Winter 1-31-2023

The Impact of Gender Differences and Geographic Locations on Social Media Literacy Among Public Universities Students

Heba Tallah Moustafa Helmy
hebahelmy@aucegypt.edu

Recommended Citation

The American University in Cairo

School of Global Affairs and Public Policy

The Impact of Gender Differences and Geographic Locations on Social Media
Literacy Among Public Universities Students

A Thesis Submitted to

Journalism and Mass Communication Department

in partial fulfillment of the requirements for
The degree of Master of Arts

By Heba Tallah Moustafa Helmy

Under the supervision of Dr. Sarah El-Richani
Fall 2022

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

The American University in Cairo

The Impact of Gender Differences and Geographic Locations on Social Media Literacy Among Public Universities Students

A Thesis Submitted by

Heba Tallah Mostafa Helmy

To the Journalism and Mass Communication Program

Fall 2022

In partial fulfillment of the requirements for
The degree of Master of Arts

Has been approved by

Thesis Committee Supervisor/Chair _____

Affiliation _Assistant Professor, JRMC, AUC_____

Examiner

Thesis Committee ~~Supervisor~~ _____

Affiliation _Associate Professor, JRMC, AUC_____

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

Thesis Committee Reader/Examiner _____

Affiliation _JRMC - AUC_____

Graduate Program Director   Date   School Dean   Date

_____   _____   _____   _____

Firas Al-Atraqchi
Chair, JRMC
On Behalf of
Graduate Director

The Impact of Gender Differences and Geographic Locations on Social Media Literacy among Public Universities Students

Heba Tallah Moustafa Helmy

Supervised by: Dr. Sarah El-Richani

Abstract

The objective of this study was to investigate the effect of both gender difference and geographic location on social media literacy levels among undergraduate students in public universities in Egypt. Four aspects related to social media literacy were considered in the Likert-scale survey, including basic technical skills, digital interactions, information evaluation, and privacy and security practices. A total of 520 students participated in this exploratory research, of which 265 males and 255 females enrolled at four public universities in different geographic locations. Cairo University and Ain Shams University represent the urban areas. The other two universities are located in center-periphery areas with Mansoura University representing the Nile Delta and Minia University representing Upper Egypt. Cross tabulation was used to analyze the subjects' responses using the MS Excel and SPSS softwares. The findings showed that male students are more proficient in basic technical skills on social networking sites than their female counterparts. Moreover, it has been found that there is a slight higher awareness in favor of male students with regards to digital interactions and privacy practices. Concerning digital information evaluation, it appeared that male and female students share the same level of competence in verifying online content and being receptive to disparate opinions. The second part of the study analysis strongly indicated that urban students are more conversant with the four measured competences related to social media literacy than their center-periphery peers.

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

Acknowledgments

I would like to express my deepest appreciation to my advisor, Dr. Sarah El-Richani. I am thankful for your considerable support and invaluable guidance. I really appreciate making time to help me out whenever I needed it. Besides being my advisor, I found you to be a patient, friendly, and most importantly, knowledgeable professor. I really enjoyed your classes.

I would also like to acknowledge the committee examiners Dr. Rasha Allam and Dr. Marwa AlMutafy for taking the time to read my thesis and providing constructive feedback. I am thankful for all Dr. Rasha Allam's positive comments regarding my thesis. It really means a lot to me, especially coming from such an eminent professor.

I am grateful to my family especially, my mother for standing by me throughout the whole journey. You have always been encouraging and believing in me. Without your tremendous support, this would not have been possible.

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

TABLE OF CONTENTS

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

List of Tables

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

List of Figures

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

CHAPTER I
INTRODUCTION

In the digital age, the Web has become implanted in each part of our everyday lives, meaningfully having an impact on the manner in which we connect with others. Many historians have perceived the Web as "a mixed blessing: prolific but unmediated, powerful but untamed, open to all but taken seriously by few" (Slumkoski, 2008). Similarly, social media have also come with their own set of advantages and disadvantages. Thanks to the growing popularity of social networking sites, our way of communication and media consumption have drastically altered, enabling us to exchange and receive an endless flow of information through an alternative channel (Crespel, 2016).

According to Statista website, social networking websites have 4.7 billion users in April 2022 which represent 58.4 percent of the world population. These numbers are still forecast to skyrocket in the near future as mobile device usage and mobile social networks enjoy more popularity in markets that were previously underserved. According to Digital 2022: Global Overview report.The report also showed that there were 51.45 million users of social media in Egypt in January 2022. At the beginning of 2022, the percentage of Egyptians using social media was 48.9% of the country's entire population. This implies that, between 2021 and 2022, the number of social media users in Egypt rose by 2.5 million (+5.0 %). The most popular social media platforms in Egypt were YouTube, gathering 46.30 million users, followed by Facebook with 44.70 million users in early 2022.

Social networking services are employed as a window to the world and their role has evolved into multidimensional approaches. Consequently, they have made a potent revolution that has profoundly altered every aspect of our lives, including how we interact with one another, conduct business, look after our well-being, participate in

8

politics, establish careers, and fill job openings (Dubose, 2011). The majority of citizens in today's world, including many students, prefer social networking over face-to-face communication (Abudabbous, 2022).

Given this overwhelming influence, the proliferation of online misinformation, fake news, and propaganda on social websites pose a threat to citizens, particularly young adults, unless they are armed with the know-how to verify and evaluate credible sources (Buckingham, 2015). Fake news has been around a long time; it preceded the Internet but the danger lies in the fact that it spreads much quicker online, particularly on social networking sites (Molina et al., 2021).

The significance of media literacy education has therefore come to the fore and has been addressed by numerous academics. Nonetheless, there is still a dearth of painstaking research on effective academic courses that have been offered to students (Garcia et al., 2013). Digital media literacy education has increasingly been given attention around the globe, especially in the West (Cunliffe-Jones, 2018). In Egypt, however, digital media literacy education in universities, to a large extent, still falls behind, lacking national curricula, as well as comprehensive, advanced training.

In light of the above, this study's main purpose was to gauge the effect of both gender difference and geographic locations on the levels of social media literacy awareness and skills among undergraduate students at public universities.

This study is exploratory in nature so the aim is that the findings could potentially be utilized by educational institutions to offer an introductory-level media literacy course at Egyptian universities. The findings might also serve as guidelines for media organizations, and corporations to formulate policy to empower young users to safely navigate the digital environment.

CHAPTER II

LITERATURE REVIEW

What is Media Literacy?

There is no universal definition for 'media literacy. It is a broad concept that, according to the definition developed by the European Union Media Literacy Expert Group (MLEG), "includes all technical, cognitive, social, civic and creative capacities that allow a citizen to access, have a critical understanding of the media and interact with it".

Ofcom, the UK's independent communications regulator in charge of fostering and boosting media literacy in the UK, defines it as the "ability to access, understand and create communications in a variety of contexts". This encompasses the competence to "question, analyze, appreciate and evaluate [those communications]".

As the technological revolution has had a profound impact on our normal day-to-day activities over two decades ago, a then-new definition has been added known as "new media literacy". It is mainly perceived as "a combination of information skills, conventional computer literacy skills, and communication skills or multiple literacies" (Chenet al, 2011). The 'new media' term was chosen for giving a broader meaning, embedding information and communications technology as well as digital technologies (Tzu-Bin Lin et al, 2013).

With the increasing proliferation of social media platforms over the past few years, recent research has put forward a new, more precise definition titled 'social media literacy' which refers to the development of critical thinking based on the competence to evaluate the intention, meaning, and authenticity of the images and content in general on social networking sites (Polanco-Levican & Salvo-Garrido, 2022). Media

technologies are evolving constantly and have become an indispensable aspect of our daily lives (Eshet-Alkalai & Soffer 2012). Social media platforms, including Facebook, Instagram, Twitter, TikTok among others, are examples of media technologies that users access for numerous motives (Dindar & Yaman, 2014).

These technologies have led to intensive digital media use as one can process, create and store massive amounts of information and data on a daily basis. Social media have provided people a pivotal role in the production process of media content by expressing their own opinions and being perpetually engaged rather than merely consuming content online others have created (Lucan et. al., 2020).

According to Statista, a German company specializing in market and consumer data, Market leader Facebook has more than 2.9 billion monthly active users in July 2022 and was the first social network to surpass one billion registered accounts. With enormous popularity over the course of the last decade, Instagram has 1.478 billion monthly users, based on the latest research issued in July 2022 by Statista. The social photo sharing application comes in fourth place among the biggest social media platforms globally, slightly behind YouTube and whatsApp which reached almost 2.6 billion users and 2 billion users monthly in July 2022.

Disinformation and Misinformation in Media

The proliferation of misinformation in mainstream media poses a threat to public interests. Misinformation has been deemed as 'inaccurate' and 'deceptive' information' (Karlova & Fisher, 2013). However, some researchers have delved deeper into the essence of the definition, referring to disinformation as 'deliberately false and misleading' (Jack, 2017). On the other hand, recent research refers to misinformation as an umbrella term for information that is wrong or inexact without being deliberately manipulative or harmful (Vraga & Bode, 2020).

Social media are growingly scapegoated for deluding the audience to the extent that some scholars think that the fake news label is employed to delegitimize news media (Egelhofer & Lecheler, 2019). Misinformation refers to "false or out-of-context information that is provided as fact with no intentional purpose to mislead", whereas disinformation is a type of misinformation that is deliberately incorrect and acts intentionally to deceive. Both misinformation and disinformation entail the proliferation of debunked information, with diversified objectives and impetus (Gebel, 2021).

The diffusion of misinformation and fake news on social media have caused mounting concerns since it has become obvious that digital media content could easily, to a large extent, result in manipulating people across the globe (Allcott & Gentzkow, 2017).

Fake news are news stories that are deliberately false aiming to mislead recipients. It is also described as "information pollution" (Wardle & Derakshan, 2017) or "information warfare" (Khaldarova & Pantti, 2016). Meanwhile, disinformation has been described as intentional practices to maneuver or perplex readers by providing incredible information, whereas misinformation is deemed misleading information produced without malevolent purpose (Ireton & Posetti, 2018).

Both disinformation and misinformation are perceived by many as harmful because they are disseminated on digital platforms, especially social media networks, reaching a massive number of audiences in the blink of an eye (Ireton & Posetti, 2018). Many attributes of social media bring about the proliferation of misinformation including insufficient professional gatekeepers online, difficulty to determine credibility on social media feeds, and malevolent actors intending to feed the public fake news (Broniatowski et al., 2018)

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

Online Safety Issues

Safety and privacy are other substantial issues that have been examined to guarantee digital citizenship for new media users, enhancing their capability to safely and responsibly access digital technologies and act in a respectful manner. A safe environment should be guaranteed for young users who are vulnerable to multiple risks that could be mitigated by new media literacy. Technopanic is among the risks which has been brought about by the digital world (Cassell & Cramer, 2008). The term 'technopanic' is not new and relates to fears of technologies and the changes they introduce. Digital technopanic comes with its own set of characteristics which magnifies the potential dangers. Some express concerns over the rapid progress in the digital world posing moral threats including cyberporn, online predators, and hostility (Marwick, 2008).

While social media have bridged the gap between all countries, some have argued that digital platforms have taken a toll on the autonomy of many cultures. Young people have shown ambiguity about identity and sense of belonging due to the massive flow of information and news produced by dominant foreign cultures. This has created a cultural sovereignty that usually contradicts users' own social values and principles (Volkmer, 2021).

Furthermore, online games, including virtual reality games, are another online risk facing youngsters. The adventurous feeling and enthusiasm give psychological rewards and a sense of satisfaction and pleasure which could lead to addictive behavior in absence of digital media literacy (Allman et al., 2009).

Worse yet, online suicide games such as the PUBG, Blue Whale Challenge, the Fire Fairy and Momo, require a series of challenges, eventually leading to committing

suicide. Social media platforms, in particular, were found to be a strong motive for encouraging them to take part in these kinds of challenges to grab attention in an attempt to capture others' attention (Bada & Clayton, 2020).

Previous research put forward that self-harm behavior could possibly be adopted by young people who suffer psychological distress and social anxiety disorder; hence they are more likely to fall prey to such dangerous online games (Kumar et al., 2017). The suicide games phenomenon has been spread across the globe and strongly condemned due to its ramifications. Authorities have released warnings and launched awareness-raising campaigns to confront such games (Bada & Clayton, 2020).

For instance, Al-Azhar, an Islamic scientific body and the largest religious institution in Egypt, has previously released several statements to warn against the harm that electronic games, including PUBG and Blue Whale, could inflict on young people who spend long hours playing them and irrationally following the sometimes-fatal instructions. In 2020, Al-Azhar Fatwa Center explained that "although the game (PUBG) seems simple at first glance, it uses complex psychological methods to encourage addiction and violence. The game attracts those who are eager for adventure as it exploits their competitive side as only the strongest players survive".
Dar al-Ifta, Egypt's government's principal Islamic legal institution for issuing fatwas, has also in turn called on the state authorities to criminalize the "Momo Challenge", a social media game purportedly pushing young adults to suicide. The game involves a challenge with disturbing messages to urge players to harm their loved ones, expose themselves to dangerous circumstances or even commit suicide.

Importance of Media Literacy

Comprehending the actual message the media wants to convey, what its source is and the reason behind a specific message has been reinforced, are substantial for

reasonable interpretation and discernment of media news and information. Most scholars propose that media literacy is a drastic solution to the wide and diverse world of social media (Ivanović, 2014).

New media literacy has been perceived as a convergence of all literacy that evolved over the previous centuries, including classic literacy, audiovisual literacy, digital literacy, and information literacy (Chen, et al., 2011).According to the US-based Center for Media Literacy, an educational organization specialized in promoting media literacy education, details the importance of media literacy as follows "an understanding of the role of media in society as well as essential skills of inquiry and self-expression…providing a framework to access, analyze, evaluate, create and participate with messages in a variety of forms — from print to video to the Internet." ("What's media literacy?", n.d.).

An online user is classified as a prosumer whose digital interaction is divided into: "consuming" and "prosuming" (Toffler, 1981). The latter term is derived from "prosumer" which means an individual who both consumes and produces. As a consequence, media literacy has been broken down into functional and critical roles/literacies to carry out a more detailed analysis of online activity involvement (Buckingham, 2003).

Functional literacies include the competence of navigation in the digital world, referring to both skills and proficiency. Critical literacies comprise the ability to apprehend, analyze and verify the reliability of information sources. In an attempt to delve deeper into a digital user experience, a prior study puts forward a conceptual framework for new media literacy encompassing: functional consuming, functional prosuming, critical consuming, and critical prosuming literacies (Chen et al., 2011).

Figure 1

A refined framework of new media literacy
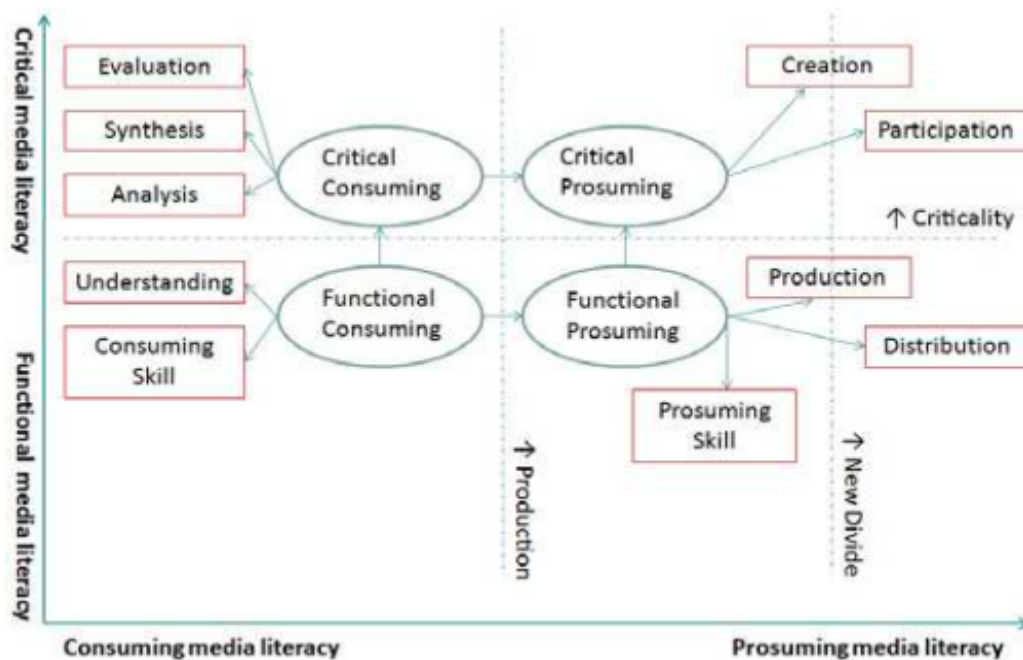
Note: This model was produced by the Perceived Social Media Literacy in 2013, addressing four different competences-related to social media literacy. From "Understanding New Media Literacy: An Explorative Theoretical Framework," by Lin, T. B., Li, J. Y., Deng, F., & Lee, L., 2013, *Journal of Educational Technology & Society*, 16(4), 160-170. Retrieved from https://www.researchgate.net/figure/A-refined-framework-of-new-media-literacy-Source-Lin-T-B-Li-J-Y-Deng-F-Lee_fig2_338829456

To elaborate, the functional consuming literacy points to the capability of accessing digital messages and grasping the purpose of the message. Critical consuming literacy refers to the media recipient's capacity to examine the cultural, social, economic, and

political contexts of the provided information. Functional prosuming literacy incorporates the capability to take part in media content production, whereas critical prosuming literacy includes the user's contextual evaluation of the media content during his/her media engagement.

Growing concerns have particularly focused on the impact of digital media on young people's lives (Herring 2006; Buckingham & Willett 2006). Over the last decades, considerable attention has been given to promoting media literacy among the youth by educators, scholars, and media professionals (Ashley et al. 2013; Adler 2014). Extensive research has been carried out to shed light on the importance of educating the youth about digital media literacy and the challenges they might encounter (Buckingham 2003). Subsequently, there is a dire need to develop new media literacy to be able to efficiently navigate the online information environment. The global lack of digital media literacy has been perceived as a crucial attribute for inaccurate/poor discernment of online disinformation and, even worse, wide-scale belief in it (Guess et al., 2020).

Digital media literacy is also essential for honing critical thinking skills that help individuals make independent, rational decisions on how to identify credible sources and channels in addition to assessing different information and news provided through those sources. An emphasis has been put on the role of media literacy education, particularly in respect of young people's education. Although new technologies, including social media platforms, are available at people's fingertips around the clock, users do not inevitably master the capability to utterly understand the true message behind words or benefit from useful information (Šuminas & Jastramskis, 2020).

Nevertheless, media literacy is not going to be a silver-bullet solution unless it is provided in well-researched and acutely observed materials and adequate, comprehensive training. However, in most countries, media education is treated as a

secondary activity and media instructors lack precise guidance and do not make use of rich and invaluable pedagogic resources. While it has been added to the curriculum in many countries, the shortage of hands-on educational practices still makes the issue linger (Ivanović, 2014).

Tools to Promote Media Literacy

Some researchers have insisted that it is vital to provide students with a formal and all-round education to master the know-how of social media use and comprehend the complexity of the digital platforms (Jacobs et al., 2009).

Media literacy classes are crucial as they give students the opportunity to have an illuminating insight into the workflow of news production, including the tools and sources to distinguish misinformation from factual information in addition to the importance of having trusted experts to provide them with a truthful and experienced opinion about the news. On the other hand, general audiences likely gain limited understanding of news passively through media socialization which relies on a long cultivation process (Amazeen and Bucy, 2019) .

Other scholars emphasized that social and moral topics should be foregrounded by developing media literacies to help youngsters stick to their personal beliefs and core values and not blindly follow ideological manipulation (Scharrer and Ramasubramanian, 2015). Media literacy is often perceived as a savior from the potentially negative ramifications caused by the heavy use of new media in the absence of conscious awareness of the digital environment. Consequently, both governments and industries (corporate and media institutions) should work hand-in-hand to bring in legislative regulation to put users on the right path. Additionally, it is essential to benefit from experts' insights regarding the digital

natives' changing attitudes and how the social media world influences their dynamics on the ground (Sarwatay et al., 2021).

Several decades ago, journalists were the first to identify the issue of disinformation as a side effect of the penny press era which engendered a drastic, positive change in the gatekeeping process. Fact-checking departments emerged in media organizations in an effort to promote transparency and earn a good reputation with audiences. Although the nature of the media industry has changed over the years, the same goal still remains: building accountability relationships with the audience. Likewise, at the start of the 20th century, media practitioners served as stakeholders in honing audiences' media literacy skills and have been continuing to do so till today.

Before the emergence of social media, media institutions (newspapers and magazines) were keen on stimulating fact-checking activities to enhance credibility and integrity. Today, media organizations are burdened with considerable challenges as a result of the endless flow of information that cannot be easily controlled and monitored. Consequently, they need to intensify their efforts by introducing media literacy programmes and interactive activities that involve all parties: reporters, media institutions and audiences. These types of activities will help invest in young audiences by equipping them to assess the quality of a given set of information and discern fake news from real news (Igor and Stela, 2019). The top media organizations' global media literacy programs such as The Guardian Foundation's Education Center, The New York Times: The New Literacy Project, BBC My World Media Literacy project, News LitCap with CNN Worldwide among few others. Nonetheless, other media outlets typically play a minor role in media literacy projects due, in part, to a shortage of resources and, in part, to a lack of focus (Cunliffe-Jones, 2018, p.34).

At the national level, in May 2021, Al-Masry Al-Youm (AMAY) news organization dedicated a section named Al-Masry Fact which looks into the credibility of specific topics that had been making the rounds. The spread of coronavirus was the trigger of the section launch. However, later on, the website has expanded the areas of investigations by digging into the transparency of uncertain claims going viral on social media. Sometimes the paper interviews experts to clarify in detail the inaccuracy of news, or cite reputable newspapers or academic papers to verify the circulated news for readers.

Additionally, it is essential for researchers and media educators to carry out a more active role in scrutinizing and putting forward educational or public initiatives that raise audiences' awareness about the trustworthiness of information disseminated on social media platforms.

Media professionals also should utilize their social media accounts as channels to educate their audiences. They could teach users how to grasp the tactics of news production in a simplified manner and how to identify misinformation through reliable sources. It is assumed that users who engage with journalists as a friend or even just following their social media accounts as well as checking various news organizations with different editorial policies on a regular basis will more easily comprehend the proper news dissemination mechanism over time which could help determine, to a large extent, credible stories (Chan et al., 2021).

Meanwhile, global social networking websites', have also been raising awareness on fake news and encouraging news verification over the past decade. In 2019, for instance, Twitter joined forces with UNESCO to introduce a guidebook for schools to sharpen school students' media literacy skills (Cunliffe-Jones,2018, p.34). Furthermore, Twitter has recently put in extra effort to reduce the prevalence of false information. The microblogging, social networking service announced in December

2022 that it has broadened its community fact-checking initiative known as Birdwatch. This move aims to enhance the business's creative fact-checking approach through using clickable notes to provide additional, relevant information about what users are reading. When Birdwatch was introduced in 2021, some Twitter users could disprove false tweets by adding notes to the content to explain the situation or cite reliable sources (Malik, 2022).

Regarding the Meta platforms, an American multinational technology conglomerate owning Facebook, Instagram, and What'sApp, is currently teaming up with independent fact-checkers who are accredited by the nonpartisan International Fact-Checking Network to examine content in more than 60 languages while identifying, categorizing, and labeling erroneous information ("Meta's third-party fact-checking program" n.d.). In addition, Facebook teamed up with fact-checking organizations in an effort to set up a media literacy initiative measuring users' online critical thinking competency by posting a series of basic questions on the platform about the source and reliability of information (Cunliffe-Jones, 2018, p.34).

Global Movement Toward Digital Media Literacy

Since 2011, UNESCO has been organizing the Global Media and Information Literacy Week in an effort to empower people with media and information literacy skills to confront the ubiquity of misleading information in the digital realm. UNESCO and members of the UNESCO Media and Information Literacy Alliance are urging countries from across the globe to organize forums, conferences, initiatives, and campaigns annually to raise the awareness of the public about the risks of the pervasive fake news stories and to help people get the most out of communication opportunities in the digital sphere ("Global Media and Information," (n.d.).

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

The European Union (EU) also released an extensive, detailed study about the major media literary projects that have been delivered in 28 European countries from 2010 till 2016. It provides invaluable insight into the media literacy infrastructure in the EU; mainly focusing on 547 wide-scale projects that have proved to be impactful in fighting the lack of media literacy. Skills associated with critical thinking are the dominant skills across the projects in the academic paper followed by skills related to media use as well as online safety and security. The majority of the target audience group for the projects is teens and older students in the research (Luís et al., 2017).

The UNESCO University Twinning and Networking Program (UNITWIN) on Media and Information Literacy and Intercultural Dialogue (MILID) is a well-known illustration of international collaboration to foster media and information literacy. UNESCO and the United Nations Alliance of Civilizations (UNAOC) were brought together to launch MILID in 2011. The program was established in accordance with UNESCO's mission serving as a powerful impetus to promote media and information literacy globally, in addition to the UNAOC's commission to promote research that can formulate policies on media and information literacy and bridge the gap between countries and cultures. Moreover, one of the main roles of the network is to focus on integrating MILID at all levels of the formal education system through innovative approaches and support the same approach in respect to media production practices. Eight universities and a plethora of associate universities work hand-in-hand to fulfill the MILID's goals namely Temple University, USA; Cairo University, Egypt; Queensland University of Technology, Australia; Autonomous University of Barcelona, Spain; the University of West Indies, Jamaica; Sidi Mohamed Bin Abdellah University, Morocco and the University of São Paulo, Brazil: and Tsinghua University, China (Carlsson & Culver, 2013).

Educators and commentators around the world have perceived the use of media literacy as an essential tool to prevent users from the harms resulting from false information.

The United States has offered various programmes specialized in misinformation in schools. These courses differ from one state to another, giving much attention to online media literacy, notably digital literacy, digital citizenship and technological media literacy among others (Huguet et al., 2019). It is noteworthy that Washington was the first state to adopt legislation pertaining to media literacy in 2016, and subsequent successes were achieved in 2017, 2019, 2021, and now in 2022 by devoting an annual fund for the Media Literacy Grant Program ("Media literacy Posters," n.d.).

Governments across Europe have fostered media literacy education in schools for decades, but more efforts have been exerted during the last decade. Finland, France, Denmark and Greece have been among the most European Union countries that joined forces with experts from fact-checking corporations to introduce innovative educational modules. According to a 2022 report, considerable attention has been directed to the importance of media literacy by the United Kingdom's official communications regulator OFCOM since 2003. In Latin America, schools have put emphasis on fostering student's digital search and digital skills but have neglected to embed misinformation literacy in most school curricula. The same goes for India where themes of misinformation literacy are not featured in most school curriculum. Media literacy education is provided on a small scale in spite of growing demand for its inclusion (Cunliffe-Jones, 2018, p.31-33).

Furthermore, there is a plethora of media literacy associations and organizations across the globe that are combating the diffusion of fake news, for instance, Action for Media Education which is keen to foster media literacy tools among different age groups with special attention directed to teachers, parents and those who practice

professions related to children. Australian Media Literacy Alliance is an unincorporated association of seven groups with closely related media literacy goals. Established in 2012, the Center for Media and Information Literacy at Temple University's Klein College of Media and Communication serves as a focal point for local, regional, national, and international media literacy and information literacy research, education, and professional development. The Center for Media Literacy is another educational institution that offers leadership, community outreach, professional growth, and tools for evidence-based teaching on a national and international scale. In an attempt to encourage critical thinking on the social, political, and cultural effects of American mass media, the Media Education Foundation (MEF) creates and disseminates documentaries and other educational materials ("Media literacy," n.d.).

On a regional level, Media Digital Literacy Academy of Beirut is one of the pioneers in the Arab world that aims to promote media and digital literacy by offering the necessary instruction, curricular, materials, and tools as well as inspiring teachers, students, journalists and activists to implement what they have learned to their institutions. So far, 40 Arab colleges and schools in 12 Arab nations have benefited from MDLAB's introduction of media and digital literacy. Furthermore, the academy develops media literacy training materials, which comprise programs and manuals with teaching materials, multimedia, and research papers ("Our mission," n.d.).

Moreover, Jordan Media Institute has been making tremendous efforts to boost young people's abilities to create digital content and actively engage in their communities. It is keen to engage civil society organizations to advance media and information literacy in addition to carrying out public opinion and periodic surveys on the media literacy level among Jordanians. It also provides a Master's program directing considerable attention to media literacy, aiming to uphold norms of international

journalism whilst taking into account particular aspects of Middle Eastern media landscape and culture ("About Jordan Media Institute," n.d.).

For its part, Egypt organizes annually The Alexandria Media Forum sponsors panel discussions and training sessions offered by experts in combating misinformation and propaganda, raising awareness against online fake news and other media-related issues. The Association for Freedom of Thought and Expression, The American University in Cairo, AMAY and Daily News Egypt are among the media organizations sponsoring and hosting the discussion (Magdi, 2019).

Moreover, the American Center Cairo organizes training and workshops to raise awareness about the importance of active media consumption and critical thinking. It runs an intense, comprehensive media literacy series which sheds light on combating fake news, protecting privacy on digital media platforms, sharpening smart research skills, and counteracting media violence and cyberbullying ("Your gateway to American culture," n.d.) .

Gender Differences

Research revealed that gender is among the most significant indicators of online information search behavior (Singer et al., 2012). Various empirical studies suggested that males demonstrate greater competence than females when it comes to digital literacy skills. This is applicable even when both men and women are provided with equal access to computer devices (Geissler & Horridge, 1993). One of the factors resulting in the digital literacy gap between males and females is each gender's discrepancy in the use of digital devices in their daily lives. While male students show avid interest in information technology functions, female students are simply concerned with how to employ technology. It has been found that boys enjoy spending a very long time in front of their computers with no particular reason or

motivation; they could kill time by playing video games for hours or mess around with the computer to merely discover its functions out of curiosity (Silver, 2001). On the flip side, traditionally, females do not perceive digital use as an indispensable activity in their daily life; they usually incline to engage in technology activity in their leisure time and are not considered heavy users (Brosnan, 1998). It is important to note that despite the fact that some of the latter studies were conducted a long time ago, the findings are still applicable to today's digital media skills. Based on a recent comparative study carried out in Rawalpindi and Islamabad, it was found that girls utilize social networking sites for educational objectives, but boys mostly use them for communication and online chats (Ali et al., 2021).

Similarly, another research conducted in 2013 echoed the previously-mentioned results stating that male students show a greater interest in using digital technology. The International Computer and Information Literacy Study (ICILS) reported that 57 percent of male students use a computer at least once daily whereas the percentage of girls is lesser by 53 percent. A recent research showed that this gap will consequently influence their level of skills and expertise. It suggested that the duration of use of digital devices is an attribute to the higher digital literacy of male students than female students.

The results of a 2014 study were broadly in line with previously-mentioned research; in terms of students' self-reported web knowledge, the data revealed a considerable disparity between male and female students. Male participants were more familiar and involved with technology than their female fellows. On the contrary, more females than males engage in social media activities and are more tolerant to others' opinions (Page & Reynolds, 2014).

Other research also found that the males achieve higher levels of information and data literacy in comparison to their counterparts, explaining that there was a vast

difference in the mean score between both genders (Liu T. & Sun H., 2012). However, female students are more literate than male students when it comes to "browsing competence, searching and filtering information." Moreover, a study suggested that male undergraduate students of Nigeria's Faculty of Education of Kogi State University demonstrate broader knowledge about information and communications technology in comparison to female undergraduate students. The research accordingly implies that the gap in digital media literacy is a consequence of males feeling more comfortable and having stronger self-efficacy when using technology compared to females (Maxwell & Maxwell, 2014). These results seem to confirm the findings of another comparative study conducted among Israeli students, which suggested that men are more familiar with the crucial tools for hiding users' identities and protecting personal data on the Web (Weinberger et al., 2017).

Gender difference is not limited to digital devices usage but also exists in social media usage among young adults. Men's primary motivation to navigate social media platforms is entertainment whereas most women use social media for acquiring information and developing academic knowledge. Males are obviously in contrast to females regarding their social media motives. Establishing channels of communication such as coming into contact with many different people via group chats and expanding their social network is the main reason for men to use it. In contrast, educational and information purposes were the major impetus for women to log into social media (Mazman & Usluel, 2011, pp.133-139).

Geographic Locations

The center-periphery model, also known as the core-periphery model, is a geographic metaphor that delineates and attempts to explain the structural relationship between a developed or metropolitan "center" and a less developed "periphery," either within a

specific nation or (more commonly) as applied to the relationship between capitalist and developing societies (Simon, 2011).

A book entitled *The Deepening Divide: Inequality in the Information Society* on the digital divide reveals that inequality among people and their given positions, eventually, result in unequal division of resources and disparate opportunities for digital technology usage. "A particular job or position determines the actual opportunities for a worker to get material access to the technology or to develop the motivation to use technology" (van Dijk, 2005, p. 138).

A study conducted in Japan echoes the sentiment, suggesting that urban school students excelled more in using legacy and new media, particularly in critical thinking and functional skills than rural school students. (Hu, 2022).

Regarding digital social interactions, both rural and urban residents in Canada seemed to give consistent answers; the responses indicated that both are conscious of how many social media users frequently portray themselves in a positive light rather than sharing negative news. Additionally, participants from different geographical locations said that, despite how they resolve things differently, they are aware of how to deal with online disagreements and respond to vile comments (Burkell & Saginur, 2015).

Furthermore, a study found that there is an enormous increase in the approach towards digital media literacy among young people living in urban areas in Indonesia (Tri Atmi et al., 2018). The paper focuses on the level of media literacy pertaining to different social media sites, in particular. The findings show that the youth of today enjoy a medium level of social media literacy in urban areas. It pinpoints, however, functional skills and information acquisition are the most literacy competencies which youngsters rapidly acquire. This is a result of the heavy usage of social media

platforms which have an aggregate effect on teenagers' attitude and personality (Tri Atmi et al., 2018).

Meanwhile, the rural population of Latin America and the Caribbean is significantly less digitally literate compared to urban populations in the same countries. Several common features contribute to the limited digital literacy among the rural population of Latin America and the Caribbean including the lack of basic prerequisite knowledge of information and communication technology which would allow them to pick up digital media skills. Additionally, the lack of educational opportunities and digital devices hamper the possession of these technological competencies. Another factor is that Internet access is usually not available and even if it is provided, infrastructure obstacles bring about low quality of connectivity and at a high cost which the underprivileged usually cannot afford ("Digital literacy in rural areas", n.d.).

In India as well, there is a divergence between urban education and rural education models, which, inevitably, call forth a gap of digital media literacy skills for school and university students based in both areas.

Online platforms such as social media sites and applications have been largely integrated into the tutoring approach in almost all urban areas' educational institutions. Conversely, there is a shortage of electronic devices, including laptops and computers, for more than 40 percent of students in the backcountry. Moreover, students face difficulty in accessing social media platforms to acquire information due to low network speed (Kaur, 2021).

Media Literacy in Egypt

The history of media literacy in Egyptian schools dates back to the 19th century. In April 1870, the first school newspaper titled "Rawdat Al-Madaress Al-Masriya" was published by the Department of Education and distributed to all schools in the country. The newspaper was part of the innovative products of Ali Pasha Mubarak, who held the position of the education minister and was the most prominent Egyptian reformer in the 19th century (Desouky, 2010).

The newspaper was employed as an effective means to enrich young minds with knowledge, science and art. Simultaneously, school broadcast activity was a popular educational approach for students to speak their minds through collating and presenting news and information on their own (El-Guindy, 2016, p. 131).

However, over the past few decades, the poverty gap between center-periphery and urban areas in Egypt has significantly widened. Despite the government's efforts to tackle this issue, there remain wide standards of living disparities between center-periphery and urban citizens, which poses serious problems for the country, particularly in the education sector. The illiteracy rate is one of the principal reasons that may be causing Egypt's poverty divide (Helmy, 2011). Based on a recent report released by Global Data, UK's data analytics and consulting company, the literacy rate in Egypt in 2021 was 87.18%.

The Central Agency for Public Mobilization and Statistics (CAPMAS) stated that 18.4 million people nationwide were classified as illiterate in 2019; 10.6 million Egyptian women were illiterate, compared to 7.8 million Egyptian men, who had an illiteracy rate of 21.1% of the total population.

According to the general population census conducted in 2017, which is the last statistics issued by the CAPMAS, the illiteracy rate in rural areas was 32.2%, while it was 17.7% in urban areas. The Red Sea Governorate had the lowest rate of illiteracy, at 12%, whereas Minya Governorate had the highest rate, at 37.2%.

Despite the fact that media literacy was introduced in Egypt decades ago, there is a dearth of school and university courses addressing media and information literacy awareness. The young generation have become digital natives due to the fact that the Internet is easily accessible anytime via digital devices. Nevertheless, the problem lies in being amateur users with no practical handbook of critical thinking (El-Guindy, 2016, p. 139).

Therefore, digital media literacy should be a crucial element of education curriculum since the 21th century predominantly depends on information and data scientists. Data has been termed the new oil. "Like oil in machines, data is the fuel when it comes to the Information Age." For instance, if social media sites and search engines had been without data, they would have merely been vacant venues to no avail (Rotella, 2012).

Another study, comparing young people residing in Egypt's cosmopolitan and metropolitan areas, indicated that both social and geographical factors emerged as salient factors on young people's new media literacy, their media use, and involvement. It has been found that the Internet, including social media, is a main medium to media exposure for the Cairo youth, barely mentioning television, magazines or even TV. This is due to the greater availability of mobile phones and iPads in cosmopolitan areas (Hirsjärvi & Tayie, 2011). On the other hand, youngsters in rural areas still depend on television and radio to have access to media content. Another reason is that boys and girls from rural areas have restricted mobile use, which is paid for by their parents. They use mobile phones only for making calls but are behind in their knowledge of technological equipment (Hirsjärvi & Tayie, 2011).

A study carried out at the American University in Cairo showed that there is a pressing need to conceptualize and design curriculum in the news literacy realm due to the lack of basic news media literacy, particularly among non-communication majors (Allam & ElGhetany, 2020).

Though the majority of students (86%) believed that social media platforms monetize their personal online data to earn revenues. In addition, most students show heightened awareness when it comes to recognizing advertisements and social media algorithms. 92% of people are aware that social media platforms leave digital traces of their online behavior, and 86% are aware that these traces include demographic data and other personal information. Moreover, non-communication students showed a rudimentary knowledge of a journalist's responsibilities and duties in some questions (Allam & ElGhetany, 2020).

Another study found that the October University for Modern Sciences and Arts (MSA) university students did not experience difficulties with the digital access skills regarding social networking sites in particular and the internet in general. They attribute their technical competence to the fact that social media are constantly accessible and simple to employ. Furthermore, it was found that the students taking part in the study possessed the ability to analyze and evaluate online news sources. Students are cautious about believing what is provided to them, and they check the information before accepting or posting it (Sami, 2019).

CHAPTER III
THEORETICAL FRAMEWORK

The Perceived Social Media Literacy Theory

Besides drawing on the previously-mentioned comparative papers regarding the theoretical framework, this study is mainly based on the Perceived Social Media Literacy (PSML) theoretical framework (Tandoc, et al., 2021). It addresses a number of divergent concepts related to social media literacy. It identifies "four types of competencies in which social media literacy can manifest: technical, social, privacy related, and informational."

To elaborate, the theory first addresses the basic technical competence measuring users' skills to maneuver on social media platforms such as creating an account, posting content, and customizing what data an application can collect. Second, the digital interactions aspect refers to social media users' knowledge of how to properly handle a conflict on social media networking sites and apps as well as how to report content that might violate the platform's conditions and terms. Additionally, being knowledgeable of what is acceptable and what is not acceptable regarding posting others' photos and information in addition to drawing a line between freedom of expression and offensive language. Third, informational awareness which refers to users' degree of reliance on social media platforms as a source of information. It also alludes to users' consciousness of the required tools to look up for information and identify the reliability of news posted on social media through various sources (Tandoc, et al., 2021, p.9). Fourth, privacy and algorithmic awareness which comprises users' consciousness of social media platforms terms and conditions to avoid committing violations and set forth clear guidelines for clients to grasp their duties and rights. The privacy structure aspect also includes being conscious of how to prevent hacking practices including different tools and software attacks and IP

tracking, as well as how to block/reduce the appearance of intrusive ads on users' accounts (Tandoc, et al., 2021, p.8).

The thesis aimed to address the following research questions:

RQ1: Does gender difference affect the awareness level of social media literacy among students enrolled at public universities located in urban and center-periphery areas?

RQ2: Do students enrolled at public universities located in urban areas have higher awareness levels of social media literacy compared to students enrolled at public universities located in center-periphery areas?

CHAPTER IV
METHODOLOGY

Design

The data collection method used in the current study is survey. Historically, large-scale population-based data gathering has been a component of survey research. This kind of survey research's main goal was to efficiently glean data on the features of a wide sample of interesting people. Large census surveys that gather data on demographic and personal factors is one of the most prominent examples; survey research has been employed for many years to gather information from people and groups. It can involve anything from casually approaching people on the street corner and asking a few pointed questions about their opinions and behaviors to doing a more thorough investigation using a number of trustworthy and credible tools (Ponto, 2015).

The current study was conducted by qualitative method. Besides the four screening questions at the beginning of the questionnaire, it consisted of 24 closed-ended, Likert scale statements.
The questionnaire employed in this study was inspired by the PSML theoretical framework (Tandoc, et al., 2021).

Participant Sampling

This study relies on an exploratory survey using a purposive random sampling of undergraduate students enrolled at four different public universities in Egypt. Two universities are located in the capital city Cairo, namely Cairo University and Ain Shams University, representing urban areas. The other two universities are located in

center-periphery areas. Mansoura University represents the Nile Delta and Minia University represents Upper Egypt.

Public universities' students were selected as a sample for this study because they represent the majority of higher education students in Egypt. According to a report released by the Central Agency for Public Mobilization and Statistics (CAPMAS), 2.5 million students were enrolled at public universities, representing 71.8 percent of total students enrolled in higher education during the academic year 2020/2021. The sample size was 520 of which 265 males and 255 females. Students targeted to take the survey were of different class standing (freshman, sophomore, junior, and senior) and different majors.

The purpose of the study was to gauge the impact of gender difference and geographic location on social media literacy levels among undergraduate students enrolled at public universities located in urban and center-periphery areas. The chosen quantitative methodology is, hence, suitable for the study nature since its purpose is to highlight the current situation on university-level media literacy in Egypt.

The study has one dependent variable which is the social media literacy level of students at public universities. The two independent variables are

1) Gender difference: male students and female students.
2) Geographical location: urban and center-periphery areas.

Data Collection and Analysis

The questionnaire was administered in Arabic. The approvals of the Institutional Review Board and CAMPAS were obtained to carry out the survey. The subjects are not anonymous but confidential to protect their identity. Participation in this study

was voluntary and consent was given from the respondents. After obtaining the approval of the Graduate Affairs Director, the data was collected by an assistant researcher only at Mansoura and Minia Universities to facilitate access to students at public universities in center-periphery areas. I accompanied the assistant researcher to ensure that the consent forms were signed beforehand and clarify the survey questions, if needed. The collected data were analyzed and presented by using cross tabulation, MS Excel, and SPSS software.

Operational Definitions

Social media literacy: the development of critical thinking based on the competence to evaluate the intention, meaning, and authenticity of the images and content in general on social networking sites (Polanco-Levican & Salvo-Garrido, 2022).

Technical competence: the basis of knowledge, competences and capabilities in technology (Kosimov et al., 2021).

Digital interactions: possibility to communicate with other Internet users of remote digital networks (Patricia et al., 2021).

Digital information evaluation: verifying the quality of information comprises students' capacity to determine accuracy, relevance, and credibility of sources (Parsazadeh et al., 2015).

Privacy and security awareness: controlling whether and how personal information can be gathered, stored, processed, and circulated (Zhang et al., 2021).

CHAPTER V
FINDINGS AND ANALYSIS

Survey Respondent Demographics

A total of 520 participants answered the first half of the questionnaire about gender difference. They were divided into 265 males and 255 females studying at center-periphery and urban universities. Concerning the second half of the questionnaire about the comparison between students' social media literacy level in urban and center-periphery areas, the same number of students (520) were divided as follows: 130 students at Cairo university, and 130 students at Ain Shams University representing the urban university students. Meanwhile, 128 students at Mansoura University represented the delta and 132 students at Minia University represented Upper Egypt. Respondents' ages ranged between 18 and 24 years representing all undergraduate students. The survey was split into four categories. The first set of questions focused on ascertaining the technical competencies of males and females at university level. They were asked questions about the basic skills required to navigate social networks and managing the content they share with their network on various platforms.

Table 1

Technical competency: How good are you at performing the following activities

Creating your account on social media		Male	Female
	n	%	%
Poor	71	15.5%	11.8%
Average	128	20.8%	28.6%
Good	146	22.3%	34.1%
Excellent	175	41.5%	25.5%

Total	520	100.0%	100.0%
Deactivating your account on social media			
Poor	80	15.1%	15.7%
Average	131	21.9%	28.6%
Good	149	24.5%	32.9%
Excellent	160	38.5%	22.7%
Total	520	100.0%	100.0%
Deleting your account on social media			
Poor	129	30.2%	19.2%
Average	133	21.1%	30.2%
Good	116	17.7%	27.1%
Excellent	142	30.9%	23.5%
Total	520	100.0%	100.0%
Posting content, such as photos and videos on social media			
Poor	27	5.3%	5.1%
Average	113	20.0%	23.5%
Good	185	33.2%	38.0%
Excellent	195	41.5%	33.3%
Total	520	100.0%	100.0%
Removing content from timeline on social media			
Poor	100	21.9%	16.5%
Average	142	23.0%	31.8%
Good	141	24.2%	30.2%
Excellent	137	30.9%	21.6%
Total	520	100.0%	100.0%

As table 1 details, male students were more efficient than female students in technical competencies. Regarding males, the highest percentage (41.5%) of answers to the five questions falling under this area of skill was "excellent". On the other hand, the

results suggested that the highest percentage of answers was "good" (34.1%), followed by "average" (28.6%) when it comes to female students.

Figure 2

How good are you at creating an account on social media?
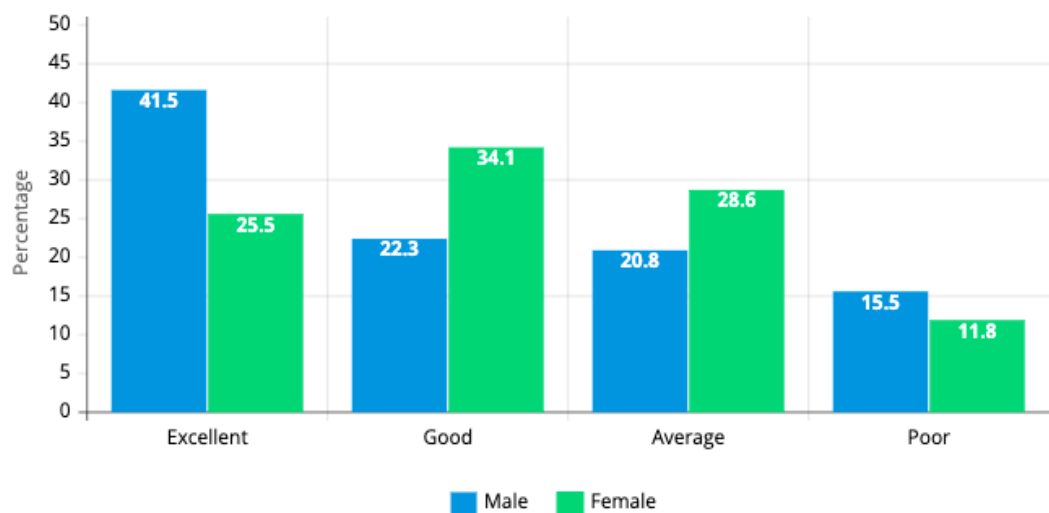
41.5% of males perceived themselves as "excellent" at creating an account on social media compared to only 25.5 % of females who selected the same answer, as figure 1 shows. Additionally, the results demonstrated that there was a gender difference regarding their capability in deactivating their social media accounts, with over a third of male students (38.5%) and 22.7% answered reported being "excellent" in doing this. The same goes for the statement measuring the student's capability of deleting content on timeline. 30.9% of male respondents demonstrated "excellent" capability which indicated a larger percentage than female respondents who represented 21.6% in the same quality level. For the latter, the highest percentage was 31.8%, displaying an "average" competence.

Table 2

Digital interactions: What is the level of your social awareness?

I am aware of the copyright laws of social media.		Male	Female
	n	%	%
No knowledge	44	7.9%	9.0%
Minimal Knowledge	67	9.1%	16.9%
Basic knowledge	72	14.3%	13.3%
Adequate knowledge	228	41.5%	46.3%
Superior knowledge	109	27.2%	14.5%
Total	520	100.0%	100.0%
I am aware of how to draw a line between objectionable content and freedom of expression on social media.			
No knowledge	42	8.7%	7.5%
Minimal Knowledge	56	5.3%	16.5%
Basic knowledge	78	15.8%	14.1%
Adequate knowledge	238	42.3%	49.4%
Superior knowledge	106	27.9%	12.5%
Total	520	100.0%	100.0%
I am aware of how to properly handle conflicts on social media.			
No knowledge	44	8.3%	8.6%
Minimal Knowledge	65	7.9%	17.3%
Basic knowledge	61	10.9%	12.5%
Adequate knowledge	224	40.4%	45.9%
Superior knowledge	126	32.5%	15.7%
Total	520	100.0%	100.0%
I am aware of how to filter my social media network, such as restrict, mute,			

unfollow/unfriend or block a contact.			
No knowledge	32	6.0%	6.3%
Minimal Knowledge	58	6.8%	15.7%
Basic knowledge	41	6.4%	9.4%
Adequate knowledge	205	35.8%	43.1%
Superior knowledge	184	44.9%	25.5%
Total	520	100.0%	100.0%
I am aware of how to report harmful content such as harassment, abuse, impersonation, etc.			
No knowledge	35	6.4%	7.1%
Minimal Knowledge	47	4.9%	13.3%
Basic knowledge	57	8.7%	13.3%
Adequate knowledge	192	35.8%	38.0%
Superior knowledge	189	44.2%	28.2%
Total	520	100.0%	100.0%
Most users only post positive information about themselves.			
Strongly disagree	34	5.3%	7.8%
Disagree	53	6.8%	13.7%
Neither agree nor disagree	76	11.7%	17.6%
Agree	198	37.4%	38.8%
Strongly agree	159	38.9%	22.0%
Total	520	100.0%	100.0%
I take into consideration who I add to my social media network.			
Strongly disagree	55	13.2%	7.8%
Disagree	57	10.6%	11.4%
Neither agree nor disagree	155	26.8%	32.9%
Agree	142	26.0%	28.6%
Strongly agree	111	23.4%	19.2%
Total	520	100.0%	100.0%

The second set of questions looked into the students' level of digital communication skills, touching upon several areas social relationships-related. The results analysis demonstrated a minor difference between both gender groups in favor of males in establishing and maintaining connections with others on social networking websites. In some questions, a significant number of both genders proved the same level of knowledge regarding the copyright laws governing social media platforms. In other words, the largest percentage of both females (46.3%) and males (41.5%) displayed "adequate knowledge". Similarly, females had almost the same awareness of males when it came to handling disputes as well as distinguishing between objectionable content and freedom of expression on social media.

When asked if they know how to take action against any distressing content and unwanted online contacts, the results found that male students were slightly skillful than their female counterparts. 44.9% of males believed that they had "superior knowledge" of how to filter or limit their social media network whereas 43.1% of females selected "adequate knowledge".

A similar pattern of results was obtained in terms of reporting harmful content, such as harassing messages and violating posts, showing that 38.9% of males chose "superior knowledge" and 38.8% selected "adequate knowledge". Furthermore, around 38.9% of male participants "strongly agreed" that most users pursue only a positive image about themselves on social media. 38.8% of female participants, on the other hand, "agreed" to that statement. To sum it up, the analysis showed that "adequate knowledge" and "superior knowledge" interchangeably had the higher percentage of responses from both genders. As previously illustrated in detail, male respondents were slightly more conversant than female respondents with handling digital social relationships on social networking services.

Table 3

Digital Information verification

I get the news from social media.		Male	Female
	n	%	%
Always	112	24.2%	18.8%
Frequently	220	39.6%	45.1%
Sometimes	104	19.6%	20.4%
Seldom	71	12.8%	14.5%
Never	13	3.8%	1.2%
Total	520	100.0%	100.0%
I know how to do an effective search for information on social media.			
No knowledge	66	7.2%	18.4%
Minimal Knowledge	97	15.1%	22.4%
Basic knowledge	97	18.9%	18.4%
Adequate knowledge	151	30.6%	27.5%
Superior knowledge	109	28.3%	13.3%
Total	520	100.0%	100.0%
I can tell whether information on social media is true or false.			
Strongly disagree	34	3.4%	9.8%
Disagree	24	4.5%	4.7%
Neither agree nor disagree	167	26.0%	38.4%
Agree	177	35.5%	32.5%
Strongly agree	118	30.6%	14.5%
Total	520	100.0%	100.0%
I get news from sources that have different views than mine.			
Always	96	24.9%	11.8%
Frequently	241	41.5%	51.4%
Sometimes	85	14.0%	18.8%

Seldom	70	13.2%	13.7%
Never	28	6.4%	4.3%
Total	520	100.0%	100.0%
I verify whether what is shared on social media is correct.			
Always	122	32.1%	14.5%
Frequently	234	35.8%	54.5%
Sometimes	83	15.8%	16.1%
Seldom	55	9.4%	11.8%
Never	26	6.8%	3.1%
Total	520	100.0%	100.0%
I know how to verify the accuracy of information on social media via different tools.			
No knowledge	76	7.9%	21.6%
Minimal Knowledge	93	15.8%	20.0%
Basic knowledge	90	16.2%	18.4%
Adequate knowledge	138	30.9%	22.0%
Superior knowledge	123	29.1%	18.0%
Total	520	100.0%	100.0%

The third set of questions measured students' knowledge, attitudes and behavior toward social media information consumption. It is noteworthy that there is a lack of consistency among both genders' answers with respect to the level of information awareness. Therefore, the median of all questions falling under the information awareness section was calculated to assure the reliability of the analysis. The results revealed that females give more attention to verifying the accuracy of information on social media more than males, with the median score of the former was "always" (48) and the latter was "sometimes" (52).

Contradictorily, another question addressing the frequency of following up the news from sources with different views, suggested that males had a higher awareness than females; where the median score (37) of males was "sometimes" while females'

median score (35) was "seldom". When asked about their capacity of doing an effective search for information on social media, the median scores of both males (50) and females (47) clearly indicated having a similar level of awareness which was "adequate".

Based on the above, no gender proved superiority over the other in most questions. And though it seems that both genders displayed an acceptable level of critical thinking, there is a necessity to be well up on learning essential tools to authenticate information online as well as exploring different channels of media news to broaden their perspectives.

Table 4

Digital privacy and security awareness

I am aware of how to control who gets to see my personal information on social media.		Male	Female
	n	%	%
No knowledge	81	7.2%	24.3%
Minimal Knowledge	82	13.2%	18.4%
Basic knowledge	77	16.6%	12.9%
Adequate knowledge	122	24.2%	22.7%
Superior knowledge	158	38.9%	21.6%
Total	520	100.0%	100.0%
I am aware of how to control who gets to see the content I post on social media.			
No knowledge	100	10.6%	28.2%
Minimal Knowledge	58	10.9%	11.4%
Basic knowledge	89	16.6%	17.6%
Adequate knowledge	117	24.9%	20.0%
Superior knowledge	156	37.0%	22.7%
Total	520	100.0%	100.0%

I am aware of how to protect my account from hacking tools.			
No knowledge	252	42.6%	54.5%
Minimal Knowledge	86	18.5%	14.5%
Basic knowledge	69	13.6%	12.9%
Adequate knowledge	77	15.5%	14.1%
Superior knowledge	36	9.8%	3.9%
Total	520	100.0%	100.0%
I am aware of how social media uses personal data to generate revenues from ads.			
No knowledge	270	47.5%	56.5%
Minimal Knowledge	90	19.2%	15.3%
Basic knowledge	57	9.4%	12.5%
Adequate knowledge	45	9.1%	8.2%
Superior knowledge	58	14.7%	7.5%
Total	520	100.0%	100.0%
I am aware of how to hide my IP address (unique address that identifies a device on the Internet).			
No knowledge	309	49.4%	69.8%
Minimal Knowledge	83	17.7%	14.1%
Basic knowledge	49	11.3%	7.5%
Adequate knowledge	52	14.0%	5.9%
Superior knowledge	27	7.5%	2.7%
Total	520	100.0%	100.0%
I am aware of how to block/reduce unsolicited content, such as intrusive ads, violent and explicit posts			
No knowledge	300	53.6%	62.0%
Minimal Knowledge	82	17.4%	14.1%
Basic knowledge	40	7.2%	8.2%
Adequate knowledge	51	9.4%	10.2%
Superior knowledge	47	12.5%	5.5%
Total	520	100.0%	100.0%

The fourth set of questions scrutinized the undergraduate students' knowledge of social media terms and conditions which delineate guidelines for users to comprehend their rights and responsibilities alike. The questions also examined students' awareness of the substantial yet simple steps to keep their data safe and their comprehension of social media algorithms.

As table 4 depicts, generally, both male and female students reported a significant low awareness of how to tighten up data security. Nevertheless, males showed, to some extent, that they are more knowledgeable than females. The results revealed that 56.5% of females and 47.5% of males responded "no knowledge" to a question asking whether they are acquainted with the fact that social media generate much of their revenues through selling targeted advertising based on algorithmical mining. When asked if they are familiar with controlling who gets to see their personal information on social media, 28.2% of females in comparison to only 10.6% males admitted that they have no knowledge of doing so.

Figure 3

I am aware of how to hide IP address.
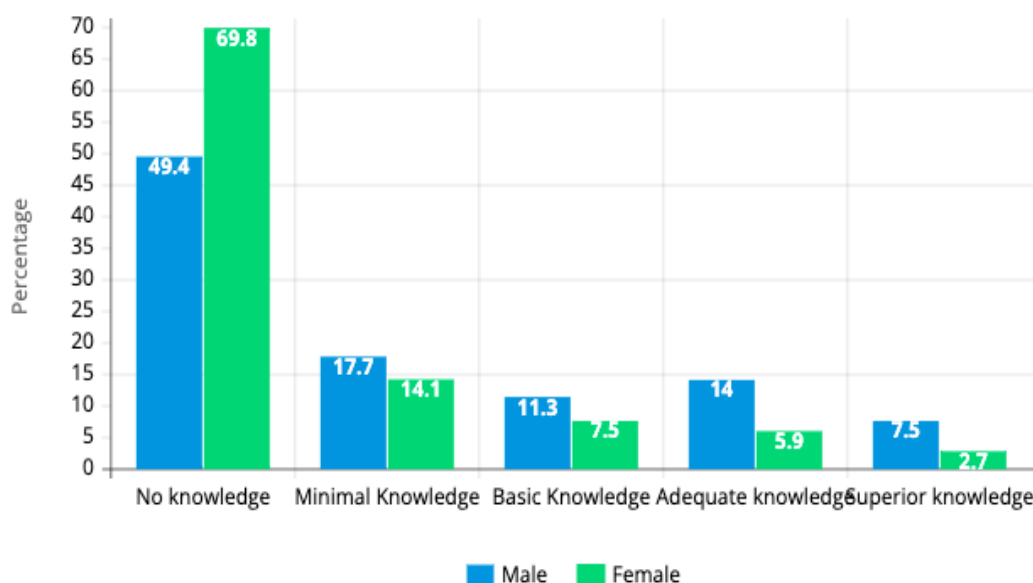
As figure 4 depicts, when asked about their awareness of how to hide IP addresses to keep search activity private and reduce hacking, the majority of females showed a significant ignorance with 69.8 % selecting "no knowledge" in comparison to 49.4% of males choosing the same answer. Another percentage that is worthy of noting regarding the same question is that only 2.7% of female participants and 7.5% of male participants had "superior knowledge". It is obvious that the gap between both answers is huge which indicates that both genders are in dire need of heightening their level of digital media literacy competency.

An extremely close result was found regarding their capacity to block/reduce unsolicited content, including intrusive ads and popups, from appearing on their account; the majority of female students (62%) selected "no knowledge" compared to 53.6% of their male counterparts who gave the same response.

Results of students at urban and center-periphery universities

Table 5

Technical competence: How good are you at performing the following activities

Creating your account on social media	Urban Universities				Center-periphery Universities			
		Cairo Uni	Ain Shams Uni			Manso ura Uni	Minia Uni	
	n	%	%	% of total	*n*	%	%	% of total
Poor	25	6.2%	13.1%	9.6%	46	14.8%	20.5%	17.7%
Average	46	17.7%	17.7%	17.7%	82	37.5%	25.8%	31.5%
Good	93	35.4%	36.2%	35.8%	53	22.7%	18.2%	20.4%
Excellent	96	40.8%	33.1%	36.9%	79	25.0%	35.6%	30.4%
Total	260	100%	100%	100%	260	100%	100%	100%

Deactivating your account on social media							
Poor	34	10.8%	15.4%	13.1%	46	14.8%	20.5%	17.7%
Average	48	19.2%	17.7%	18.5%	83	32.8%	31.1%	31.9%
Good	87	33.8%	33.1%	33.5%	62	26.6%	21.2%	23.8%
Excellent	91	36.2%	33.8%	35.0%	69	25.8%	27.3%	26.5%
Total	260	100%	100%	100%	260	100%	100%	100%
Deleting your account on social media							
Poor	61	24.6%	22.3%	23.5%	68	21.1%	31.1%	26.2%
Average	51	20.0%	19.2%	19.6%	82	36.7%	26.5%	31.5%
Good	65	26.9%	23.1%	25.0%	51	16.4%	22.7%	19.6%
Excellent	83	28.5%	35.4%	31.9%	59	25.8%	19.7%	22.7%
Total	260	100%	100%	100%	260	100%	100%	100%
Posting content, such as photos, on social media							
Poor	7	1.5%	3.8%	2.7%	20	3.9%	11.4%	7.7%
Average	51	19.2%	20.0%	19.6%	62	25.8%	22.0%	23.8%
Good	97	36.9%	37.7%	37.3%	88	34.4%	33.3%	33.8%
Excellent	105	42.3%	38.5%	40.4%	90	35.9%	33.3%	34.6%
Total	260	100%	100%	100%	260	100%	100%	100%
Removing content from timeline on social media							
Poor	34	14.6%	11.5%	13.1%	66	14.8%	35.6%	25.4%

Average	72	23.8%	31.5%	27.7%	70	33.6%	20.5%	26.9%
Good	82	31.5%	31.5%	31.5%	59	25.0%	20.5%	22.7%
Excellent	72	30.0%	25.4%	27.7%	65	26.6%	23.5%	25.0%
Total	260	100%	100%	100%	260	100%	100%	100%

Table 5 reveals that the highest percentage of urban students are excellent at creating their account on social media, with 36.9% of the total population of respondents whereas the highest percentage of center-periphery students (31.5 %) believed that they are "average" at doing the same online activity.

The table, likewise, conveys that center-periphery students remained less competent than urban students in respect to deleting content, such as posts and photos, on their timeline, with 31.5% selected "good" vs 26.9% selected "average" respectively.

Posting content on timeline was another skill indicating that urban students were more proficient than their center-periphery peers. 40.4% and 37.3% of urban students perceived themselves as "excellent" and "good" sequentially, which is higher than their counterparts, selecting 34.6% (excellent) and 33.8% (good) at the same skill.

Based on all the findings in table 5, it is strongly suggested that the higher level of knowledge at technical competencies was remarkably consistent in favor of students at urban universities over students at center-periphery universities.

Table 6

Digital interactions: what is the level of your social awareness?

I am aware of the copyright laws of social media platforms.	Urban Universities				Center-periphery Universities			
	Cairo Uni	Ain Shams Uni			Mansoura Uni	Minia Uni		
	n	%	%	% of total	*n*	%	%	% of total
No knowledge	23	10.8%	6.9%	8.8%	21	7.8%	8.3%	8.1%
Minimal Knowledge	30	9.2%	13.8%	11.5%	37	14.1%	14.4%	14.2%
Basic knowledge	32	10.0%	14.6%	12.3%	40	16.4%	14.4%	15.4%
Adequate knowledge	114	50.0%	37.7%	43.8%	114	43.8%	43.9%	43.8%
Superior knowledge	61	20.0%	26.9%	23.5%	48	18.0%	18.9%	18.5%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how to draw a line between objectionable content and freedom of expression on social media.								
No knowledge	18	7.7%	6.2%	6.9%	24	7.8%	10.6%	9.2%
Minimal Knowledge	25	9.2%	10.0%	9.6%	31	14.1%	9.8%	11.9%
Basic knowledge	38	7.7%	21.5%	14.6%	40	12.5%	18.2%	15.4%
Adequate knowledge	121	53.8%	39.2%	46.5%	117	44.5%	45.5%	45.0%
Superior knowledge	58	21.5%	23.1%	22.3%	48	21.1%	15.9%	18.5%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how to properly handle conflicts on social media.								
No knowledge	20	5.4%	10.0%	7.7%	24	7.0%	11.4%	9.2%
Minimal Knowledge	28	9.2%	12.3%	10.8%	37	17.2%	11.4%	14.2%
Basic knowledge	23	7.7%	10.0%	8.8%	38	11.7%	17.4%	14.6%
Adequate knowledge	114	52.3%	35.4%	43.8%	110	43.0%	41.7%	42.3%
Superior knowledge	75	25.4%	32.3%	28.8%	51	21.1%	18.2%	19.6%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how to filter my social media network, such as restrict, mute, unfollow/unfriend or block a contact.								
No knowledge	13	4.6%	5.4%	5.0%	19	7.0%	7.6%	7.3%

Minimal Knowledge	24	6.9%	11.5%	9.2%	34	11.7%	14.4%	13.1%
Basic knowledge	11	2.3%	6.2%	4.2%	30	11.7%	11.4%	11.5%
Adequate knowledge	106	45.4%	36.2%	40.8%	99	35.2%	40.9%	38.1%
Superior knowledge	106	40.8%	40.8%	40.8%	78	34.4%	25.8%	30.0%
Total	260	100%	100%	100%	260	100%	100%	100%

I am aware of how to report harmful content such as harassment, online abuse, impersonation, etc.

No knowledge	17	6.2%	6.9%	6.5%	18	6.3%	7.6%	6.9%
Minimal Knowledge	22	6.9%	10.0%	8.5%	25	9.4%	9.8%	9.6%
Basic knowledge	19	4.6%	10.0%	7.3%	38	10.9%	18.2%	14.6%
Adequate knowledge	101	41.5%	36.2%	38.8%	91	35.2%	34.8%	35.0%
Superior knowledge	101	40.8%	36.9%	38.8%	88	38.3%	29.5%	33.8%
Total	260	100%	100%	100%	260	100%	100%	100%

Most users only post positive information about themselves.

Strongly disagree	11	4.6%	3.8%	4.2%	23	10.2%	7.6%	8.8%
Disagree	22	6.2%	10.8%	8.5%	31	10.2%	13.6%	11.9%
Neither agree nor disagree	31	10.0%	13.8%	11.9%	45	18.0%	16.7%	17.3%
Agree	106	43.8%	37.7%	40.8%	92	32.8%	37.9%	35.4%
Strongly agree	90	35.4%	33.8%	34.6%	69	28.9%	24.2%	26.5%
Total	260	100%	100%	100%	260	100%	100%	100%

I take into consideration who I add to my social media network.

Strongly disagree	24	7.7%	10.8%	9.2%	31	11.7%	12.1%	11.9%
Disagree	23	6.9%	10.8%	8.8%	34	18.0%	8.3%	13.1%
Neither agree nor disagree	78	30.8%	29.2%	30.0%	77	29.7%	29.5%	29.6%
Agree	81	30.8%	31.5%	31.2%	61	16.4%	30.3%	23.5%
Strongly agree	54	23.8%	17.7%	20.8%	57	24.2%	19.7%	21.9%
Total	260	100%	100%	100%	260	100%	100%	100%

Table 6 indicates that urban students demonstrated more knowledge than center-periphery students at a slight degree.

For instance, the majority of respondents at urban universities (46.5% and 22.3%) selected adequate and superior knowledge, respectively, of how to differentiate between objectionable content and freedom of expression on social networking websites. Respondents at center-periphery universities showed a minor decrease in percentage compared to their peers in urban areas, with 45% for adequate knowledge and 18.5% for superior knowledge.

Likewise, the largest percentage of students in both geographic locations selected the same answer "adequate knowledge" of how to properly handle conflicts on social media. Still, urban students were slightly more conversant than their fellows in center-periphery areas; 43.8% and 28.8% of urban students chose adequate knowledge and superior knowledge respectively. 42.3% and 19.6% of the center-periphery students selected adequate knowledge and superior knowledge sequentially.

Figure 4

I am aware of how to filter my social media network.
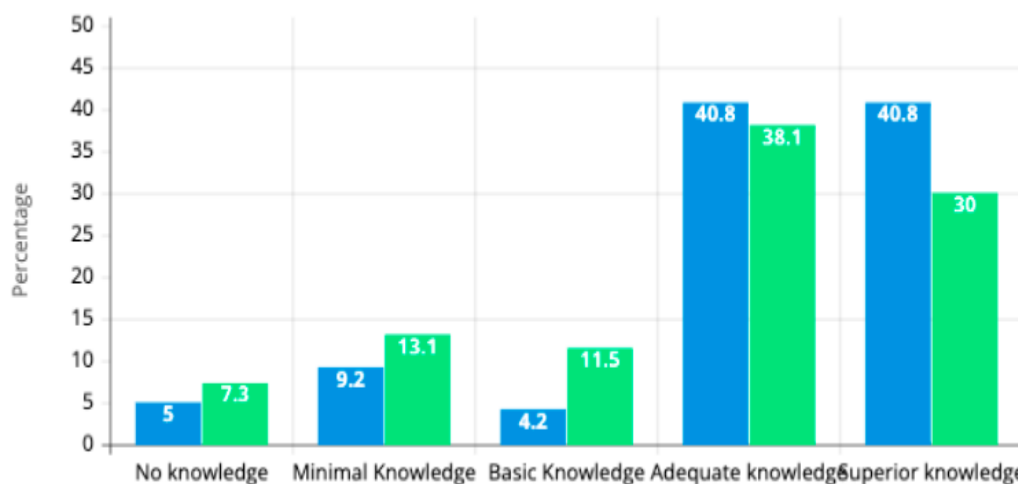
Note: Blue color indicates urban students and green color indicates center-periphery students.

In other questions, students at urban universities displayed superiority over their center-periphery counterparts, to some extent. For example, as figure   5 displays, there was an increasing level of knowledge in terms of filtering their feeds and contact list, such as restrict, mute, unfollow/unfriend or block an individual. To illustrate, the largest percentage of urban students (40.8%) believed that they had "superior knowledge" in contrast to the highest percentage of center-periphery students (38%) who had "adequate knowledge" in terms of getting rid of any content and/or friends. The same subtle difference was found concerning the statement measuring their awareness of how to report distressing content, such as harassing messages, fake accounts, and violating posts; 38.8% of students at urban universities compared with 33.8% center-periphery peers selected "superior knowledge".

Table 7

Digital Information verification

I get the news from social media.	Urban Universities				Center-periphery Universities			
	Cairo Uni	Ain Shams Uni			Mansoura Uni	Minia Uni		
	n	%	%	% of total	*n*	%	%	% of total
Always	48	23.8%	13.1%	18.5%	64	25.8%	23.5%	24.6%
Frequently	106	40.0%	41.5%	40.8%	114	43.0%	44.7%	43.8%
Sometimes	54	18.5%	23.1%	20.8%	50	21.1%	17.4%	19.2%
Seldom	43	15.4%	17.7%	16.5%	28	7.8%	13.6%	10.8%
Never	9	2.3%	4.6%	3.5%	4	2.3%	0.8%	1.5%
Total	260	100%	100%	100%	260	100%	100%	100%
I know how to do an effective search for information on social media.								
No knowledge	33	12.3%	13.1%	12.7%	33	16.4%	9.1%	12.7%
Minimal Knowledge	47	16.9%	19.2%	18.1%	50	14.8%	23.5%	19.2%
Basic knowledge	35	10.8%	16.2%	13.5%	62	21.9%	25.8%	23.8%
Adequate knowledge	76	29.2%	29.2%	29.2%	75	32.8%	25.0%	28.8%
Superior knowledge	69	30.8%	22.3%	26.5%	40	14.1%	16.7%	15.4%
Total	260	100%	100%	100%	260	100%	100%	100%
I can tell whether information on social media is true or false.								
Strongly disagree	12	4.6%	4.6%	4.6%	22	14.1%	3.0%	8.5%
Disagree	12	3.1%	6.2%	4.6%	12	3.9%	5.3%	4.6%
Neither agree nor disagree	97	30.0%	44.6%	37.3%	70	21.1%	32.6%	26.9%
Agree	85	35.4%	30.0%	32.7%	92	34.4%	36.4%	35.4%
Strongly agree	54	26.9%	14.6%	20.8%	64	26.6%	22.7%	24.6%
Total	260	100%	100%	100%	260	100%	100%	100%
I get news from sources that have								

different views than mine.

Always	54	23.1%	18.5%	20.8%	42	20.3%	12.1%	16.2%
Frequently	117	43.1%	46.9%	45.0%	124	45.3%	50.0%	47.7%
Sometimes	48	19.2%	17.7%	18.5%	37	17.2%	11.4%	14.2%
Seldom	33	11.5%	13.8%	12.7%	37	10.9%	17.4%	14.2%
Never	8	3.1%	3.1%	3.1%	20	6.3%	9.1%	7.7%
Total	260	100%	100%	100%	260	100%	100%	100%

I verify whether what is shared on social media is correct.

Always	70	30.8%	23.1%	26.9%	52	23.4%	16.7%	20.0%
Frequently	104	42.3%	37.7%	40.0%	130	47.7%	52.3%	50.0%
Sometimes	38	13.1%	16.2%	14.6%	45	17.2%	17.4%	17.3%
Seldom	30	7.7%	15.4%	11.5%	25	7.8%	11.4%	9.6%
Never	18	6.2%	7.7%	6.9%	8	3.9%	2.3%	3.1%
Total	260	100%	100%	100%	260	100%	100%	100%

I know how to verify the accuracy of information on social media via different tools.

No knowledge	39	16.2%	13.8%	15.0%	37	19.5%	9.1%	14.2%
Minimal Knowledge	51	14.6%	24.6%	19.6%	42	10.2%	22.0%	16.2%
Basic knowledge	32	12.3%	12.3%	12.3%	58	20.3%	24.2%	22.3%
Adequate knowledge	58	23.8%	20.8%	22.3%	80	31.3%	30.3%	30.8%
Superior knowledge	80	33.1%	28.5%	30.8%	43	18.8%	14.4%	16.5%
Total	260	100%	100%	100%	260	100%	100%	100%

Table 7 points to an acceptable level of information awareness among undergraduate students located in both center-periphery and urban areas. Nonetheless, still, urban students were slightly more knowledgeable than their counterparts with regards to information awareness in most answers.

The findings indicated that 29.2% of urban students and 28.8% center-periphery students had an "adequate knowledge" of how to do an effective search for information on social media**.** On the other hand, the lowest number of participants in both areas responded "never", as illustrated in the above table.

When asked if they get news from sources that have different views than theirs, the majority of urban students (45% and 20.8%) picked "frequently" and "always" respectively, and the lowest percentage (3.1%) was "never".
Students enrolled at center-periphery universities displayed comparable answers, with 47.7% and 16.2% of participants responding "frequently" and "always". Only 7.7% of participants chose "never".

Another question displayed similar results to the previous ones. 40% percent of urban students stated that they "frequently" verify news shared on social media, followed by 20.8% choosing "always" and only 3.1% admitted they never do so. In a similar vein, most students (47.7% and 16.2%) studying at center-periphery universities selected "frequently" and "always" sequentially, and only 7.7% selected "never".

The survey participants seemed to have different levels of knowledge on how to verify information on social media through different tools. The answers of urban students were distributed among 30.8% "superior knowledge", followed by 22.3% "adequate knowledge", 19.6% "minimal knowledge" whereas "basic knowledge" and "no knowledge" represented 12.3% and 15% sequentially. On the other hand, the results of center-periphery students also showed no overwhelming majority toward a specific level of knowledge, with 30.8% choosing "adequate knowledge", 22.3% "basic knowledge", 16.5% "superior knowledge", 16.2% "minimal knowledge", and 14.2% "no knowledge".

Table 8

Digital privacy and security awareness

I am aware of how to control who gets to see my personal information on social media.	Urban Universities				Center-periphery Universities			
	Cairo Uni	Ain Shams Uni			Mansoura Uni	Minia Uni		
	n	%	%	% of total	n	%	%	% of total
No knowledge	40	13.1%	17.7%	15.4%	41	22.7%	9.1%	15.8%
Minimal Knowledge	41	13.8%	17.7%	15.8%	41	6.3%	25.0%	15.8%
Basic knowledge	28	10.8%	10.8%	10.8%	49	18.0%	19.7%	18.8%
Adequate knowledge	56	22.3%	20.8%	21.5%	66	23.4%	27.3%	25.4%
Superior knowledge	95	40.0%	33.1%	36.5%	63	29.7%	18.9%	24.2%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how to control who gets to see the content I post on social media.								
No knowledge	48	16.9%	20.0%	18.5%	52	26.6%	13.6%	20.0%
Minimal Knowledge	29	6.9%	15.4%	11.2%	29	5.5%	16.7%	11.2%
Basic knowledge	37	15.4%	13.1%	14.2%	52	18.0%	22.0%	20.0%
Adequate knowledge	48	20.8%	16.2%	18.5%	69	25.0%	28.0%	26.5%
Superior knowledge	98	40.0%	35.4%	37.7%	58	25.0%	19.7%	22.3%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how to protect my account from hacking tools.								
No knowledge	122	48.5%	45.4%	46.9%	130	57.0%	43.2%	50.0%
Minimal Knowledge	49	17.7%	20.0%	18.8%	37	7.8%	20.5%	14.2%
Basic knowledge	30	6.9%	16.2%	11.5%	39	13.3%	16.7%	15.0%
Adequate knowledge	40	20.0%	10.8%	15.4%	37	13.3%	15.2%	14.2%
Superior knowledge	19	6.9%	7.7%	7.3%	17	8.6%	4.5%	6.5%
Total	260	100%	100%	100%	260	100%	100%	100%
I am aware of how social media use								

personal data to generate revenues from ads.

No knowledge	120	52.3%	40.0%	46.2%	150	64.8%	50.8%	57.7%
Minimal Knowledge	49	15.4%	22.3%	18.8%	41	12.5%	18.9%	15.8%
Basic knowledge	26	6.9%	13.1%	10.0%	31	8.6%	15.2%	11.9%
Adequate knowledge	23	10.0%	7.7%	8.8%	22	7.8%	9.1%	8.5%
Superior knowledge	42	15.4%	16.9%	16.2%	16	6.3%	6.1%	6.2%
Total	260	100%	100%	100%	260	100%	100%	100%

I am aware of how to hide my IP address (unique address that identifies a device on the Internet).

No knowledge	165	62.3%	64.6%	63.5%	144	57.8%	53.0%	55.4%
Minimal Knowledge	39	13.8%	16.2%	15.0%	44	13.3%	20.5%	16.9%
Basic knowledge	21	8.5%	7.7%	8.1%	28	9.4%	12.1%	10.8%
Adequate knowledge	22	11.5%	5.4%	8.5%	30	13.3%	9.8%	11.5%
Superior knowledge	13	3.8%	6.2%	5.0%	14	6.3%	4.5%	5.4%
Total	260	100%	100%	100%	260	100%	100%	100%

I am aware of how to block/reduce unsolicited content, such as intrusive ads, such as intrusive ads, violent and explicit posts.

|							
No knowledge	149	56.2%	58.5%	57.3%	151	56.3%	59.8%	58.1%
Minimal Knowledge	44	17.7%	16.2%	16.9%	38	18.0%	11.4%	14.6%
Basic knowledge	15	4.6%	6.9%	5.8%	25	10.2%	9.1%	9.6%
Adequate knowledge	26	10.8%	9.2%	10.0%	25	10.2%	9.1%	9.6%
Superior knowledge	26	10.8%	9.2%	10.0%	21	5.5%	10.6%	8.1%
Total	260	100%	100%	100%	260	100%	100%	100%

Table 8 pointed out that the majority of students in both geographic locations had a notable lack of awareness of digital privacy protection which could tremendously impact their everyday online interactions and decisions.

One of the questions gauged students' knowledge of how to hide their IP addresses, where 63.5% of respondents at urban universities selected "no knowledge" and 57.7% of respondents at center-periphery universities provided the same answer.

The highest percentage of students admitted their ignorance of how to protect their personal data from hacking tools and software; 46.9% and 50% of students at urban and center-periphery universities had "no knowledge" sequentially.

Figure 5

I am aware of how social media make use of personal data to generate revenues from ads.
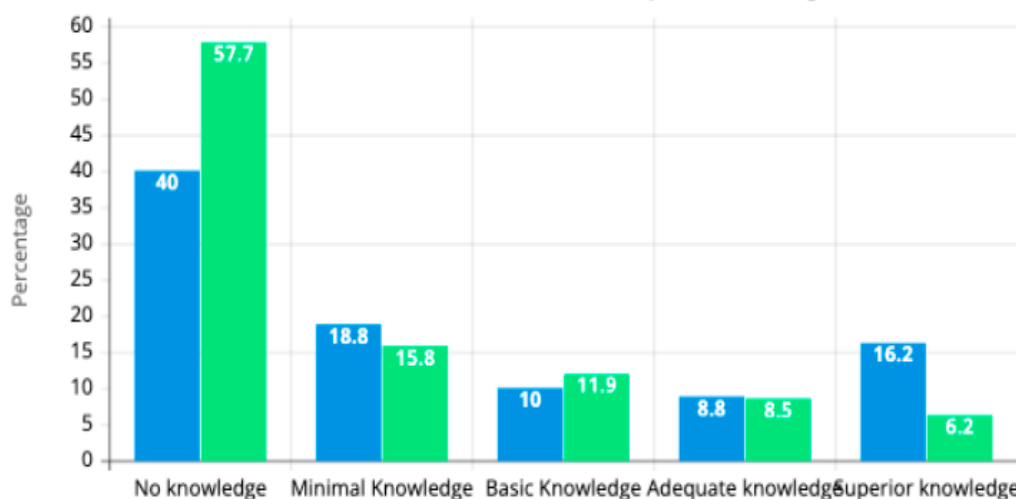
Note: Blue color indicates urban students and green color indicates center-periphery students.

Additionally, a considerable number of participants said that they showed a complete lack of awareness regarding how social media yield revenues from the analysis of data value. 65% of students at urban universities believed that they had "no knowledge" or "minimal knowledge" about data monetization. The same goes for the majority of respondents (57.7% and 15.8%) at center-periphery universities selected "no knowledge" and "minimal knowledge" respectively.

Progress in basic knowledge of personal data control techniques was subtly greater compared to previous answers in this question set. As an illustration, 36.5% (superior knowledge) and 21.5% (adequate knowledge) of respondents believed that they are aware of how to control who gets to see their personal information on social media accounts. On the other hand, 22.3% and 26.5% of respondents studying at center-periphery universities selected "superior knowledge" and "adequate knowledge" respectively.

CHAPTER VI
DISCUSSION AND CONCLUSION

Based on my research carried out through an extensive survey, I was capable of addressing the research questions propounded in this thesis. The present quantitative study aimed at adding to the small body of empirical literature on digital media literacy in Egypt, mainly focusing on social media. The comparative study set out to explore innovative angles; gauging the effect of gender difference in addition to geographic locations on Egyptian students' awareness of digital media literacy. The survey revealed intriguing findings, sharing some similarities with the literature; while also revealing different outcomes.

RQ1: Does gender difference affect the awareness level of social media literacy among students enrolled at public universities located in both urban and center-periphery areas?

Technical Competency

The analysis strongly indicated that students of both genders are most skilled in the technical competences as opposed to the others. The least selected answer to all questions was "poor", indicating their high technical capacity in basic activities on social media platforms as that of the students who participated in Sami's study (2019). According to the latter study, students at MSA University believed that the reason why they do not face difficulties in digital access skills in the Internet generally and social media networks specifically, is that they are easy to use and accessible around the clock.

In this study, male students were self-reported to be more aware of technical skills than females, which echoes the findings of a comparative study at UK's Cardiff University conducted by Page and Reynolds (2014). According to the latter study, female participants reported lower levels of web technology than their male counterparts.

Digital Interactions

The items in the questionnaire intended to examine the socially mediated practices among respondents. The results suggested that male students had slightly higher levels of handling online uncomfortable situations than their female peers, such as dealing with online disputes and responding to harmful posts. These results seem to contradict the findings of Page and Reynolds (2014), whose results demonstrated that female graduate students achieved higher social performance scores than their male counterparts. As an illustration, females are more responsive, tolerant to social arguments, in addition to being more open-minded to others' opinions in online discussions.

Digital Information verification

In the current study, male students' responses did not signal a noteworthy difference from their female counterparts' in their capacity of being responsible media consumers. In other words, students of both genders were at the same acceptable level of doing their part in reflecting and verifying online information. These results confirm the findings of prior study finding that university students (both males and females combined) at MSA University scrutinized online content before embracing or posting it because they are wary about believing what is shared on the Internet (Sami, 2019).

Digital Privacy and Security Awareness

Both male and female students are in dire need of fostering their technological knowledge to adequately protect their identity and personal data on the Internet. The results of the present study revealed that participants, generally, had the lowest level of awareness when it comes to digital privacy and security protection, compared to other measured competencies,

On the other hand, the results in a recent study revealed major differences between students at AUC and public universities (Allam & ElGhetany, 2020); the majority of AUC undergraduate students of both genders have higher awareness of security and algorithm practices than students who participated in this study. To illustrate, 86% are knowledgeable that social networks benefit from their demographics and other personal data to generate revenues from advertisements. Additionally, 92% are aware of the fact that they have digital shadows for their online activities and communications.

Regarding the comparative results of the present study, male students were found to be slightly more informed than their female peers in security practices. For instance, when asked about their skill to hide their IP address to prevent hackers' tracking, 69.8% of females and 49.4% of males answered that they had "no knowledge", which showed the gap of knowledge between the two genders. The same went for other security-related capabilities, including blocking unsolicited content and controlling who sees their personal information.

These findings seem to confirm the results of a past comparative study carried out among Israeli students which supported that male are more conversant with essential tools for concealing users' identity and securing personal information on the Web (Weinberger et al., 2017).

RQ2: Do students enrolled at public universities located in urban areas have higher awareness levels of social media literacy compared to students enrolled at public universities located in center-periphery areas?

Technical Competency

The results of this study showed that students at urban universities were more acquainted with digital technical skills than their fellows at center-periphery universities. Nonetheless, the general implications of these findings demonstrated that respondents studying at both geographic locations mastered basic digital functional skills the most in comparison to others.

These findings are directly in line with results of a prior study carried out in Indonesia, suggesting that digital functional skill on social media is one the most literacy competencies youngsters rapidly develop in urban areas. This is a consequence of young adults using social websites frequently and the increasing accessibility of different digital devices in urban locations (Tri Atmi et al., 2018).

Digital Interactions

Compared with their center-periphery counterparts, urban students slightly outperformed in terms of digital social interactions.The findings found that students going to urban universities were more skillful than their center-periphery peers in regard to reporting harmful messages as well as managing their favorite contacts. Furthermore, urban students were well-aware that most people are inclined to present themselves in the best light.

It is noteworthy that there is a dearth of research on digital interpersonal skills via social networking sites, especially in reference to center-periphery and urban areas. The findings of the study at hand revealed a salient difference from a study conducted in Canada, examining the difference of online social interactions skills of participants residing in urban and center-periphery areas (Burkell & Saginur, 2015). Participants gave comparable responses; residents of center-periphery and urban communities seemed to be aware of how a vast number of social media users usually tend to draw a positive picture of their lives which are different from their real ones. Moreover, participants from both geographic locations responded that they know how to handle online conflicts and respond to hurtful comments, though they settle them differently.

Digital Information Verification

The findings of this study showed that students at center-periphery universities relatively lag behind their peers at urban universities in information assessment and verification practices. A similar pattern was obtained in a previous comparative study undertaken in Japan, suggesting that urban school students are highly adept at critical thinking skills in both legacy and new media than center-periphery school students (Hu, 2022).

Digital Privacy and Security Awareness

The results of this section clearly emphasized the need of digital security knowledge and training to Egyptian youth; the majority of participants studying at both urban and center-periphery universities perceived themselves as unknowledgeable about how to protect their personal data from tracking and hacking. Students at urban universities do not widely vary in their capability at adopting security practices on social networking from their center-periphery peers. In brief, urban students were also

slightly more familiar with digital protection tools than their center-periphery counterparts.

This result is consistent with what has been found in a previous study suggesting that most participants residing in Malaysian center-periphery communities face difficulties in grasping cybersecurity issues, including phishing scams and cyber attacks (Awang et al., 2021).

To sum it up, the analysis revealed that both male and female respondents are most proficient in basic digital technical competence in comparison with the other media literacy skills. On the other hand, it should be pointed out that privacy awareness was surprisingly very low for both genders, especially regarding hiding IP addresses and blocking unsolicited content.

Male students were self-reported to be more knowledgeable, to a large extent, than their female peers in regards to basic technical skills on social networking services. The findings also suggested a slightly higher awareness of digital interactions as well as privacy awareness in favor of male students. Finally, there appeared to be no difference between males and females in being responsible media consumers; their answers were effectively indistinguishable and interchangeable

For the second part of the study concerning the different geographic location, the analysis showed a similar pattern to the gender difference comparison with respect to the highest and lowest levels of social media literacy skills. In other words, students at urban and center-periphery regions self-reported the highest performance at basic technical skills and lowest performance at digital security awareness. In general, the analysis of the study supported that urban students are marginally more competent than their center-periphery peers in all social media literacy skills.

Limitations and Future Research

As with the majority of previous studies, the current study is subject to some limitations. The first limitation is that previous research studies on the same topic which is social media literacy in Egypt is very limited. Moreover, there is a complete lack of previous research focusing on social media literacy levels of Egypt's public universities students Therefore, there was no sufficient information to serve as a conceptual framework for the literature review and discussion chapters. The second limitation is that mass communication students were not eliminated from the study. Subsequently, all subjects were not at the same information level which may affect the reliability of the findings. Another reason that could interfere with the reliability of the results is the self-reported measure in this study that could be impacted by respondents' motivations and some biases, such as social desirability bias (Arendt & Matthes, 2017, p.7).

In respect of future research, this study could be replicated without the participation of students at mass communication faculty. They might develop higher awareness about media literacy, consequently, the findings are more likely to be reliable than the existing ones in this study. Another suggestion for further research is conducting a study where the sample is divided into respondents who study different disciplines: soft sciences and hard sciences. This angle might bring to light fresh, valuable information that could help glean in-depth insight into students' different awareness, attitude and behavior toward digital media consumption and engagement. Finally, more research is needed in the sphere of providing informal media literacy to educate school and university students alike since media literacy courses are offered on a very small scale in Egypt.

References

About Jordan Media Institute. (n.d.). Retrieved from: https://www.jmi.edu.jo/en/About-JMI

Ali, S., Ayesha, Q., Mohammad, H., & Adwan, A. (2021). Gender discrepancies concerning social media usage and its influences on students academic performance. *Utopía y Praxis Latinoamericana*, 26(1), DOI: https://doi.org/10.5281/zenodo.4556283

Allam, R. & ElGehandy, S. 2020. News media literacy in the digital age: A measure of need and usefulness of a university curriculum in Egypt. In W. G. Christ, and B. S. De Abreu (Ed.), *Media literacy in a disruptive media environment* (pp. 185-188). Taylor & Francis Group.

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives* 31(2): 211–236.

Allman, T. L., Mittelstaedt, R. D., Martin, B., & Goldenberg, M. (2009). Exploring the motivations of base jumpers: Extreme sport enthusiasts. *Journal of Sport & Tourism*, 14(4), 229–247. https://doi.org/10.1080/14775080903453740

Amazeen, M. A., & Bucy, E. P. (2019). Conferring resistance to digital disinformation: The inoculating influence of Procedural News Knowledge. *Journal of Broadcasting & Electronic Media*, 63(3), 415–432. https://doi.org/10.1080/08838151.2019.1653101

Arendt, F., & Matthes, J. (2017). Media effects: Methods of hypothesis testing. *The International Encyclopedia of Media Effects*, 1–12. https://doi.org/10.1002/9781118783764.wbieme0024

Awang, N., Zambri, S. & Abdullah, S. (2021). Awareness of cybersecurity threats for rural community. 2nd International E-Conference on New Normal in Education. Retrieved from https://www.researchgate.net/publication/356082599_AWARENESS_ON_CYBERSE CURITY_THREATS_FOR_center-periphery_COMMUNITY

Broniatowski, D., Jamison, A., Qi S., AlKulaib L., Chen T., Benton A., Quinn S., & Dredze M. (2018) Weaponized health communication: Twitter bots and Russian trolls amplify the vaccine debate. *American Journal of Public Health* 108: 1378–1384.

Brosnan, M. J. (1998). The role of psychological gender in the computer-related attitudes and attainments of primary school children (aged 6–11). *Computers & Education*, 30(3-4), 203–208. https://doi.org/10.1016/s0360-1315(97)00070-5

Buckingham, D. & Willett, R. (eds.) (2006). Digital generations. Children, young people, and new media. *Mahwah, NJ.: Lawrence Erlbaum Associates*.

Buckingham, D. (2003). Media education. Literacy, learning and contemporary culture. *Cambridge, UK: Polity Press*.

Buckingham, D. (2007). Childhood in the Age of Global Media. *Children's Geographies*, Vol. 5, No. 1–2, 43–54.

Buckingham, D. (2015). Defining digital literacy - what do young people need to know about digital media? *Nordic Journal of Digital Literacy*, 10(Jubileumsnummer),21–35.
https://doi.org/10.18261/issn1891-943x-2015-jubileumsnummer-03

Carlsson, U., & Culver, S. H. (2013). Media and information literacy and intercultural dialogue. Nordicom.

Chan, M., Lee, F. L., & Chen, H.-T. (2021). Examining the roles of multi-platform social media news use, engagement, and connections with news organizations and journalists on news literacy: A comparison of seven democracies. *Digital Journalism*, *9*(5), 571–588. https://doi.org/10.1080/21670811.2021.1890168

Chen, D. -T., Wu, J., & Wang, Y. -M. (2011). Unpacking new media literacy. *Journal of Systemics, Cybernetics and Informatics*, 9(2), 84- 88. Retrieved from http://www.iiisci.org/journal/sci/FullText.asp?var=&id=OL508KR

Chen, D.-T., Wu, J., & Wang, Y.-M. (2011). Unpacking new media literacy. Journal of Systemics, Cybernetics and Informatics, 9(2), 84-88. http://www.iiisci.org/journal/sci/FullText.asp?var=&id=OL508KR

Crespel, E., (2016). Controlling social media flow: Avoiding unwanted publication. *Essachess*. 9. 21-32.

Cunliffe-Jones, P. (2018). Misinformation policy in Sub-Saharan Africa: From laws and regulations to media literacy. *University of Westminster Press*.

Desouky, S. (2010). Media literacy in the elementary education in the globalization age. *Alexandria: Dar elgamaa elgadida*.

Dijk, J. A. van. (2005b, February 25). The Deepening Divide: Inequality in the Information Society. *Sage Publications*, Inc.

Dindar, M., & Akbulut, Y. (2014). Why do pre-service teachers quit Facebook? an investigation on 'quitters forever' and 'quitters for a while.' *Computers in Human Behavior*, 39, 170–176. https://doi.org/10.1016/j.chb.2014.07.007

Dubose, C. (2011). The social media revolution. Radiologic technology. 83. 112-9.

E- Resources & Library use. *Advances in Social Sciences Research Journal*, *1*(7), 96–108. https://doi.org/10.14738/assrj.17.492

Egelhofer, JL., & Lecheler, S. (2019) Fake news as a two-dimensional phenomenon: a framework and research agenda. *Annals of the International Communication Association,* 43(2): 97–116.

El-Guindy, M. N. (2016). Middle East Media & Information Literacy in the Digital Age: A Perspective from Egypt. UNESCO IFAP Proceeding, 209. pp 131-139

Garcia, A., Seglem, R., & Share, J. (2013). Transforming teaching and learning through Critical Media Literacy Pedagogy. *LEARNing Landscapes*, 6(2), 109–124. https://doi.org/10.36510/learnland.v6i2.608

Gebel, M. (2021, January 15). Misinformation vs. disinformation: What to know about each form of false information, and how to spot them online. *Business Insider*.

Retrieved   from
https://www.businessinsider.com/guides/tech/misinformation-vs-disinformation.

Geissler, J. E., & Horridge, P. (1993). University students' computer knowledge and commitment to learning. *Journal of Research on Computing in Education*, 25(3), 347–365. https://doi.org/10.1080/08886504.1993.10782056

Global media and information literacy week. (n.d.). Retrieved from https://www.unesco.org/en/weeks/media-information-literacy

Guess, A. M., Lerner, M., Lyons, B., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the National Academy of Sciences*, 117(27), 15536–15545. https://doi.org/10.1073/pnas.1920498117

Helmy, H. E. (2011). Egypt's center-periphery—urban income disparity: is the gap diverging? *Contemporary Arab Affairs*, 4(2), 148–173. https://www.jstor.org/stable/48599749

Herring, S.C. (2007). 'Questioning the Generational Divide: Technological Exoticism and Adult Constructions of Online Youth Identity'. In D. Buckingham (ed.) Youth, Identity and Digital Media. Bambridge Mass.: The MIT Press.

Hirsjärvi, I., & Tayie, S. (2011). Children and new media: Youth media participation. A case study of Egypt and Finland. *Comunicar*, *19*(37), 99–108. https://doi.org/10.3916/c37-2011-03-01

Hoehe, M. R., & Thibaut, F. (2020). Going digital: how technology use may influence human brains and behavior. *Dialogues in clinical neuroscience*, *22*(2), 93–97. https://doi.org/10.31887/DCNS.2020.22.2/mhoehe

Hu, X., & Kurokami, H. (2022). A Comparison of Media Literacy in Urban and center-periphery Middle School Students. *International Journal for Educational Media and Technology*, *11*(1). Retrieved from https://ijemt.org/index.php/journal/article/view/256

Huguet, A. Kavanagh, J., Baker G., & Blumenthal, M. (2019). Exploring media literacy education as a tool for mitigating truth decay.Rand Corporation.https://www.rand.org/content/dam/rand/pubs/resear ch_reports/RR3000/RR3050/RAND_RR3050.pdf

Igor, K., Stela, L. (2019). The role of organizations of journalists in promoting media literacy - building credibility and trust. *Media Literacy and Academic Research*, 2(4), 24-37. https://www.mlar.sk/wp-content/uploads/2019/04/MLAR_2019_1_clanok_2-1.pdf

Ireton, C., & Posetti, J. (2018). *Journalism, 'fake news' & disinformation: Handbook for journalism education and training*. United Nations Educational, Science, and Cultural Organization.

Interaktive Und Kooperative Medien. Interaktiv Informiert – Allgegenwärtig Und Allumfassend!?, 23–32. https://doi.org/10.1524/9783486718782.23

Ivanović, M. (2014). Development of Media Literacy – an important aspect of modern education. *Procedia - Social and Behavioral Sciences*, *149*, 438–442. https://doi.org/10.1016/j.sbspro.2014.08.284

Jack, C. (2017) Lexicon of Lies: Terms for Problematic Information. *Data & Society*. https://datasociety.net/library/lexicon-of-lies/.

Jacobs, S., Egert, C. A., & Barnes, S. B. (2009). Social Media Theory and Practice: Lessons Learned for a pioneering course. 2009 39th IEEE Frontiers in Education Conference. https://doi.org/10.1109/fie.2009.5350773

Karlova, N. & Fisher, K. E. (2013). A social diffusion model of misinformation and disinformation for understanding human information behavior.. *Inf. Res.*, 18.

Kaur, J. (2021). Social media and online education - A study about rural segment. *International Journal of Advanced Research in Commerce, Management & Social Science*, 4 (01), 127-132.

Kosimov, S. U., Rafiqova, M. R., & Murodova, M. I. (2021). Implementation of the technological competence of future specialists. *Creative Education*, 12(03), 666–677. https://doi.org/10.4236/ce.2021.123046

Kumar, K. K., Sattar, F. A., Bondade, S., Hussain, M. M. S., & Priyadarshini, M. (2017). A gender-specific analysis of suicide methods in deliberate self-harm. *Indian Journal of Social Psychiatry*, *33*(1), 7. https://doi.org/10.4103/0971-9962.200098

LIU, T. & SUN, H. (2012). Gender differences on information literacy of science and engineering undergraduates. *International Journal of Modern Education and Computer Science*, 4(2), 23–30. https://doi.org/10.5815/ijmecs.2012.02.04

Luan, L., Liang, J.-C., Chai, C. S., Lin, T.-B., & Dong, Y. (2020). Development of the New Media Literacy Scale for EFL Learners in China: A validation study. Interactive Learning Environments, 1–14. https://doi.org/10.1080/10494820.2020.1774396

Luis, S., Maria Jose, B., Marisa, M., Helena, S. (2017). Mapping of media literacy practices and actions in EU-28. *Publications office*. Doi 10.2759/111731

Magdi, N. (2019, April 17). "Media Literacy, SGDs to highlight 7th edition of Alexandria Media Forum". *Egypt Today*.Retrieved from https://www.egypttoday.com/Article/1/68442/Media-Literacy-SGDs-to-highlight-7th-edition-of-Alexandria-Media

Malik, A. (2022). Twitter begins rolling out its Community Notes feature globally. *TechCrunch*. Retrieved from https://techcrunch.com/2022/12/12/twitter-begins-rolling-out-its-community-notes-feature-globally/

Maxwell, E. C., & Maxwell, E. M. (2014). Gender differences in digital literacy among undergraduate students of Faculty of Education, Kogi State University: *Implications for E- Resources & Library use. Advances in Social Sciences Research Journal*, 1(7), 96–108. https://doi.org/10.14738/assrj.17.492

Mazman, G. & Usluel, Y. (2011). Gender differences in using social networks. *Turkish Online Journal of Educational Technology-TOJET*, 10(2), pp. 133-139.

Media literacy: Media literacy organizations & associations. (n.d.). Retrieved from https://libguides.library.kent.edu/c.php?g=1177409&p=8607492

Meta's third-party fact-checking program. (n.d.). Retrieved from https://www.facebook.com/formedia/mjp/programs/third-party-fact-checking

Molina, M. D., Sundar, S. S., Le, T., & Lee, D. (2021). "Fake News" Is Not Simply False Information: A Concept Explication and Taxonomy of Online Content.

American Behavioral Scientist, 65(2), 180–212.
https://doi.org/10.1177/0002764219878224

Ofcom's approach to online media literacy. Ofcom. (2021, December 6). Retrieved from https://www.ofcom.org.uk/research-and-data/media-literacy-research/approach

Our mission. (n.d.). Retrieved from: https://mdlab.lau.edu.lb/about/mission/

Page, K. L., & Reynolds, N. (2014). Learning from a wiki way of learning. *Studies in Higher Education*, 40(6), 988–1013. https://doi.org/10.1080/03075079.2013.865158

Parsazadeh, N., Ali, R., & Ridwan Saeed, I. I. (2015). Digital Information Evaluation Skills among students in Higher Education. *Jurnal Teknologi*, 75(11). https://doi.org/10.11113/jt.v75.5336

Patricia Ordóñez de Pablos, Lytras, M. D., & Zhang, X. (2021). It and the development of Digital Skills and competencies in Education. *Information Science Reference*.

Polanco-Levicán, K., & Salvo-Garrido, S. (2022). Understanding Social Media Literacy: A systematic review of the concept and its competences. *International Journal of Environmental Research and Public Health*, 19(14), 8807. https://doi.org/10.3390/ijerph19148807

Ponto J. (2015). Understanding and Evaluating Survey Research. *Journal of the advanced practitioner in oncology*, *6*(2), 168–171.

Popescu, M. (2020). Media literacy tools in combating disinformation and fake news in social media. SERIES VII - SOCIAL SCIENCES AND LAW, 13(62)(1), 103–112. https://doi.org/10.31926/but.ssl.2020.13.62.1.11

Rizal, R., Rusdiana, D., Setiawan, W., Siahaan, P., & Ridwan, I. M. (2021). Gender differences in digital literacy among prospective physics teachers. *Journal of Physics: Conference Series*, 1806(1), 012004. https://doi.org/10.1088/1742-6596/1806/1/012004

Sami, R. (2019). Digital media literacy skills for university students: A qualitative study. T*he Arab Journal of Media and Communication Research (AJMCR)*, 2019(26), 196-215. doi: 10.21608/jkom.2019.107468

Scharrer, E., and Ramasubramanian, S. (2015). Intervening in the media's influence on stereotypes of race and ethnicity: the role of media literacy education. *J. Soc.* Issues 71 (1), 171–185. doi:10.1111/josi.12103

Shin, D., Kee, K. F., & Shin, E. Y. (2022). Algorithm awareness: Why user awareness is critical for personal privacy in the adoption of algorithmic platforms? *International Journal of Information Management*, 65, 102494. https://doi.org/10.1016/j.ijinfomgt.2022.102494

Silver, M. (2001). Gender equity and the development of computer literacy. Available at: http://www.tomorrows girls .com/wattworks.htm.

Simon, W. (2011). Center-periphery relationship in the understanding of development of internal colonies. *International Journal of Economic Development Research and Investment,* 2 (1). Retrieved from

https://icidr.org/ijedri_vol2no1_april2011/Centre-periphery%20Relationship%20in%2
0the%20Understanding%20of%20Development%20of%20Internal%20Colonies.pdf

Singer, G., Norbisrath, U., & Lewandowski, D. (2012). Impact of gender and age on
performing search tasks online. Mensch & Computer 2012: 12. *Fachübergreifende
Konferenz Für Interaktive und Kooperative Medien. Interaktiv Informiert –
Allgegenwärtig Und Allumfassend*!?, 23–32.
https://doi.org/10.1524/9783486718782.23

Slumkoski, C., Conrad, M., & Charlong, L. (2008). History on the Internet: The
"Atlantic Canada Portal." *Acadiensis*, 37(1), 100–109. Retrieved from
http://www.jstor.org/stable/30303484

Southwell, BG, Niederdeppe, J, Cappella, JN, et al. (2019) Misinformation as a
misunderstood challenge to public health. *American Journal of Preventive Medicine,*
57(2): 282–285.

Suminas, A., & Jastramskis, D. (2020). The importance of Media Literacy Education:
How Lithuanian students evaluate online news content credibility. *Central European
Journal of Communication*, 13(2), 230–248.
https://doi.org/10.19195/1899-5101.13.2(26).5

Toffler, A. (1981). The third wave. Cavaye Place, *London: Pan Books*.

Tri Atmi, R., F. Satibi, I., & R. Cahyani, I. (2018). Media Literacy Skills and social
media: A portray of teenagers in urban areas. *International Journal of Engineering &
Technology*, 7(3.7), 236. https://doi.org/10.14419/ijet.v7i3.7.16359

Tzu-Bin Lin, Jen-Yi Li, Feng Deng, & Ling Lee. (2013). Understanding New Media Literacy: An Explorative Theoretical Framework. *Journal of Educational Technology & Society*, 16(4), 160–170. http://www.jstor.org/stable/jeductechsoci.16.4.160
Universitat Autònoma de Barcelona. Studies on the Current Trends and Approaches to Media Literacy in Europe, 2007, Available:
http://ec.europa.eu/avpolicy/media_literacy/docs/studi es/study.pdf.
Volkmer, I. (2021). Digital sovereignty and approaches to governing globalized data spaces. In G. Feindt, B. Gissibl & J. Paulmann (Ed.), *Band 21 Cultural Sovereignty beyond the Modern State: Space, Objects, and Media* (pp. 128-146). Berlin, Boston: De Gruyter Oldenbourg. https://doi.org/10.1515/9783110679151-007

G. Feindt, B. Gissibl & J. Paulmann (Ed.), Band 21 Cultural Sovereignty beyond the Modern State: Space, Objects, and Media (pp. 128-146). *Berlin, Boston: De Gruyter Oldenbourg.* https://doi.org/10.1515/9783110679151-007

Vosoughi, S, Roy, D, Aral, S (2018) The spread of true and false news online. Science 359(6380): 1146–1151.

Vraga, E. K., & Bode, L. (2020). Defining misinformation and understanding its bounded nature: Using expertise and evidence for describing misinformation. *Political Communication*, 37(1), 136–144. https://doi.org/10.1080/10584609.2020.1716500

Weinberger, M., Zhitomirsky-Geffet, M., & Bouhnik, D. (2017). Sex differences in attitudes towards online privacy and anonymity among Israeli students with different technical backgrounds. Information Research: *An International Electronic Journal*, 22(4), n4.

What's media literacy? A definition and more. (n.d.). Retrieved from https://www.medialit.org/reading-room/what-media-literacy-definitionand-more

Why is a post on Instagram marked as false information?. (n.d.). Retrieved from https://help.instagram.com/388534952086572

Your gateway to American culture. (n.d.). Retrieved from: https://eg.usembassy.gov/education-culture/acc/

Zhang, D., Lim, J., Zhou, L., & Dahl, A. A. (2021). Breaking the data value-privacy paradox in Mobile Mental Health Systems through user-centered privacy protection: A web-based survey study. *JMIR Mental Health*, 8(12). https://doi.org/10.2196/31633

Appendices

Appendix A - Survey Questions

Part A - Demographic Details

1) What is your gender identity?

Male

Female

Other

Rather not state

2) Which one of the following best describes your age group?

18-24

25-34

35-44

45-54

55-64

Above 65

3) Which of the following universities are you enrolled at?

Cairo University

Ain Shams University

Al-Mansoura University

Al-Minia University

4)What year are you in?

Freshman

Sophomore

Junior

Senior

Part B - Technical Competence

How good are you at performing the following activities?

5) Creating your account on social media

Poor

Average

Good

Excellent

6) Deactivating your account on social media

Poor

Average

Good

Excellent

7) Deleting your account on social media

Poor

Average

Good

Excellent

8) Posting content, such as photos, on social media

Poor

Average

Good

Excellent

9) Removing content from the timeline on your social media account

Poor

Average

Good

Excellent

Part C - Digital Interactions

What is the level of your social awareness on social media?

10) I am aware of the copyright laws of social media platforms.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

11) I am aware of how to draw a line between objectionable material and freedom of expression on social media.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

12) I am aware of how to properly handle conflicts on social media.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

13) I am aware of how to filter my social media network, such as restrict, mute, unfollow/unfriend or block a contact.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

14) I am aware of how to report harmful content such as harassment, online abuse, impersonation, etc.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

15) Most users only post positive information about themselves.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

16) I take into consideration who I add to my social media network.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

Part D - Digital Information verification

17) I get the news from social media.

Always

Frequently

Sometimes

Seldom

Never

18) I know how to do an effective search for information on social media.

No knowledge

Minimal knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

19) I can tell whether information on social media is true or false.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

20) I get news from sources that have different views than mine.

Always

Frequently

Sometimes

Seldom

Never

21) I verify whether what is shared on social media is correct.

 Always

 Frequently

Sometimes

Seldom

Never

22) I know how to use different sources of information to verify content on social media.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

Part E - Digital Privacy and Security Awareness

23) I am aware of how to control who gets to see my personal information on social media

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

24) I am aware of how to control who gets to see the content I post on social media

No knowledge

Minimal Knowledge

Basic knowledge

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

Adequate knowledge

Superior knowledge

25) I am aware of how to protect my account from hacking software.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

26) I am aware of how social media use personal information to generate revenues from ads.

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

27) I am aware of how to hide my IP address (unique address that identifies a device on the Internet).

No knowledge

Minimal Knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

90

28) I am aware of how to block/reduce unsolicited content, such as intrusive ads, violent and explicit posts.

No knowledge

Minimal knowledge

Basic knowledge

Adequate knowledge

Superior knowledge

Appendix B - Consent Form

الجـامـعـة الأمـريكيـة بالقـاهـرة

استمارة موافقة مسبقة للمشاركة في دراسة بحثية

عنوان البحث : تأثير الاختلاف بين الجنسين و الموقع الجغرافي على الثقافة الإعلامية الرقمية بين طلاب الجامعات الحكومية

الباحث الرئيسي: هبه الله مصطفي حلمي

البريد الالكتروني: hebahelmy@aucegypt.edu

الهاتف: 01222287615

انت مدعو للمشاركة فى دراسة
بحثية عن مدى معرفة الثقافة
الإعلامية الرقمية

هدف الدراسة هو هو قياس الوعي والقدرات الأساسية لطلاب الجامعات فيما يتعلق بالثقافة الرقمية بهدف استخدامها عبر مواقع التواصل الاجتماعي وتداول المعلومات بحرص ودقة والتفكير النقدي.

نتائج البحث ستنشر فى دورية متخصصة أو مؤتمر علمي.

المدة المتوقعة للمشاركة فى هذا البحث ١٥ دقائق.

إجراءات الدراسة تشتمل على: أستقصاء وجها لوجه

المخاطر المتوقعة من المشاركة فى هذه الدراسة: لا يوجد

الاستفادة المتوقعة من المشاركة في البحث: أن النتائج يمكن أن تستخدم من قبل المؤسسات التعليمية لتقديم دورة محو الأمية الإعلامية على المستوى التمهيدي في الجامعات المصرية. قد تكون النتائج أيضًا بمثابة إرشادات للمؤسسات الإعلامية والشركات لصياغة سياسة لزيادة التوعية بالثقافة الإعلامية الرقمية للشباب.

SOCIAL MEDIA LITERACY AMONG PUBLIC UNIVERSITIES STUDENTS

السرية واحترام الخصوصية :المعلومات التي ستدلى بها فى هذا البحث سوف تكون غير مجهولة ولكن سرية لحماية هوية المبحوثين.

أي أسئلة متعلقة بهذه الدراسة أو حقوق المشاركين فيها أو نتائجها يجب ان توجه الى الأستاذة هبه حلمي 01222287615.

إن المشاركة في هذه الدراسة ما هي إلا عمل تطوعى, حيث أن الامتناع عن المشاركة لا يتضمن أى عقوبات أو فقدان أى مزايا تحق لك. ويمكنك أيضا التوقف عن المشاركة فى أى وقت من دون عقوبة أو فقدان لهذه المزايا.

الامضاء: ....

اسم المشارك : ....

التاريخ : ..../................/..........