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Article

Digitalization in Educational Technologies for Edtech Solutions: A Comparatuive Study of Jordanian and Malaysian Universities

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Abstract

The Covid-19 lockout has heightened higher education institutions' interest in digital educational technologies (DET), which require researchers' participation to benefit fully. The current study investigates the impact of digital and information literacy on DET usage in Malaysian and Jordanian colleges. Aspects of digital literacy, information literacy, and attention to utilising DET in Malaysian and Jordanian universities are examined. The current study used survey questionnaires to acquire primary data. The current study used smart-PLS to assess convergent and discriminant validity and the relationship between the understudy constructs. The results showed a favourable correlation between digital and informational literacy and DET usage in Malaysian and Jordanian institutions. In Malaysian and Jordanian universities, the results show that DET usage has considerably mediated the relationship between digital literacy, informational literacy, and DET use. The current research has guided policymakers in drafting regulations for using DET to improve education quality.

Keywords

Digital literacy, informational literacy, attention to using DET, Malaysian and Jordanian universities

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The world has been transformed into a global village. Business, education, and learning are now transnational. The countries are connected through a single click. Individuals have access to a wealth of information. Technology has established a foothold in every facet of the community. Additionally, the literature demonstrates that technology profoundly affects humanity in various ways (Au-Yong-Oliveira et al., 2018; Bass, 2018; Duroc & Tedjini, 2018). Developing countries are catching up to developed ones in practically every facet of life, most notably technology. Covid-19 has had a significant impact on nearly every facet of the community, most notably the education sector. Educational institutions are coerced into adopting digital technologies to maintain their educational operations and close the gap created by school closures due to lockdown. Countries throughout the world shifted to a digital education system to reclaim their educational systems. Malaysia and Jordan are similarly situated.

Technology has been used in education for many decades, although only to a limited level. The use of projectors rather than blackboards or whiteboards, online assignment submission, connecting students, instructors, classmates, and coworkers via devices and the internet, online performance evaluation and online tests, and so on are all examples of restrictions. Education has undergone a revolutionary transition due to technology, and education can revolutionize our world. As a result, we must increase our use of technology in education, but with caution. Students and teachers are provided with devices and internet connectivity to study, acquire various abilities, connect, and automate numerous activities (Dennis, 2018). The benefits of integrating technology into classrooms and even at home for educational purposes are immeasurable. As technology-integrated learning has advanced in lockstep with advances in information and communication technologies, the demand for technology in education has increased. Teachers, as specialists, must grapple with the challenges of teaching with technology while keeping a firm grasp of subject-matter information in response to educational environment technological advancements. Teachers must develop a holistic grasp of teaching, content, and technology, dubbed Technology Pedagogy and Content Expertise (TPACK). There is a good correlation between the educational system and the implementation of digital education technology in education, as evidenced by the literature (Fernandez, 2021; Luna-Nevarez & McGovern, 2018; Raja & Nagasubramani, 2018). Malaysia is one of the countries advancing rapidly in the educational sector. Malaysian institutions are implementing cutting-edge digital tools to improve the quality of their education (Bistaman et al., 2018). Malaysia has 20 state universities and 58 private universities, according to the 2020 census. Malaysia is emphasizing education, with a budget allocation of 50.4 billion (RM) for education in 2021.

On the other hand, Jordan is not as advanced in the sphere of education as Malaysia. Still, it is rapidly upgrading its educational setup through high-tech instructional instruments. The country has ten state institutions and nineteen private universities. In 2015, the government spent 9.86 percent of its budget on education. Despite its numerous challenges, the country is concentrating its efforts on boosting its education sector (Habes et al., 2018). Figure 1 shows the number of students enrolled at Malaysian and Jordanian institutions in 2018.

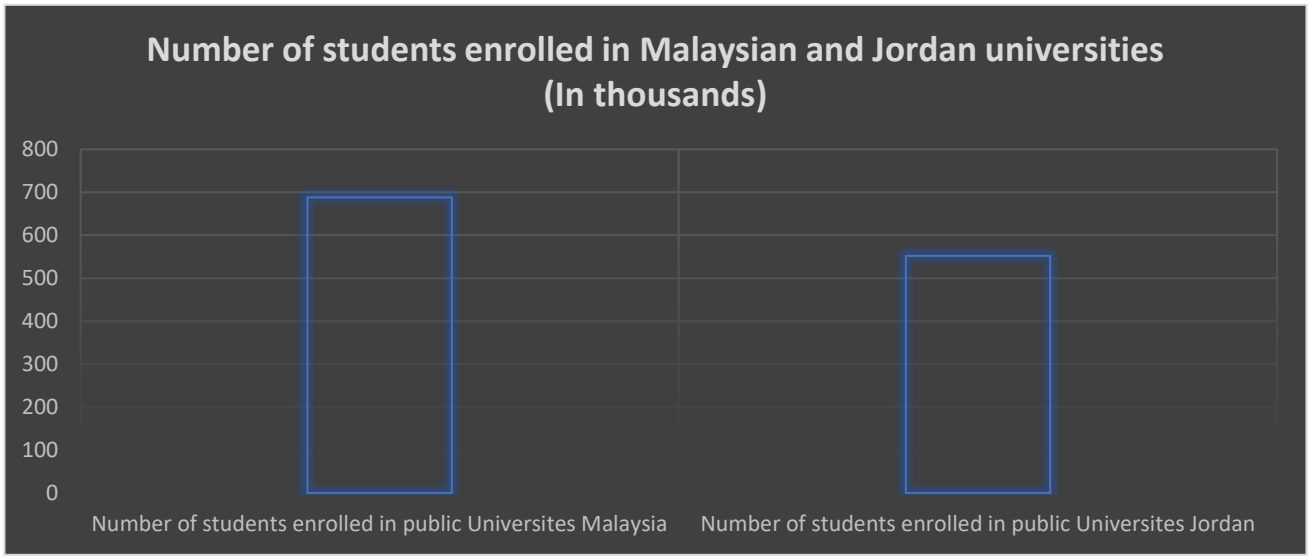

Figure 1: *Number of students enrolled in Malaysian and Jordan universities*

The current study will address several gaps in the literature, including the following: 1) while digital education technology has been extensively explored, it has not yet reached its peak; and 2) while digital education technology has been extensively researched, it has not yet reached its peak. 2) Otterborn et al. (2019) examined how pre-school instructors in Sweden use digital technology, namely digital tablets. In contrast, the current study examined digital educational technology in Jordanian and Malaysian public institutions. 3) Hashim (2018) examined the application of digital technology in the digital era. In contrast, the current study examined digital educational technology in Jordanian and Malaysian public universities and the factors affecting the use of digital educational technology, namely digital and information technology. 4) Ilomäki and Lakkala (2018) focused on school development through digital technology, whereas this study examined the use of digital educational technology in Jordanian and Malaysian institutions. 5) Scherer et al. (2019) examined instructors' use of digital technologies in the education sector, whereas the current study will examine digital educational technologies in Jordan and Malaysia's public universities. 6) The model of digital literacy, information literacy, and aspirations to use digital educational technology, with the addition of an attitude toward using digital educational technologies as moderator, has not been examined previously in Jordan or Malaysian universities. The current study will also contribute to the literature by demonstrating that 1) developing countries urgently require the adoption of digital educational technologies in the education sector, specifically universities, following the Covid-19, and 2) developing countries urgently require the adoption of digital educational technologies in the healthcare sector, specifically hospitals. 2) will also emphasise the importance of digital educational technologies in improving the country's education sector; 3) will assist technology professionals in developing a user-friendly digital forum for teachers and students, and 4) will assist country educational policymakers in formulating a more effective policy and implementing it.

The current study's structure is further subdivided into distinct phases. The study's inception was discussed in the first phase. The second section will discuss the evidence relating digital literacy, information literacy, attitudes toward and intentions to use digital educational devices considering previous studies. The third phase will explore the methods for collecting data on digital literacy, information literacy, attitudes toward and intends to use digital educational technologies, and the validity of the data. The fourth phase will reveal the study's conclusions based on the research completed thus far and will include approval of the results. The article will conclude with the study's implications, conclusion, and final recommendations.

2 Literature Review

The world has emphasised the critical need for digital literacy, which promotes and assists students in developing communication skills and navigating digital technologies. Communication is critical for digital literacy, and during the Covid-19 epidemic, digital literacy explored a variety of possibilities for Jordanian and Malaysian students.

2.1 Digital literacy and attention to the use of DET

Statti and Torres (2020) studied the necessity for the impact of digital literacy on participation and learning in community schools through the integration of technology. Students who are literate yet ignorant in educational technology typically confront numerous obstacles in their careers. Digital literacy is investigated through the lens of its underlying elements, utilising a variety of theoretical perspectives. According to the study, having a digital talent and digital literacy greatly increases interest in using digital education technology (Jakavonytė-Staškuvienė, 2021; Sulasmi, 2021). Similarly, Churchill (2020) examined numerous forums dedicated to developing digital literacy for educational technology purposes. Students from diverse countries are taught digital literacy in various ways, including through storytelling on mobile devices. The factors affecting digital literacy are analysed via the lens of theoretical and practical ramifications. The findings imply that digital literacy facilitates the successful use of digital education technology.

Additionally, Sadaf and Johnson (2017) investigated teachers' opinions about integrating digital literacy, which enables classroom focus to be directed toward using and becoming acquainted with digital education technology (AL-ABRI & MYDIN, 2021; Service, 2021). This prepares students to live and work in society and deal with communicative skills on a global scale. Theoretical and practical approaches are used to assess digital literacy and its relation to educational technology. The study demonstrates that digital literacy fosters an environment conducive to digital educational technologies.

Thus, Garcia et al. (2020) evaluated the leverage of technology and the role of digital education in transforming social attitudes toward digital literacy. In most nations, gender discrimination is prevalent, and digital literacy benefits all genders living and working in society. The practises of digital literacy in the development of digital education are interpreted through the lens of established theoretical frameworks. The study discovered that critical digital literacy piques the interest of those interested in utilising digital educational technology (Ramadani, 2021; Valizadeh & Soltanpour, 2021). Tzoc and Ubbes (2017) discussed the importance of promoting digital literacy among librarians, students, and teachers. Numerous projects have been developed to address the concerns of digital education, in which technology plays a critical role. Numerous theoretical techniques have been explored to link digital literacy and the attention required when utilising technology. The study discussed the importance of digital literacy, enabling individuals from diverse backgrounds to access digital education technology.

Additionally, Hall (2021) discussed the urgency and necessity for digital literacy and access, which creates a separation between students and educators familiar with educational technology. Most pupils who have access to libraries and information are proficient in digital literacy. This increases the emphasis on the use of digital instructional technology in most colleges, as seen by the uniform approaches. The study acknowledges the critical role of digital literacy in generating interest in digital educational tools.

H1: *Digital literacy significantly influences the attention to the use of digital educational technologies.*

2.2 Informational literacy and attention to the use of DET

In several nations, such as Jordan and Malaysia, information literacy pervades and plays a critical role in various processes and decision-making. Indeed, the use of digital technology has garnered much attention due to the critical implications for information literacy. Trembach and Deng (2018) examined how students in diverse nations perceive and consume information literacy in virtual and physical spaces. This is accomplished through the successful emergence of knowledge and instructional efficacy and the development of emerging technologies and learning styles. Information literacy has been asserted in a variety of contexts through the use of digital and theoretical methodologies. The study highlighted the importance of information literacy and drew attention to the usage of digital educational technology.

Additionally, Kong et al. (2017) explored the digital humanities by utilising a source of geographical information literacy in conjunction with the efficient use of digital education technology. Numerous countries' schools encountered numerous obstacles due to a lack of information and libraries, particularly in Africa. As a result, information literacy has been evaluated using a variety of theoretical and practical methodologies. This methodological approach succinctly conveyed the need for information literacy, eliciting interest in using digital technology in education (Alev & Bozbayindir, 2021; Dawson, 2021). Additionally, Thompson and Beene (2020) looked at competency standards concerning the usage of digital technologies and the critical and prominent role of information literacy. Typically, the primary objective draws considerable attention to the use of digital education, although some issues of technical literacy persist.

As a result, numerous facets of literacy have been investigated using digital and theoretical implications. The study's conclusions show that combining the domains of information literacy can help increase awareness of the benefits of employing digital technology in schooling. Similarly, Talikka et al. (2018) summarised the data

about integrated information literacy among undergraduate engineering students during several educational sessions. This enables students to cope with and become familiar with information literacy, which may improve and expand educational technologies. Information literacy plays a critical role in resolving various problems and making decisions, as evidenced by applying theoretical and strategic techniques. According to the study, the benefits of information literacy on educational technology are rather evident. Thus, Yap and Manabat (2021) underlined the necessity of information literacy that is positively synchronised among students and is capable of acting on perceived information and experience. The development of information literacy skills can be critical in addressing a variety of circumstances, including pandemics. Using various strategies and theoretical perspectives, information literacy and its associated components play a critical role. The study identified a strong connection between information literacy and its emphasis on digital technologies in education.

Additionally, Khamis et al. (2018) examined information technology and literacy as it evolves and incorporates new ideas on using digital technology for education. During pandemics, the underpinning uses and skills of information literacy in pupils cultivate an interest in digital education. Information literacy signifies important ramifications by using effective structural approaches and theoretical implications. The outcome demonstrates the efficacy of information literacy in fostering an interest in using digital technology for education.

H2: *Information literacy significantly influences the attention to use digital educational technologies.*

2.3 Mediating Role of Attitude towards using DET

Many nations' educational systems, particularly in remote areas such as Malaysia and Jordan, have limited students' access to digital technology due to a lack of resources and a lack of positive attitudes about digital technology. Thus, good attitude management strongly influences both digital literacy and interest in adopting digital technology for education. Casillas Martín et al. (2020) emphasised the critical nature of digital competence and technology use among students and teachers. This enables students and teachers to deal with various challenges and circumstances arising from global demands and needs from an early age. As described quantitatively, knowledge and attitude play a significant impact in digital literacy and educational technology. The study established a link between digital literacy and its appeal to the employment of digital technology in education. Daya and Laher (2020) investigated the mediating effect of educator attitudes and access to educational technology, modified further by digital literacy. Digital literacy prompted students and teachers to grasp the implications of digital technology and its beneficial values for the educational system. Multiple regression and descriptive statistics demonstrated a substantial relationship between the chosen factors. The study identified attitudes as a critical factor mediating the relationship between digital literacy and its contribution to digital technology for education. Thus, Hall (2021) explored the distinction between digital literacy and digital access, emphasizing the educational use of digital technology. The navigation of attitudes has a crucial role in developing digital literacy and educational technologies. Digital literacy instruction is inextricably tied to the possession of digital devices, as seen by the rigorous use of prominent approaches. The findings indicate that by modulating the effect of attitude, digital literacy increases interest in using digital technology for education.

Additionally, Guerra-Nunez (2017) examined the use of digital technology in education in light of the widespread presence of digital literacy among international students from various nations. Teachers' expertise and experience have a major impact on digital literacy among students. Numerous characteristics relating to digital literacy and technology were mediated by attitudes, as revealed by numerous approaches. According to the report, the study promotes personal and educational empowerment by drawing attention to digital technology in education, emphasizing the importance of attitudes. Wu et al. (2017) examined attitudes regarding digital literacy and its role in communication and information technology for education in this setting. Technology plays a critical role in management education, highlighting the significance of digital literacy. The chosen factors are thoroughly studied using both theoretical and empirical methodologies. The study quantifies the mediating effect of attitude toward the relationship between digital literacy and educational use of digital technology.

H3: *Attitude towards using DET significantly mediates the relationship between digital literacy and attention to using DET.*

During the Covid-19 pandemic, information literacy substantially aided countless pupils in successfully coping with and evaluating the situation. Students also answer numerous difficulties in places such as Malaysia and Jordan during a pandemic for conceiving knowledge. Abima et al. (2021) investigated the relationship between attitude, digital literacy, social influence, and information literacy content specific to Ugandan women. Attitude has a key part in information literacy, assisting students in gaining interest in using digital technology for education. The chosen factors are evaluated fully using a variety of theoretical methodologies such as correlation, factor analysis, and regression analysis. The study discovered that the beneficial effect of attitude is constant across digital literacy and educational technology. Keeping the above in mind, Akinde and Adetimirin (2017) discussed the implications of teacher attitudes on information literacy and educational technology in Nigerian universities and schools.

Information literacy is a critical factor that aids students in gaining acceptance for the use of digital technology in their education. As a result, several elements were considered while interpreting attitudes and using digital tools. The findings reveal that attitude has a significant mediating effect on the relationship between digital technology for education and digital literacy.

Additionally, Hardy (2021) explored the circulation of critical digital technologies for rural pupils in the Midwestern United States. The social context and technological divide are more pronounced in the literacies of rural residents confronted with educational situations. Communication and information technology are more prominent features when holistic strategic and theoretical approaches are used. The study demonstrates the critical function of attitude and the influence of information literacy in generating interest in using digital technology in education. Meanwhile, Macgilchrist (2019) emphasised the importance of optimism in educational institutions' adoption of digital education approaches that promote enhanced information literacy. Students would qualify for the working circumstances and make sound judgments. Information literacy is used to expound on the barriers to educational equity, and related aspects are studied using a variety of common methodologies. The study examined the significance and implications of attitude in mediating the relationship between digital technology for education and information literacy.

Additionally, Kearney et al. (2020) stressed the importance of instruments and attitudes toward easy-to-learn abilities enabled by technology. As a result, information literacy is a skill that students possess, progressively drawing attention to the digital education system. The mediating influence of attitude is extensive since it creates optimal pathways for students to develop their information literacy using various statistical methodologies. The findings shed light on the attitudes that influence how people perceive information literacy and digital technology in education. Finally, Ciampa (2017) examined the links between the information contents of literacy and digital technology for education through the lens of attitudes as a mediating factor. Learners may gain significantly from the use of integrated technology, and teachers may also possess a variety of capacities. Numerous variables are considered and analysed using qualitative and descriptive analysis techniques. The study advanced the development of attitudes endorsing a substantial impact on information literacy and the future need for educational technology.

H4: *Attitude towards using DET significantly mediates the relationship between information literacy and attention to using DET.*

3 Methodology

The study explores the effect of digital literacy and information literacy on the attention to use DET in Malaysian and Jordanian universities and the mediating effect of attitude toward utilising DET at the nexus of digital literacy, information literacy, and attention to use DET. The current study acquired primary data via survey questionnaires. The current article used "purposive sampling" to identify public universities in Malaysia and

Jordan. The researchers ranked the top twenty-five public universities in each country. The students are the respondents to this article, chosen via "basic random selection." Five hundred fifty-five questionnaires were sent to students via personal visits. After twenty days, only 375 legitimate surveys were collected and used, representing a response rate of roughly 67.57 percent.

Additionally, the present research used the smart-PLS to examine the "convergent validity" and "discriminant validity" of the understudy constructs and the link between them. The smart-PLS has yielded noteworthy discoveries, even though researchers used a sophisticated framework and high sample sizes (Hair Jr et al., 2021). Additionally, convergent validity demonstrates item correlation and is evaluated using "Alpha, factor loadings, composite reliability (CR), and average variance extracted (AVE)." Additionally, discriminant validity is investigated to determine the association between variables using "Fornell Larcker, cross-loadings, and Heterotrait Monotrait (HTMT) ratio." The route analysis revealed relationships between the understudy constructs. Additionally, the current study used two independent variables: digital literacy (DL), which consisted of fifteen items adapted from Rizal et al. (2019), and informational literacy (INL), which consisted of six items adapted from Pinto et al. (2019); Pinto et al. (2020). Additionally, the current paper used attitude toward DET usage (AUDET) with eight items as a mediating variable and attentiveness to DET use (ATUDET) with six items as the dependent variable; these variables are listed in the framework shown in Figure 2.

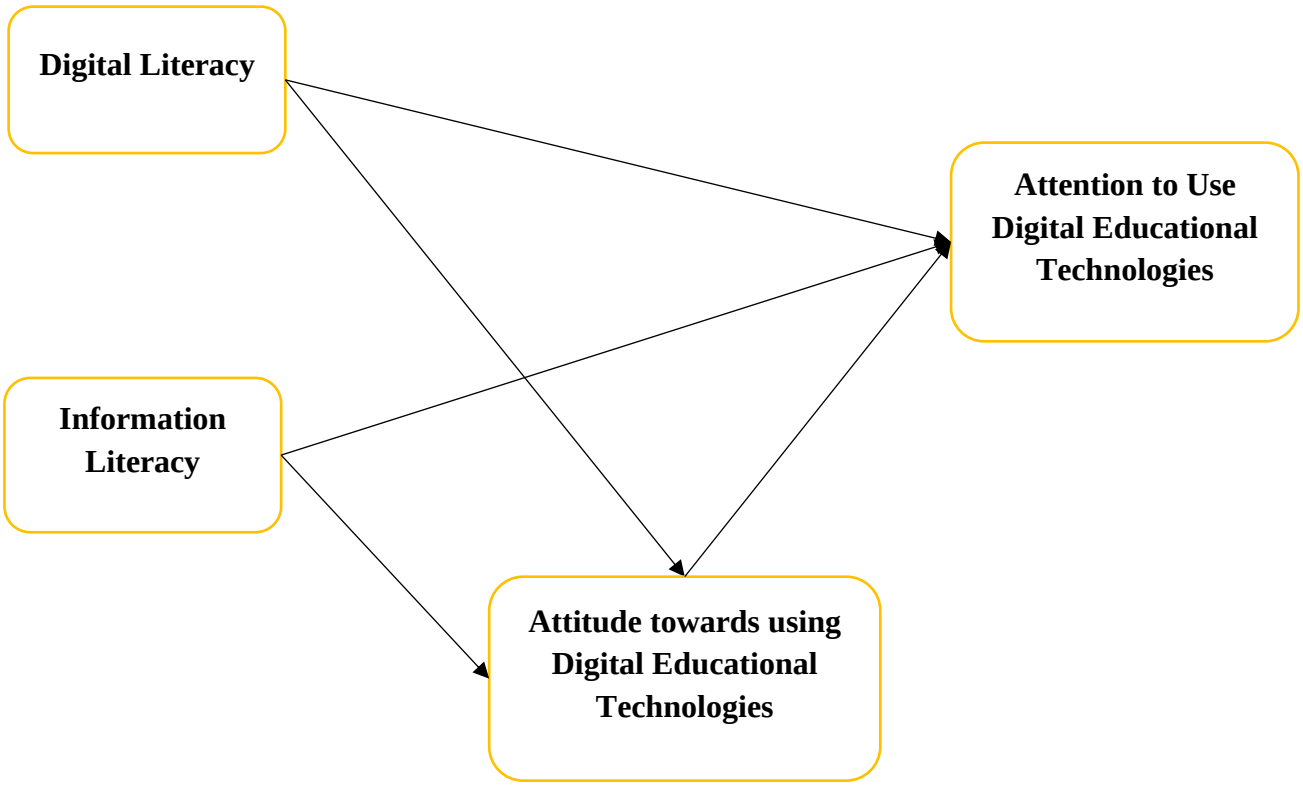

Figure 2: *Theoretical framework*

4 Research Findings

The article's findings demonstrate convergent validity, determined by "Alpha, factor loadings, CR, and AVE." The requirements for "Alpha and CR" are values greater than 0.70, whereas the criteria for "factor loadings and AVE" are greater than 0.50. The results indicated that the "Alpha and CR" statistics exceeded 0.70 while the "factor loadings and AVE" statistics exceeded 0.50. These figures, which suggest a strong correlation between the items and valid "convergent validity," are summarised in Table 1.

Table 1: *Convergent validity*

Constructs	*Items*	*Loadings*	*Alpha*	*CR*	*AVE*
Attention to Use Digital Educational Technologies	ATUDET1	0.840	0.836	0.884	0.605
	ATUDET2	0.785			
	ATUDET3	0.720			
	ATUDET5	0.717			
	ATUDET6	0.820			
Attitude towards using Digital Educational Technologies	AUDET1	0.903	0.947	0.956	0.734
	AUDET2	0.878			
	AUDET3	0.867			
	AUDET4	0.926			
	AUDET5	0.868			
	AUDET6	0.803			
	AUDET7	0.847			
	AUDET8	0.748			
Digital Literacy	DL1	0.823	0.934	0.942	0.543
	DL10	0.668			
	DL11	0.624			
	DL13	0.744			
	DL14	0.639			
	DL15	0.730			
	DL2	0.779			
	DL3	0.848			
	DL4	0.640			
	DL5	0.800			
	DL6	0.844			
	DL7	0.755			
	DL8	0.567			
	DL9	0.782			
Information Literacy	INL1	0.889	0.928	0.944	0.737
	INL2	0.813			
	INL3	0.826			
	INL4	0.885			
	INL5	0.873			
	INL6	0.862			

In addition, the ""discriminant validity"" shows the correlation among variables and is examined using ""Fornell Larcker, cross-loadings and HTMT ratio"." The criteria for ""Fornell Larcker"" are that the column's first figure should be larger than others. The outcomes investigated that the first figure in the column has been larger than others. These statistics indicated a low association between the variables and valid ""discriminant validity"" shown in Table 2.

Table 2: *Fornell Larcker*

	ATUDET	*AUDET*	*DL*	*INL*
ATUDET	0.778			
AUDET	0.565	0.856		
DL	0.744	0.538	0.737	
INL	0.576	0.518	0.514	0.858

The researcher also uses the ""cross-loading"" to test ""discriminant validity" ". The criteria for ""cross-loading"" is that all figures of the variables should be larger than others. The outcomes investigated that all statistics of the variables are larger than others. These statistics indicated a low association between the variables and valid ""discriminant validity"" shown in Table 3.

Table 3: *Cross-loadings*

	ATUDET	*AUDET*	*DL*	*INL*
ATUDET1	**0.840**	0.409	0.621	0.458
ATUDET2	**0.785**	0.585	0.611	0.385
ATUDET3	**0.720**	0.438	0.566	0.444
ATUDET5	**0.717**	0.402	0.480	0.454
ATUDET6	**0.820**	0.357	0.604	0.504
AUDET1	0.491	**0.903**	0.454	0.454
AUDET2	0.444	**0.878**	0.426	0.397
AUDET3	0.443	**0.867**	0.400	0.449
AUDET4	0.519	**0.926**	0.487	0.467
AUDET5	0.569	**0.868**	0.551	0.516
AUDET6	0.502	**0.803**	0.485	0.477
AUDET7	0.420	**0.847**	0.413	0.364
AUDET8	0.446	**0.748**	0.438	0.393
DL1	0.599	0.474	**0.823**	0.427
DL10	0.422	0.296	**0.668**	0.275
DL11	0.466	0.280	**0.624**	0.319
DL13	0.505	0.408	**0.744**	0.350
DL14	0.384	0.263	**0.639**	0.233
DL15	0.562	0.329	**0.730**	0.332
DL2	0.627	0.372	**0.779**	0.383
DL3	0.640	0.339	**0.848**	0.383
DL4	0.528	0.640	**0.640**	0.510
DL5	0.641	0.398	**0.800**	0.429
DL6	0.654	0.401	**0.844**	0.410
DL7	0.544	0.240	**0.755**	0.313
DL8	0.440	0.551	**0.567**	0.381
DL9	0.542	0.407	**0.782**	0.431
INL1	0.519	0.492	0.434	**0.889**
INL2	0.499	0.418	0.432	**0.813**
INL3	0.455	0.446	0.478	**0.826**
INL4	0.504	0.430	0.442	**0.885**
INL5	0.506	0.479	0.426	**0.873**
INL6	0.479	0.397	0.440	**0.862**

The researcher also used the ""HTMT ratio"" to test ""discriminant validity" ". The ""HTMT ratio"" criteria are that the values should be lower than 0.90. The outcomes investigated that all values are less than 0.90. These statistics indicated a low association between the variables and valid ""discriminant validity"" shown in Table 4.

Table 4: *Heterotrait Monotrait ratio*

	ATUDET	*AUDET*	*DL*	*INL*
ATUDET				
AUDET	0.629			
DL	0.831	0.555		
INL	0.656	0.547	0.543	

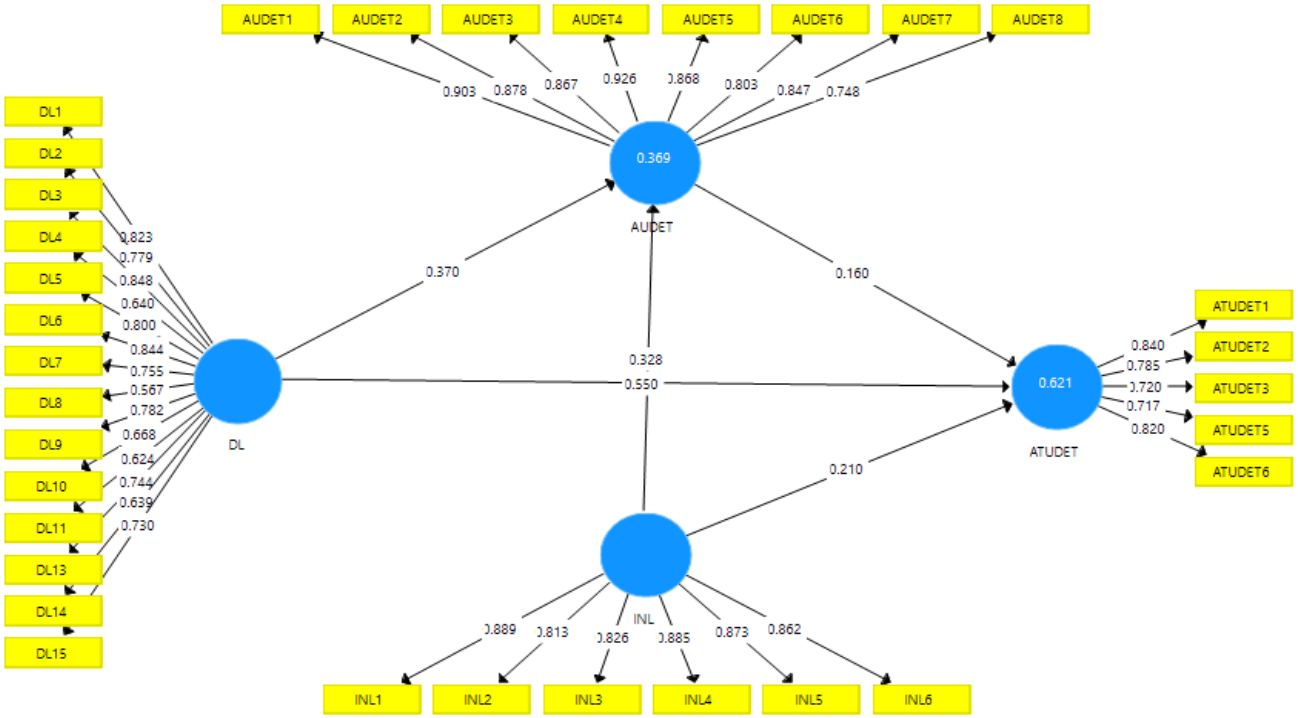

Figure 3: *Measurement model assessment*

The path analysis has shown the relations among the understudy constructs. The output in Table 5 indicated that digital and informational literacy positively associated with attention to use DET in Malaysian and Jordanian universities and accept H1 and H2. The findings also explored that if one per cent rise in DL, the ATUDET will increase by 0.550 per cent and vice versa. In addition, the outcomes also explored that if one per cent rise in AUDET, the ATUDET will increase by 0.160 per cent and vice versa. Finally, the findings also explored that if one per cent rise in INL, the ATUDET will increase by 0.210 per cent and vice versa.

Table 5: *Direct Path analysis*

Relationships	*Beta*	*Standard Deviation*	*T Statistics*	*P Values*	*L.L.*	*U.L.*
AUDET -> ATUDET	0.160	0.044	3.607	0.000	0.080	0.249
DL -> ATUDET	0.550	0.047	11.770	0.000	0.457	0.642
DL -> AUDET	0.370	0.044	8.492	0.000	0.290	0.460
INL -> ATUDET	0.210	0.044	4.814	0.000	0.119	0.293
INL -> AUDET	0.328	0.049	6.649	0.000	0.222	0.423

The results in Table 6 also explore that the attitude towards using DET has significantly mediated among the association of digital literacy, informational literacy, and attention to use DET in Malaysian and Jordanian universities and accept H3 and H4.

Table 6: *Indirect Path analysis*

Relationships	*Beta*	*Standard Deviation*	*T Statistics*	*P Values*	*L.L.*	*U.L.*
DL -> AUDET -> ATUDET	0.059	0.018	3.288	0.001	0.028	0.097
INL -> AUDET -> ATUDET	0.052	0.016	3.206	0.001	0.025	0.086

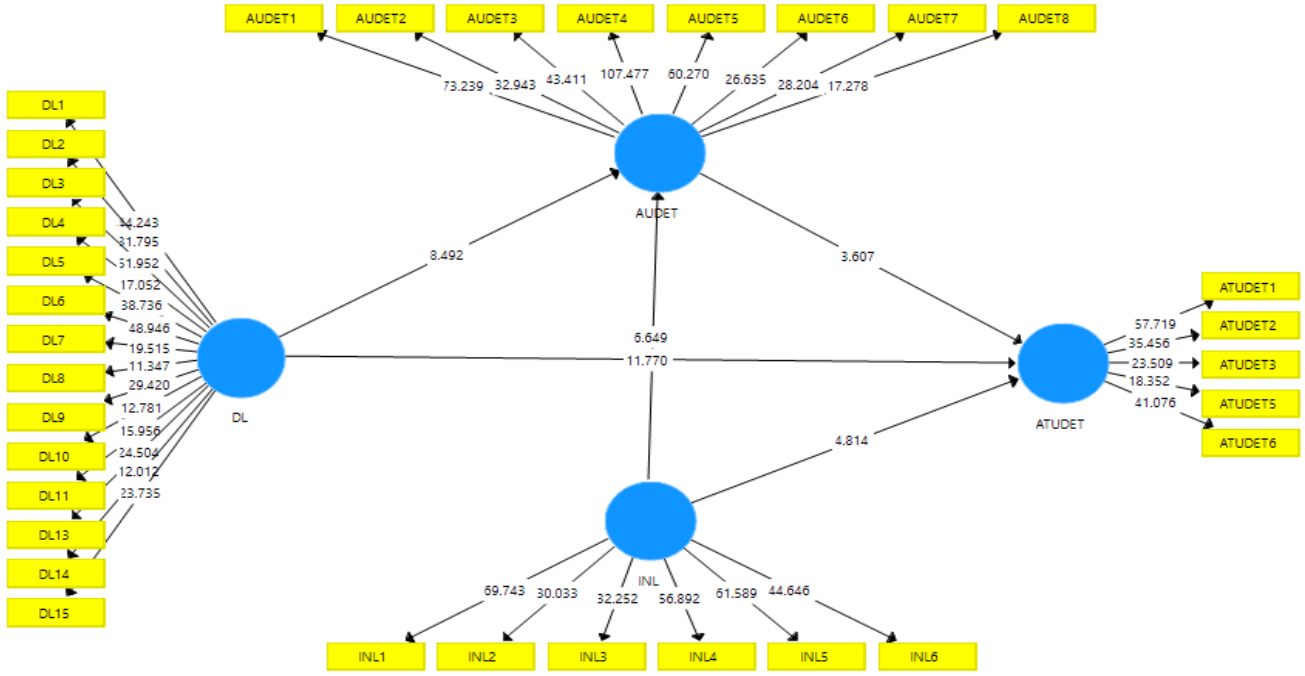

Figure 4: *Structural model assessment*

5 Results and Discussions

The findings indicated that digital literacy positively correlates with the proclivity to utilise DET. These findings are corroborated by Rafi et al. (2019) previous work, which sheds light on digital literacy and evaluates people's motivation to use DET. According to the study, individuals who possess a thorough understanding of digital devices, common digital words, applications, common plate-forms, effective search engines, privacy, ethics, and content production are driven to utilise digital technologies for educational purposes. The rise in digital literacy has shifted people's focus to digital educational technology to enhance educational quality. These findings corroborate a previous study by Techataweewan and Prasertsin (2018), which found that when learners are familiar with, understand, and are capable of using web browsers, search engines, text, email, wikis, PowerPoint, blogs, Photoshop, and video creation applications/editing software, as well as the ability to evaluate online resources to obtain accurate, up-to-date, and reliable information, they are more likely to use digital technology for education. These findings corroborate a recent study by Falloon (2020), which demonstrates that when an educational institution's leadership possesses digital literacy: the knowledge and skills necessary to interact with digital technologies and online educational platforms, they prioritise the use of digital technology for education.

The findings indicated that information literacy positively correlates with attention to DET use. These findings corroborate a recent study by Hatlevik et al. (2018), which found that students who possess the knowledge, understanding, and ability to locate information through appropriate sources such as online publications including texts, books, or magazines, evaluate the information using effective digital applications, and use the information appropriately are motivated to use DET, as it requires the same prior knowledge, understanding, and ability. These findings corroborate Pinto et al. (2019) previous work, which concluded that

using digital technology for educational purposes required more concentration and prior acquaintance with associated terms, gadgets, search engines, and online platforms. Teachers who have the desire and aptitude to seek out information, assess its quality, and transmit it effectively through various textual, personal, and digital sources can devote greater concentration and prior expertise to digital education tools. These findings are corroborated by Aharony and Gazit (2019) previous study, which demonstrates that prior knowledge of digital technologies, their applications, associated accessories, applications, and other websites is essential for adoption. Thus, information literacy draws consumers' attention to the educational value of digital technology.

The study discovered that an individual's attitude toward utilising DET is a mediator between digital literacy and interest in using DET. These findings corroborate a recent study by McDougall et al. (2018), which indicates that frequently, people's attitudes are the outcome of their knowledge, information, and talents. It is their attitudes that dictate their actions and performance in a community. Individuals who have acquired knowledge about the digital world, including new digital inventions innovation in online applications, websites, and educational platforms, demonstrate a favourable attitude toward DET and continue to devote their full attention to the use of digital technologies for education. These findings are also consistent with a previous study by Güneş and Bahçivan (2018), which focuses on the growth of digital education. They assert that people's understanding of digital devices, programmes, and websites and their ability to use them effectively to acquire and share information shapes positive attitudes toward digital technology to advance education sectors. The positive impressions and attitudes of those concerned with the education sector direct their attention to implementing DET effectively to raise educational standards. As a result, attitude toward DET use influences the relationship between digital literacy and attention to DET use.

The study discovered that an individual's attitude toward DET use is a mediator between information literacy and willingness to use DET. These findings corroborate Zhu et al. (2019) previous research, which indicates that information literacy teaches individuals how to make plans for obtaining information, search for required information using search engines, web browsers, and digital social media, and evaluate the information's quality using reputable information sources. This understanding strengthens learners' attitudes regarding using beneficial digital technologies in education. It shapes their interest and intention to put their perceptions into action through digital technologies in learning. These findings corroborate a previous study by Fázik and Steinerová (2020), which indicates that information literacy, defined as the capacity to search for, evaluate, organise, sort out, use, and share information in all of its forms, is more likely to shape positive attitudes toward the use of digital technologies for teaching-learning processes when it is used to make decisions, solve problems, or acquire knowledge. People have acquired an interest in utilising digital technology in education due to their high level of information literacy and favourable attitudes toward the usage of digital technologies.

5.1 Conclusions and Implications

The current study is significant theoretically because it contributes significantly to the body of knowledge regarding schooling. The current study examines the use of digital technology in education, either in conjunction with or substituting traditional educational methods. The purpose of this essay is to examine the effects of digital literacy and information literacy on the willingness to utilise DET. Digital literacy and information literacy are two distinct concepts that numerous authors have addressed to quantify attention to using DET. Still, their relationship to attention to use DET has been investigated in separate research. The concurrent examination of the effects of digital literacy and information literacy on the motivation to use DET is a significant contribution to the field. The attitude toward DET use has been investigated primarily concerning digital literacy and information literacy and the attention paid to DET use. However, the literature on this subject shares the mediator of attitude toward DET use between digital literacy and information literacy and the attention to DET use. The current research has guided regulatory bodies to formulate rules about the use of DET to improve educational quality.

Additionally, this work has numerous empirical ramifications. This study is an appropriate guideline for developing economies that desire success in their education sector and wish to promote learning and education practises in other economic or social areas. For education, regulations encourage the use of digital technology for teaching and learning purposes since it is more effective, convenient, and eliminates time and location constraints compared to conventional teaching and learning methods. According to the study, interest in using DET increases with digital literacy and information literacy and a positive attitude toward DET use.

The purpose of this study was to examine the function of digital literacy and information literacy in fostering an interest in DET usage and the influence of attitude toward DET use on the relationship between digital literacy and information literacy and an interest in DET use. The authors distributed a study survey to universities in Malaysia and Jordan to examine digital literacy and information literacy, attitudes toward and attention toward DET use, and their interaction. The findings indicated a positive correlation between digital literacy and information literacy and attitudes toward and attention to DET use. The findings indicated that digital literacy increases interest in DET use since digital technologies and accessories necessitates extensive knowledge in this sector, which is only feasible with a high level of digital literacy. The findings indicated that as information literacy increases, the awareness of effective sources of information, the ability to interact with those sources (for acquiring, evaluating, and sharing information), and the abilities to interact with those sources (for acquiring, evaluating, and sharing information), the attention to use DET increases as well. Additionally, the study's findings indicated that digital literacy and information literacy improve attitudes toward DET use, hence increasing interest in DET use.

5.2 Limitations and Prospects

The study contains some flaws that require future scholars' attention. To assess attention to use DET, this study evaluates only two factors: digital literacy and information literacy. The study's scope is limited by the study's focus on only two factors of attention to utilise DET, leaving all other variables unexamined. Other scholars are anticipated to examine the attention to use DET through the lens of digital literacy and information literacy and other possible factors. This research is directed at the education sector, specifically at the universities in Malaysia and Jordan. Malaysia and Jordan have distinct educational policies, cultures, and economic conditions that may be incompatible with those found in other nations. The study's reliability and validity are in doubt for other education sectors or economies. To ensure that the standardised study meets the requisite level of validity, it is suggested that the authors evaluate the relationship between understudy factors and the attention to use DET in additional nations outside the two focal countries.

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