



Factors influencing the evaluation of information on social media by Kuwait University students: College of Social Sciences

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Abstract

Objectives: The study aimed to examine the relationship between a set of demographic variables and the assessment scale - for undergraduate students at Kuwait University - for information in social media. These variables include gender, age, academic year, devices used to obtain information, and information knowledge. **Method:** An E-survey was used for the study, a link to the questionnaire was sent to students through the Teams platform, and the usual procedures of reliability were tested on the scale approved. **Results:** Statistically significant differences were found between some demographic variables and the assessment of information found in social media. Those variables include age, information literacy related to the use of the library and reading culture, in addition to the use of devices related to the internet (laptops, desktops, smartphones, and ipads). No statistically significant differences were found between gender and the evaluation of information in social media. **Conclusion:** There are demographic factors influencing the ways by which social science students evaluate the information circulated in social media, and these results can be relied upon and benefited from in increasing

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university students' awareness of how to evaluate and benefit from the information they obtain from social media.

Keywords: information-seeking behavior, information literacy, Kuwait University, social media, information evaluation

العوامل المؤثرة في تقييم طلبة جامعة الكويت للمعلومات في وسائل التواصل الاجتماعي: كلية العلوم الاجتماعية

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ملخص

الأهداف: هدفت الدراسة إلى فحص العلاقة بين مجموعة من المتغيرات الديموغرافية ومقياس التقييم -عند طلبة البكالوريوس في جامعة الكويت- للمعلومات في وسائل التواصل الاجتماعي، وتشمل تلك المتغيرات: النوع والعمر والعام الأكاديمي والأجهزة المستخدمة في الحصول على المعلومات، وكذلك المعرفة المعلوماتية. **المنهج:** استخدمت استبانة إلكترونية أداة للدراسة، وأُرسلت إلى الطلبة من خلال منصة تيمز، وقد تم القيام بإجراءات الصدق والثبات المعتادة. والجدير بالذكر أن مقياس التقييم المستخدم قد تم أيضاً التحقق من ثباته وتطبيقه في دراسة سابقة تمت في جامعة السلطان قابوس في سلطنة عمان. **النتائج:** وجدت فروق دالة إحصائية بين بعض المتغيرات الديموغرافية في مقياس تقييم طلبة العلوم الاجتماعية للمعلومات التي يحصلون عليها من وسائل التواصل الاجتماعي، وهذه المتغيرات هي: العمر ومستوى الوعي بالمكتبة واستخدام أجهزة الانترنت وكذلك المتغير المتعلق بالمعرفة المعلوماتية والقراءة، وكشفت الدراسة أيضاً عن عدم وجود فروق دالة إحصائية بين متغير النوع وتقييم المعلومات في وسائل التواصل الاجتماعي. **الخاتمة:** هناك عوامل ديموغرافية مؤثرة على طرق تقييم طلبة العلوم الاجتماعية للمعلومات التي يتم تداولها في وسائل التواصل الاجتماعي، ويمكن الاعتماد على تلك النتائج في زيادة وعي طلبة الجامعة بكيفية تقييم المعلومات التي يحصلون عليها من تلك الوسائل.

الكلمات المفتاحية: سلوك البحث عن المعلومات، المعرفة المعلوماتية، تقييم المعلومات، جامعة الكويت، وسائل التواصل الاجتماعي

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Introduction

Evaluation of information describes different approaches used by information users such as college students to assess the quality and relevancy of information at their disposal. Given the rise of social media, college undergraduate students are confronted with vast amounts of information from multiple types of sources and often find it hard to verify their authenticity (Syam & Nurrahmi, 2020). Amid information overload, students face problems in finding the appropriate information and in this situation the students need help from information professionals and librarians. Library serves point for students and teachers to access ideas and information and as a learning laboratory. However, access to a vast amount of information alone does not guarantee that students will excel in their academic performance and post-graduation life. Moreover, evaluation of the information is necessary given the varying degree quality of and increased disinformation via the online platform. As demonstrated by Walraven et al. (2019), despite advancements in information technology in the digital age, most college students are lacking in literacy skills such as evaluating information needed to navigate through the vast amount of available information.

Several factors have been found to determine the effectiveness of university students in adopting and using information technology. For instance, Lanning and Mallek (2017) noted that the factors vary from availability of resources and materials, management and administration as well as student's attitude and disposition. Additionally, Dupuis (2019) indicated that although the emergence and use of Information Technology [IT] has improved efficiency in the performance of routine tasks in the library, like acquisitions, cataloguing and user services, students in developing nations have continued to find it difficult to adopt to the IT learning programs due to inappropriate attitudes and wrong perceptions towards cataloguing of some essential relevant materials that are now processed online. The framework of policies, designed to help university students'

measure up to the current IT expectations, has also become a major hurdle. According to Julien et al. (2018), in developing nations, the availability and utilization of information technology is at its lowest ebb and that is why the concern of library and information services must not only be on the survival of libraries but mainly in the formulation of a framework of policy for the development of libraries with modern and up-to-date Information Technology. Such a statement explains why Bruce and Hogan (2019) likened the state of information and communication technology in most university libraries in developing countries to a mediocre, insisting that any university without a functional Information and Communications Technology [ICT] connectivity will eventually become extinct and obsolete.

Therefore, IT learning in colleges must be implemented in a way that is collaborative between teachers and students. Teachers must also have the ability to incorporate technology into the classroom. Teachers must also be well-versed in the usage of IT if they are to positively alter the attitudes and perceptions of their students regarding IT adoption (Hu et al., 2020). On the other hand, Owens and Lilly (2017) noted that students also need to build IT-related competencies such as innovation and creativity, communication, teamwork, critical thinking, and problem-solving. From such a perspective, it is worth noting that the use of IT and digital learning tools in planning is intrinsically related to the plan's learning model as it is related to student's use of internet devices and their ability to evaluate it information. As such, students at all higher education institutions must have understanding of how to utilize IT and digital learning technology in an educational setting, as well as learning and creativity abilities (Techataweewan & Prasertsin, 2018).

Commenting on this point of view, Dupuis (2019) noted that in developing nations, implementing and utilizing instructional technology has proven difficult and it does not necessarily result in proportional improvements in student learning results.

This article is organized into six main sections; these include the introduction, review of related literature, research methods, results, discussion of results, and conclusion.

Definition of terms

Prior to reviewing the literature, the following part illustrates the definition of terms used in this study:

- Information Evaluation: A process that involves assessing the “potential usefulness of information within a set of circumstances and information needs” (Head & Eisenberg, 2010, p.9).

- Social Media: Broadly defined as “interactive technologies that facilitate the creation or sharing/exchange of information, ideas, interests, and other forms of expression via virtual communities and networks” (Wikipedia, 2022). Social media networking sites include microblogs such as Twitter, applications like Facebook, YouTube, Instagram, LinkedIn and Snapchat, all of which are influencing social and educational aspects of individuals (Muftah, 2022).

- Information Literacy: The Association of College & Research Libraries [ACRL] defines information literacy as “The set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (ACRL, 2022, p.8).

Based on the above definitions, the appropriate definition for information evaluation for this research can be based on the ACRL’s first standard of its Framework for information literacy in higher education which states that: “Learners acknowledge they are developing their own authoritative voices in a particular area and recognize the responsibilities this entails, including seeking accuracy and reliability, respecting intellectual property, and participating in communities of practice”. (ACRL, 2022, p.13).

Literature Review

Evaluating the quality of information helps students to determine the accuracy, relevance, and credibility of information and its sources. Scholars have shown that students have varied information evaluation skills and competencies. Studies have shown lack of information evaluation skills and the ability to use evaluation criteria such as accuracy, authority, objectivity, and coverage of digital information and sources for college going students (Agyeiku, 2022). Additionally, multiple factors are known to influence the evaluation of information by college students. A study by Taylor and Dalal (2017) demonstrated that female students are more discerning than males in evaluating internet sources of information. These findings strengthen the notion of gender differentiation in information literacy skills. Related research by Agyeiku (2022) confirmed the significance of providing an orientation program on the use of library services and resources in helping new students to meet information requirements. Leeder's (2019) findings suggest that advanced aged college students are better evaluators of internet information to determine fake information than younger college students. Research findings indicate that the use of internet devices among secondary school students reduces the evaluation of information (Milková & Ambrožová, 2018). Rather, these authors observed that addiction to the internet has fostered exam cheating as students copy information without evaluating it critically. Studies have also affirmed that reading culture among adolescents in secondary schools improves their ability to evaluate information and literacy skills (Sikora et al., 2019).

Even though research exists concerning information evaluation, they are majorly focused on online information due to its extreme variability. In addition, most available studies are focused on secondary students and more so the techniques and criteria for evaluation of information. The study sought to address the literature gap by examining key factors believed to influence the evaluation of in-

formation among college students. The researchers' article uses the College of Social Science at Kuwait University to explore the factors believed to influence students' evaluation of information. The researchers sought to address this research question:

Are there statistically significant differences between the evaluation of information and independent variables such as gender, receiving an introductory program, age, using internet devices, and book reading among a sample of students from the College of Social Science at Kuwait University?

Factors that influence the ability of college students to evaluate IT-related information are diverse, especially in developing countries such as Kuwait. Tokareva et al. (2019) observed that amongst such factors that militate against the use of information technology in universities in developing countries are the cost factor, problems of foreign exchange required for the purchase of computers, lack of library and information standards, inadequate and unreliable telephone network systems, shortage of manpower, low prestige of information professions, difficulty in recruiting specialist and lack of continuing education. These views were correlated by other researchers. For instance, Buzzetto-Hollywood et al. (2018) pointed out the harsh economic condition and government apathy to library services in most developing countries. Due to the same reason the researchers noted that the content and quality of services of most university libraries in these countries have deteriorated to such a level that the quality of the products of such universities has also been adversely affected. Affirming this point of view, Dinçer (2018) carried out a study to test the quality of Nigeria university academic programs with particular focus on IT literacy. Findings obtained from the study indicated that staffing scored 32% as against the 70% benchmark; physical facilities including IT facilities/resource scored 25%, while library and funding scored 12% and 05% respectively as against 70% benchmark for each item (Dinçer, 2018).

Further research has identified factors that make it challenging for undergraduate students in developing countries to evaluate and utilize information from social media sources. For instance, Al-Aufi et al. (2017) carried out a study investigated the kinds of social media that were common among undergraduate students and utilized as sources of information. Additionally, the researchers examined what kinds of actions users take in order to evaluate the trustworthiness of information provided by social media sources. A total of 446 undergraduate students from a public university participated in the study. Findings obtained by Al-Aufi et al. (2017) indicated that undergraduate students found it challenging to evaluate social media information, especially academic/course-related information due to lack of adequate information regarding establishing trustworthiness. These findings are consistent with the findings obtained by Talib (2018) after he carried out a study to investigate the impacts of advances in technology and the readily available social media information on the academic pursuits of undergraduate students. Findings obtained by Talib (2018) indicated that whereas students had developed diverse strategies for assessing the trustworthiness of information from sources such as YouTube, students found it difficult to determine the credibility of information obtained from platforms such as Facebook.

IT Literacy and Social Media Information Evaluation Among College Students

The Use of Internet Devices and Thinking Skills

The ability of undergraduate students to assess the nature of social media information depends on their ability to use internet devices and harnessed thinking skills. Greenhow et al. (2018) carried out a study in which they explored the use of social media among undergraduate students using a mixed method research approach. According to the researchers, the ability of students to use internet devices effectively affected their ability to evaluate the credibility of

information. A sample consisting of 983 undergraduate students was utilized in the study with the researchers focusing on thinking skills and the use of internet devices. Findings obtained from the study indicated that the proficiency of undergraduate students in determining the trustworthiness and credibility of social media information was determined by their ability to develop thinking and operation skills such as cognition, invention, and presentation.

These findings were corroborated by Syam and Nurrahmi (2020) after they carried out a study in which they investigated the factors influencing assessment of social media information among literacy competency of college students. The researchers analyzed multiple factors from current university students' high school experiences, including demographic, educational, and economic factors, and current standing and grade point average [GPA], to evaluate the students' use of social media and information literacy skills. Findings obtained from the study indicated that students that lack sufficient knowledge in the use of internet devices and had insufficient thinking and operational skills were less able to evaluate the credibility and trustworthiness of information on while using social media platforms.

Teacher Proficiency, Training, and Social Media Evaluation among College Students

The ability of undergraduate students to evaluate the credibility and trustworthiness of social media information while undertaking their academic pursuits has been found to depend on factors such as teacher proficiency and their levels of training. Successful usage of social media information among college students is not about equipment or software but influencing and empowering teachers so they can influence the perceptions and attitudes of students (Dichev & Dicheva, 2017). Further, Coldwell-Neilson (2017) noted that successful IT implementation is not about acquiring computer skills but supporting teachers in the ongoing engagement with students in

their learnings. A study was conducted by Yevelson-Shorsher and Bronstein (2018) to determine the correlation between student perceptions regarding IT, social media use, and instructor/lecturer level of IT preparedness. The researchers concluded that before investing heavily in IT school administrators should appreciate that the nature of 'productivity' in learning is elusive to be able to prepare teacher training programs that will help augment student's use of internet devices while seeking out information from social media platforms. Yevelson-Shorsher and Bronstein (2018) provided some well-reasoned empirical evidence that highlights that the specific needs and expectations of students, teachers, parents and administrators who adopt IT for use in education should be studied as the outcomes of investments in IT are uncertain and may not always align with the intentions of school administrators with regards to positively changing the perceptions of students.

From the same perspective, Khan and Idris (2019) conducted a study in which they compared the attitudes, perceptions, and learning preferences of IT professionals in the education sector with professionals from other sectors in relation to student's ability to source credible and trustworthy information from internet and social media sources. The researchers found that training professionals in the education sector was the best way to offer active learning in the digital age, and intensive classroom curriculums that require paradigm changes in student attitudes concerning IT literacy and the use of internet devices were critical to augment the ability to assess information from social media platforms. Corroborating this point of view, Yevelson-Shorsher and Bronstein (2018) noted that although online training, blended learning, and other upstart methods may be the future as many organizations move away from traditional classroom instruction, fostering IT literacy in universities and colleges requires instructor-led training to help change student perceptions, it was more important to ensure that training programs enables students to assess the nature of information availed on social media platforms.

From a similar point of view, Wongwatkit (2019) stated that the ideal way to offer blended learning to IT college instructors that will positively influence student perceptions regarding IT literacy would be four weeks of classroom instruction with participant interaction and then four weeks' participants working on their own to build skills and learn techniques that would help enhance student abilities in assessing the nature of academic information available across social media platforms.

Teacher training programs should be focused on enabling instructors to equip their apprentices regarding the utilization of information from social media platforms. Britt et al. (2017) conducted a study in which they explored the changes of the education industry relative to the ongoing digital age and the role of IT college educators and the emerging use of social media platforms by students to acquire academic information. The researchers stated that the digital-based transformations required sufficient teacher training to ensure that learners will be able to utilize social media platforms for academic purposes. The researchers investigated group communication media choice and the use of web-based learning tools by instructors and students, as well as other types of communication media such as Facebook, Twitter, and Instagram. Britt et al. (2017) insights into the academic use of social media platforms can assist educators in choosing the best product and in managing the tools for optimum benefit, and especially with regards to aligning student perceptions towards IT literacy and the use of internet devices to college curricula.

These findings are consistent with the results obtained by Hu and Zhao (2018) after they undertook a study in which they explored the correlation between teacher's IT perceptions and student IT attitudes with particular focus on student's use of social media platforms for academic platforms. The study was also designed in a such a way as to capture teachers' perceptions of support for and attitudes towards use of IT in their schools as well as the degree to which they

were encouraged and helped students respond to the personalization of teaching and learning while undertaking their academic homework. Findings obtained from this study showed that while teachers were positive about both the personalization agenda and the role of IT in delivering that agenda, there were significant inter-subject differences that hampered their ability to influence student perceptions towards the use of internet devices and their utilization of social media for academic purposes.

Gender and Age and College Student's Social Media Information Evaluation

The components of gender and age have been found to determine the ability of college students to critically evaluate information obtained from social media platforms. Recently, Dadaczynski et al. (2021) undertook a study in which they investigated digital health literacy and web-based information-seeking behaviors of university students in Germany during the COVID-19 pandemic using a cross-sectional survey methodology. A cross-sectional study among 14,916 university students aged ≥ 18 years from 130 universities across all 16 federal states of Germany was conducted using a web-based survey. Along with sociodemographic characteristics such as sex, age, and subjective social status, web-based information-seeking behavior was investigated by examining the web-based sources used by university students and the topics that the students searched for in connection with COVID-19. Data were analyzed using univariate and bivariate analyses. Findings obtained by Dadaczynski et al. (2021) indicated that female students were found to use social media and health portals more frequently, while male students used Wikipedia and other web-based encyclopedias as well as YouTube more often. Dadaczynski et al. (2021) did not associate age with information evaluation. The researchers associated the use of social media with a low ability to critically evaluate information, while the opposite was observed for the use of public websites.

In a similar study, Hu et al. (2020) explored factors affecting academics' adoption of emerging mobile technologies. Further, the researchers evaluated the acceptance, preparedness, and adoption of mobile technologies by academic faculties and students within higher education with particular focus on the components of age and gender. Underpinned by the extended Unified Theory of Acceptance and Use of Technology [UTAUT2] Model, Hu et al. (2020) engaged a large-scale quantitative survey investigating the factors affecting academics' behavioral intentions and the use for mobile technologies, and variations between different demographic university student groups. Findings obtained by Hu et al. (2020) suggested that the most significant factors affecting academics' behavioral intention and behaviors of use were their performance expectancy, facilitating conditions, social media use and gender factors, hedonic, motivation and habit.

Gender has been linked to the evaluation of social media information, information literacy, information evaluation, and web-use skills. Taylor and Dalal (2017) undertook a study in which they explored the correlation between gender and information literacy. The study stemmed from the literature-based realization that although numerous studies had attempted to determine the correlation between students' use of internet sources, limited efforts had been made to link the information literacy skills of college students to the gender aspect in relation to the social media component. Taylor and Dalal (2017) used a survey of college-aged students to evaluate a subset of student information literacy skills and social media information reliance in relation to Internet information sources. Analysis of the data collected provided strong indications of gender differences in information literacy skills. Taylor and Dalal (2017) found that female respondents appeared to be more discerning than males in evaluating Internet sources, and especially those obtained from social media whereas males appeared to be more confident in the credibility and accuracy of the results returned by social media platforms.

These findings are consistent with the results obtained by Owens and Lilly (2017) after they carried out a study in which they investigated the influence of academic discipline, race, and gender on web-use skills among graduate-level students. Hargittai and Hsieh's 27-item Web-use Skills Index was used to measure web-use skills and the Kruskal–Wallis H test with post hoc Fisher's least significant difference test was used to determine statistical differences between groups of independent variables. Findings obtained from the study indicated that academic discipline, social media usage across genders, race/ethnicity, and gender had a greater number of statistically significant differences whereas few web-skill variables were significantly different by age. Owens and Lilly (2017) concluded that in the absence of the component of academic discipline, the impacts of gender and age on the ability of students to evaluate information obtained from social media internet devices would be insignificant.

Theory framework

As shown in the literature review, the focus of the related studies was on the area of information literacy, more specifically in the sphere of social media and how students in higher education evaluate the information they find and use in these tools. Information literacy has been identified as a vital element for information users as it enables them to locate, access, retrieve, evaluate, and interpret the information they find (De Paor & Heravi, 2020). Sample (2020) classified the concept of information literacy into information literacy as a set of skills; information literacy as a way of thinking; and information literacy as a social practice. Theoretically, this current research focused on information literacy from a social perspective and for this reason, the conceptual framework was based on metaliteracy which is placed within this social perspective (Sample, 2020).

According to De Paor and Heravi (2020) metaliteracy provides “a new and contemporary framework that reflects the current digital environment and provides effective approaches that can help pre-

pare individuals for the information age” (p.7). “As a pedagogical strategy, metaliteracy encourages students to evaluate, produce, and share reliable information” (Mackey, 2020, p.347).

Metaliteracy’s learning objectives recognize that individuals call upon various domains when participating in the changing information environment. These domains include the cognitive, affective, behavioral, and metacognitive (Lapointe, 2021)

Metaliteracy includes the following standards and goals:

1. Actively evaluate content while also evaluating one’s own biases.
2. Engage with all intellectual property ethically and responsibly.
3. Produce and share information in collaborative and participatory environments.
4. Develop learning strategies to meet lifelong personal and professional goals (Fulkerson et al., 2017).

Research Questions

This study addresses the following research questions:

1. What are the perceptions of information evaluation among students from the College of Social Science at Kuwait University?
2. Are there statistically significant differences between evaluation of information and independent variables such as gender, received an introductory program, age, using internet devices, and books reading among a sample of students from the College of Social Science at Kuwait University?

Methods

A cross-sectional method was used in this study to fulfil its goals. A cross-sectional study involves collecting data from several participants simultaneously. Variables are observed in cross-sectional methods without being modified. This method is commonly used in social science research.

Participants and Data Collection

The study took place at the College of Social Science at Kuwait University. The College of Social Science has five departments: Sociology and Social Work, Political Sciences, Geography, Psychology, and Information Studies. The total number of undergraduate students who registered in the college during the academic year 2020/2021 was 1,852 (Deanship of Admission and Registration, 2021). All social science courses were taught online because of the COVID-19 pandemic. For this study, the participants were selected by counting compulsory courses in each department with a high number of registered students. A simple random method was then used to select only two courses from each department. Then a link to the online survey was sent to the class instructor's Teams account (after they agreed to distribute the online survey to their classes) so they can send the link to their students. In light of the fact that this study does not intend to investigate a student's major, the major was not included in the questionnaire. As a result, the percentage of majors will not be included in the sampling section.

The total sample of the current study was 531 participants who enrolled in the College of Social Science during the academic year 2020/2021 at Kuwait University. The response rate for this study was high (88.5%).

The mean age of the participants was 24.88 years ($SD = 6.74$, range = 19–53). In terms of gender, 17.5% were males, and 82.1% were females. Meanwhile, 94.7% were Kuwaiti, and 5.3% were

non-Kuwaiti. The majority of the participants was married (68.3%), followed by those who were single (22.8%), divorced (5.9%), and widowed (1.8%). Regarding academic year level, 22.6% of the participants were in their first academic year, 30.1% were in their second academic year, 24.5% were in their third academic year, and 22.7% were in their fourth academic year and higher. More than half of the participants reported that their level of IT literacy is intermediate (62.5%), followed by participants who have an advanced level (23.2%) and a beginner level of IT literacy (14.3%). A total of 82.9% of the participants reported that a smartphone is their most-used device, followed by a laptop (7.2%), iPad (5.6%), and PC (4.3%). Meanwhile, 49.5% received an introductory program on using the library and dealing with information sources, while 49.9% did not (See Table 1).

Table 1

Participants Characteristics (N = 531)

Variables	N	%
Gender		
Female	436	82.1
male	93	17.5
Nationality		
Kuwaiti	503	94.7
Others	28	5.3
Academic Year		
First Year	120	22.6
Second Year	160	30.1
Third Year	130	24.5
Fourth Year	91	17.1
Fifth Year & above	30	5.6
Most frequently used device		
Desktop computer	23	4.3

Cont. Table 1*Participants Characteristics (N = 531)*

Variables	N	%
Tablet	30	5.6
Laptop	38	7.2
Smartphone	440	82.9
Marital Status		
Single	409	77
Married	106	20
Divorce	15	2.8
IT literacy level		
Beginner	76	14.3
Intermediate	332	62.5
Advanced	123	23.2
Library instructional session		
Yes	263	49.5
No	265	49.9

Measures

The current study used an online questionnaire which included demographic questions such as age, gender, academic and, year level, as well as information on literacy skills questions. It also used the Evaluation of the Information Scale developed by Al-Aufi et al. (2017), which was a self-report measure that contained eight items. The responses were based on a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The evaluation of information showed good concurrent validity, and it had good internal consistency (Al-Aufi et al., 2017). In order to ensure the reliability of the scale, a pilot study was conducted. Based on the study sample, Cronbach's alpha for the evaluation of information scale was 0.64. The "evaluation of information" was written in Arabic because it is the first language of the study participants.

Data Analysis

The SPSS version 26 (IBM Corp.) was used to analyze the data. In addition, mean, percentages, and standard deviations were used to describe the participants of the study, and t-test and one-way ANOVA were used to answer the research questions. In the descriptive analysis, the mean levels for key answers were determined as follows: low = 0.10–2.32, medium = 2.33–3.65, and high = 3.66–5.00; this was based on Al-Aufi et al.'s (2017) categories. The statistical significance was set at $p \leq 0.05$.

Results

Information Evaluation

In terms of the students' perceptions of information evaluation, the results showed that six items had high perception levels among the participants, such as "I hesitate to use information I receive on social media before checking its credibility" ($M = 4.27$, $SD = 0.85$) and "I make sure that the information I receive on social media is referenced before making a decision to use it" ($M = 4.09$, $SD = 0.85$). However, the participants gave a low perception of information evaluation to the item, "I trust the information I receive on social media from someone I don't know well" ($M = 2.13$, $SD = 1.08$). see Table 2.

Table 2

Means and Standard Deviations of Scores in Information Evaluation

Information Evaluation		<i>M</i>	<i>SD</i>	<i>Level</i>
1.	I hesitate to use information I receive in the social media before checking its credibility.	4.26	0.85	High
2.	I make sure that the information I receive in the social media is referenced before making a decision to use it.	4.09	0.85	High
3.	I search for additional information from the internet to ensure the credibility of the information before making a decision to use it.	4.09	0.83	High

Cont. Table 2*Means and Standard Deviations of Scores in Information Evaluation*

	Information Evaluation	<i>M</i>	<i>SD</i>	<i>Level</i>
4.	I count, if needed, on a knowledgeable person to ensure the credibility of the information before making a decision to use it.	4.05	0.83	High
5.	I can distinguish between a true information and a rumor in the social media.	3.93	0.93	High
6.	I possess good skills in dealing with information in the social media.	3.83	0.84	High
7.	I trust the information I receive in the social media from someone I know well .	3.19	1.01	Medium
8.	I trust the information I receive in the social media from someone I don't know well.	2.13	1.08	Low

Gender

T-test and ANOVA were used to identify significant differences between the grouped mean of evaluation of information and a set of independent variables such as gender, received an introductory program, age, using internet devices, and books reading among participants of social science students at Kuwait University.

The t-test results showed that there were no significant differences between evaluation of information and gender among the sample of the study. However, there were significant differences between evaluation of information and received an introductory program on using the library and dealing with information sources among the participants of social science students at Kuwait University at $p < .05$. Participants who received an introductory program on using the library and dealing with information sources had a higher score level of evaluation of information than participants who did not. The results for t-test are presented in Table 3.

Table 3

Results of t-test for Evaluation of Information by Gender and Received an Introductory Program

IV		Evaluation of Information		Statistic
Gender	Female	<i>M</i>	29.67	$t(520) = 789; p = 4.31$
		<i>SD</i>	4.01	
	Male	<i>M</i>	29.51	
		<i>SD</i>	3.60	
Received an introductory program	Yes	<i>M</i>	30.26	$t(517) = 4.26; p = 0.000$
		<i>SD</i>	3.37	
	No	<i>M</i>	28.90	
		<i>SD</i>	3.88	

Note. $p < .05$. p-values (2-tailed).

Age

The results from the ANOVA test showed that there were significant differences between evaluation of information and independent variables such as Age, Internet Devices, and Books Reading, and using internet devices among the participants at $p < .05$. Participants who were older (24–53 years old) had a higher score level of evaluation of information than other participants from different group categories. In addition, participants who read four books or more and used a PC have higher score level of evaluation of information than other groups. The results for ANOVA are presented in Table 4.

Table 4

Results of One-way ANOVA for Evaluation of Information by Age, Internet Devices, and Books Reading

Independent Variables		Evaluation of Information		Statistic
Age	19–21	<i>M</i>	28.99	$F(2; 498) = 3.92; p = .020$
		<i>SD</i>	4.32	
	22–23	<i>M</i>	29.74	
		<i>SD</i>	3.22	
	24 and above	<i>M</i>	30.09	
		<i>SD</i>	3.46	
Internet devices	Laptop	<i>M</i>	29.28	$F(3; 518) = 4.01; p = .008$
		<i>SD</i>	2.62	
	Smart phone	<i>M</i>	29.56	
		<i>SD</i>	3.71	
	PC	<i>M</i>	31.78	
		<i>SD</i>	3.17	
	IPad	<i>M</i>	28.33	
		<i>SD</i>	4.26	
Books reading	One book	<i>M</i>	29.33	$F(3; 518) = 2.87; p = .036$
		<i>SD</i>	4.48	
	Two books	<i>M</i>	29.20	
		<i>SD</i>	3.16	
	Three books	<i>M</i>	29.65	
		<i>SD</i>	2.89	
	Four books and more	<i>M</i>	30.59	
		<i>SD</i>	3.55	

Note. $p < .05$. p -values (2-tailed).

Discussion

The article has explored the concept of evaluation of information among learners in the college environment and presents findings of critical factors that influence students' evaluation of information among college students. The present findings marry most of the existing scholarly works on the various factors impacting students' evaluation of information (Agyeiku, 2022; Leeder, 2019; Sikora et al., 2019). However, there were consistencies in the impact of gender and reading cultures on information evaluation among students (Taylor & Dalal, 2017; Milková & Ambrožová, 2018).

The present study has found no significant differences between the evaluation of information and gender among college students. This is a mismatch to earlier findings by Taylor and Dalal, (2017) suggesting that female students have a better evaluation of internet information than their male counterparts. In contrast with previous findings, the present study indicates a significant correlation between the use of internet devices and the evaluation of information among college students. Using secondary school students, Milková and Ambrožová (2018) observed that internet addiction reduces the ability of a student to evaluate the quality and accuracy of the information they read. These findings weaken the notion of gender differentiation and the contribution of internet use towards information literacy skills. However, the differences in research findings are attributed to the nature of participants and the context of the study, where the present study focused on the evaluation of internet information college students as opposed to secondary school students in a study by Taylor and Dalal (2017).

Consistent with earlier studies, these findings demonstrate that student evaluation of learning information is significantly correlated with a library orientation program, the age of college students, use of internet devices, and improved reading culture. The present research has confirmed that orientation programs on the use of library

services and resources are crucial for new students to gain information literacy skills and better learning outcomes. Since student age is a key factor in information evaluation, library orientation programs should focus more on younger college students to enlighten their ability to differentiate between accurate and fake information. The present findings also coincide with Sikora et al., (2019) indicating a positive relationship between reading culture among adolescents and the ability of students to evaluate information and literacy skills.

The study has shown a significant role of the library orientation program, student age, and reading culture in improving the ability of college students to evaluate information. Even though present research presents a positive picture of the use of internet devices, their role in improving the ability of students to evaluate internet information should be approached with caution to avoid possible misuse. Additionally, gender factors appear to have no significant role in enhancing the evaluation of information among college students. The use of digital devices, particularly smartphones and laptops to access learning materials is a common trend among college students but comes with massive fake information. Overall, the present findings provide empirical evidence that supports the use of these factors to improve the evaluation of information by college students.

Conclusion

This study highlighted the potential to improve the ability of college students to evaluate the information they read. The study has demonstrated that implementing a library orientation program for new students, use of internet devices, and enhanced reading culture have the potential to improve the ability of college students to evaluate information. The age role of age factors is closely linked to the maturity and experience of students to understand the presence of fake information on digital platforms. In light of these findings, policy intervention in the area of information management for col-

lege students should focus on mandatory library orientation, digitization of libraries equipped with internet devices, and promoting a reading culture among students to enhance their ability to evaluate information.

Although digitization of libraries through updated internet devices can enhance reading culture among Kuwait college students, issues such as access to adequate and reliable electricity can still hinder their ability to utilize and evaluate IT information (Dichev & Dicheva, 2017). Many other problems can also hinder IT literacy among Kuwait college students. These constitute lack of development of adequate thinking skills and IT instructor attitudes and lack of adequate preparedness, which also impact student perceptions regarding the adoption and utilization of internet devices (Coldwell-Neilson, 2017). As such, it is critical that IT teacher training in Kuwait considers the need to incorporate programs that will adequately prepare the teachers so that they can be efficient in aligning college student's IT literacy perceptions and attitudes to the requirements of the current digital age.

Recommendations

Based on the above conclusions there are a set of recommendations that will enable the enhancement of students' evaluation abilities in the age of social media and rapid technological developments:

- Faculty members should develop IT-literacy based classrooms by dedicating part of their course time focusing on how to enhance their students' searching and evaluating tools.
- Mandatory library orientation for all students joining college; there should be a training program or a course where students must pass several credits in a course given by librarians on tools of searching and evaluating of information.

- Providing intensive teacher training programs to keep them updated with the necessary tools of using various types of information resources including social media. Such programs will enable the instructors to have adequate skills to pass on to their students. Staff development is a key aspect of digital and information literacy support, to make it viable and to support cultural change across the academic institution.
- Providing more web-based learning tools for students and faculty members on how to search for information and most importantly how to evaluate the information they find.
- Fostering more cooperation between faculty members, teacher assistants and librarians to work together in assigning students with tasks that require them to constantly evaluate the information they find and use on the different platforms.
- Make partnership with IT department and librarians to develop new kinds of multi-media assignments for the courses provided in each disciplinary area.
- Incorporating social media into learning in higher education.

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