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Social Networks to Rescue COVID-19 Education: Learners' Awareness of Social Networks in Aiding Education

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Abstract

Governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the novel coronavirus (COVID-19). This has culminated in the largest school disruption in recent history. This study explored learners' awareness of using smart educational systems (social networks) to support remote learning (e-learning). The study examined three constructs: Motivation, Active role, and Interaction, based on the theory of Connectivism. These constructs contributed to the development of a survey used to gather perspectives on social networks in education from a group of Business Studies learners in a South African high school. Data was collected from a sample of Business Studies learners (n=133) just before the COVID-19 pandemic. The results show there was an awareness of the use of social networks in education among learners. Therefore, social networks had the potential to support distance education during the pandemic.

Keywords: Social networks, E-Learning, Smart educational systems, Connectivism, Pandemic.

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1. Introduction

1.1. The Move Online

Due to the global COVID-19 pandemic, social distancing has become the new norm, and many countries have imposed lockdown regulations. These regulations have included the closure of schools, severely affecting the world's learner population. Close to 1.5 billion of the world's learners have been impacted, with millions undertaking to learn solely online [1]. The resumption of education has become a matter of urgency. Countries worldwide are exploring options for smarter educational systems, including remote learning and the use of other educational resources to mitigate the loss of learning caused by the pandemic. The dangers posed by face-to-face education make distance education the preferred choice, especially online learning, which enables distancing learning (remote learning) through e-learning (electronic learning) and m-learning (mobile learning). The need to continue with education and pursue smarter options has resulted in an evolution of concepts within e-learning and distance education as we know it [2].

As the global community finds itself accelerating into the Fourth Industrial Revolution (4IR) with faster internet connections due to fiber-optic technologies, reports show that South Africa will soon be phasing from 5G trial testing to full 5G availability [3]. It has been suggested that the Internet of Things (IoT), coupled with 5G networks, will drive the future of the Internet forward [4].

The web was initially a tool used for military, scientific, and academic purposes. However, since the early 1990s, it has become a huge part of our everyday lives. As technology has progressed and more people have begun to use the Internet, the web has gone through (and continues to go through) major shifts, specifically, Web 2.0, Web 3.0, and the IoT. The Internet has provided tools for collaboration and sharing information [5], including social networking services like WhatsApp, Messenger, Telegram, WeChat, Instagram, Pinterest, Twitter, and Facebook, to mention a few.

Social networks, or social media, are generally platforms that are accessed via software applications installed on devices such as desktop computers, laptops, smartphones, or via the web [6]. Social networks allow people to connect virtually to one another's profiles based on shared common interests. These common interests may be academic, business-oriented, professional, personal, or merely social [7]. Social networks promote individuals' social connections through virtual environments, allowing for instant communication [8]. In this study, social networks are contextually understood as collections of tools and facilities with which groups of individuals (particularly, in the context of this work, groups of school-going learners) who share common interests can interact. The estimated number of social network users in South Africa, as of mid-2020, is 22.89 million [9] out of an estimated total population of 57.78 million [10], thus close to half the population.

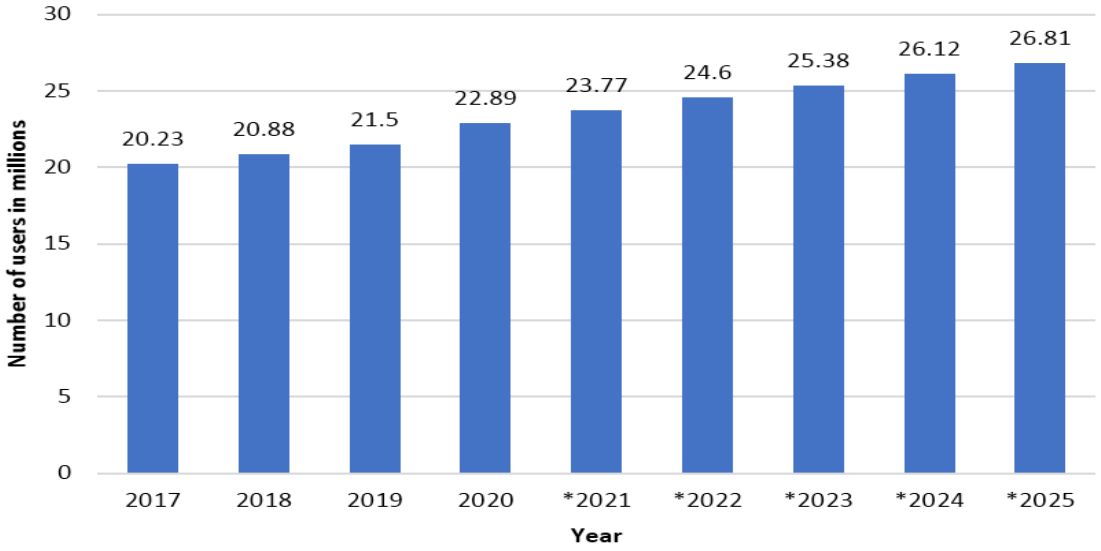

Figure 1.
South Africa's number of social network users 2017–2020 and predicted up to 2025.
Note: * Indicates number of users predicted by inferential statistics and other contributing factors.

There has been a steady increase in the number of social network users in South Africa from 2017 to 2020, and the projected numbers of users up to 2025 are depicted in Figure 1. In 2020, there were approximately 22.89 million social network users in South Africa, and this value is projected to grow to 26.81 million users in 2025. This growth since 2017 strongly indicates that many people have widely accepted and adapted to social networks. Research conducted by the Pew Research Center in 2018 found that youth are very active on social networks [11] thus making social networks a great tool for use in education, especially given the pandemic and the ensuing need to access educational content at a distance.

1.2. Learning in the Information/Digital Age

In addition to the global pandemic's pressures on education, the dawn of 4IR has brought about an educational revolution [12]. The advances in educational technologies have given rise to pedagogical practices that are relevant and familiar to the current generation of learners through the use of gadgets and apps (applications). With the emergence of educational technologies to assist remote education, priority must always be given to well-planned, well-designed, and pedagogically effective methods [13, 14]. Information is available at learners' fingertips, placing them at the global frontier of knowledge. This highly techno-aware generation has grown up surrounded by digital technology; thus, as technology natives, they are adept at social networks, let alone the never-ending release of new tech. A fundamental transformation is needed in the design and delivery of education through the creation of smarter learning spaces coupled with the wise use of learning tools [14].

Connectivism is a learning theory of the Digital Age [15, 16], recognizing technology in the learning process to the extent that learning is located within technology. Unlike traditional theories like cognitivism and constructivism, which limit learning to a process that occurs inside the person [17], in connectivism, the learner is encouraged to seek and explore opinions and suggestions. Goldie [5] noted that the "starting point for learning occurs when knowledge is actuated by learners connecting to and participating" (p. 1065). This is achieved through technology, resulting in the teacher no longer being the single source of knowledge [18]. The eight Principles of Connectivism described by Siemens [17], in no particular order, are:

A. "Learning and knowledge rest in diversity of opinions".

B. "Learning is a process of connecting specialized nodes or information sources".
C. "Learning may reside in non-human appliances".
D. "The capacity to know more is more critical than what is currently known".
E. "Nurturing and maintaining connections are needed to facilitate continual learning".
F. "The ability to see connections between fields, ideas, and concepts is a core skill".
G. "Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities".
H. "Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision" (p. 5).

The theory of connectivism is founded on learning through networked societies influenced by technology [19], as knowledge flows through a network made up of humans and non-humans. The network of knowledge consists of nodes and connections, and learning is a process of pattern recognition. In other words, the network consists of connections between nodes, which can be individuals, groups, ideas, resources, or communications [2]. In a sense, the nurturing of knowledge determines the choice of what to learn and the meaning of what one learns. The network includes non-humans in the form of technology. Knowledge can even be stored in devices for on-demand retrieval and updated for currency and timeliness [17].

Collaborative learning and information sharing via social networking services are consistent with the views of connectivism as learning can occur among peers or groups through online learning technologies like Facebook and others. Efficient networks have the following properties: Diversity and welcoming of an array of viewpoints, Autonomy of persons in the network, Openness to processes that allow different views to enter the network, and Connectivity of nodes [20]. An individual's network influences their ability to access information through social networks. Hence, learning can be seen as dynamic due to the changes in the network. These changes result from network expansion or the prior experience an individual brings into the network. In essence, when there is a network expansion, an individual can increase their knowledge. Likewise, network reduction is the result of the eradication of misconceptions or knowledge to make space for updates. A contributing factor to misleading information is that fake news evolves rapidly, spreading false and misleading claims [21].

This study proposes summarizing Siemens' eight principles of connectivism within three core constructs: Motivation, Active role, and Interaction. Table 1 shows the categorization of each principle.

Table 1.
Categorization of the eight Connectivism principles.

	Connectivism principle	**Construct**
A	Learning and knowledge rest in diversity of opinions.	Interaction
B	Learning is a process of connecting specialized nodes or information sources.	Interaction
C	Learning may reside in non-human appliances.	Active role
D	The capacity to know more is more critical than what is currently known	Motivation
E	Nurturing and maintaining connections are needed to facilitate continual learning.	Active role
F	The ability to see connections between fields, ideas, and concepts is a core skill.	Motivation
G	Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.	Interaction
H	Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.	Motivation

Intrinsic Motivation is pertinent to the aspects of connectivism that are based on the influence of internal factors. The learner desires and summons the willingness to act/behave in a way that is internally satisfying, such as by knowing more than what is currently known – *Principle D*. Unlike extrinsic motivation, when an act/behavior is based on external factors, the learner has to make decisions that are part of the learning process – *Principle H*. Siemens [17] explains that motivation enables the "desire to foster deep network connections" (p. 2). Decision-making is an internal factor that affects the learner's assimilation of information through the network (connections and nodes). In connectivism, Goldie [5] states that "learning occurs when knowledge is actuated by learners connecting to and participating in learning" (p. 1065). The decision-making process determines how dynamic the learning process will be due to the information that filters through the network. A dynamic network permits change and alteration of knowledge when the learner realizes connections between fields, ideas, and concepts – *Principle F*.

A learner's Active role within a network, whether it be with humans or non-humans – *Principle C* – contributes to maintaining connections. Hence, if the learner does not play an active role, the connections between nodes are weak or non-existent. The learner's activity in the network ensures the need to continuously innovate in a changing environment [22]. A learner's active role in the network is thus critical in promoting continuous learning – *Principle E*. According to Corbett and Spinello [18], "within Connectivism, learning occurs when peers are connected and share opinions, viewpoints, and ideas through a collaborative process" (p. 3) as the network (connections and nodes) is seen as knowledge, and learning is a process of pattern recognition. Motivation, primarily intrinsic motivation, is likely the driving force behind the learner's active role.

It is only through Interaction that diversity and opinions emerge – Principle A. One aspect of connectivism is communication, increasing engagement, knowledge, and collaboration [18]. As a result, connection paths to specialized nodes and sources exist in the network – Principle B. These connection paths could also exist because of a learner's active role; hence, an active role is a driving force of interaction. Interaction is critical within the network as it plays a role in sense-

making. The relevant knowledge one seeks – Principle G – is obtained through interaction within the network via newsfeeds, blogs, vodcasts, podcasts, etc.

2. Statement of the Problem

The problem can be identified as an exploration of social networks' potential as a tool for resuming education in the context of the global pandemic. Learners often have a substantial amount of daily homework and assignments while, at the same time, they have to cope with other daily life demands. There is also the challenge that learners have of developing sufficient discipline to achieve a fair division of time between schoolwork, social life, and other important life activities. Interestingly, social networking generally takes the largest share of teenagers' time [11]. Do learners take advantage of social networking services for educational purposes and to develop life-long skills? If so, which social networking services do they embrace, and to what extent? The study attempts to answer the following main research question: What is social network users' level of awareness in support of e-learning?

3. Methodology and Procedures

The research followed a quantitative exploratory design, which involved inductive reasoning and involved administrating a survey questionnaire to a group of 133 learners. The study population was learners enrolled in Business Studies at a high school in South Africa. Business Studies is a subject that is offered within the Further Education and Training (FET) Phase Grades: 10, 11, and 12. Business Studies is a practical subject relating directly to the real business world and current affairs. Business Studies content centers on case studies in which learners are required to analyze and strategize and develop solutions. Hence Business Studies learners were the ideal participants as they had a strong need to communicate, share ideas, and discuss solutions.

The sample represented more than 50% of the population enrolled in the school's Business Studies subject. A descriptive analytical approach was used to present and analyze the role of social networks in support of e-learning. Before undertaking the investigation, full ethical clearance was obtained from the governing education department. The researchers considered that some participants might not have social network accounts due to age restrictions but might have used family members' or relatives' accounts. However, given the school's quantile rating, location, and socioeconomic status, learners were from affluent, middle-income homes. Therefore, one can assume that they had easy access to technological devices, resulting in access to social networks. The high school also adhered to a Bring Your Own Device (BYOD) policy since it has a Learning Management System (LMS). Devices that learners could bring to school included tablets or smartphones that were child-locked and under parental surveillance, limiting their use to educational purposes only.

The study's data collection instrument included two parts. A general/demographic section with five items, followed by a 15-item five-point Likert scale response. The data instrument assessed learners' desire for, attraction to, and awareness of social networking services. This questionnaire was designed to identify social network awareness among learners in supporting e-learning based on Connectivism Theory. Hence the 15 Likert scale statements were categorized according to the three proposed constructs: Motivation, Active role, and Interaction. The survey's initial format was sent to a set of educational specialists to check its validity in terms of the items' comprehensiveness and appropriateness, welcoming any necessary changes.

Table 2.
Gender of participants.

Gender	N	%
Female	63	47.36
Male	70	52.63
N	133	100

Of the 133 participants, 70 were male, and 63 were female (see Table 2).

Table 3.
Age of participants.

Age	N	%
13–15	46	34.58
16–18	69	51.87
19–21	16	12.03
>21	2	1.50

Table 3 indicates that the majority of learners were in the age group 16–18. When considering the learners in the age group 19–21, it suggests that these respondents were in Grades 11 and 12. The group below the age of 19 constituted 86.45% (115) of the sample, more than those above the age of 19, who represented 13.53% (18).

4. Results and Discussion

Table 4.
Device and Internet.

Question	Yes	No
Do you own/have access to a smartphone?	86.46%	13.53%
Do you have internet access?	91.72%	8.27%
Do you have access to a PC (computer)?	32.33%	67.66%

The findings depicted in Table 4 indicated that 86.46% of the respondents owned or had access to a smartphone. The vast majority of learners had access to the Internet. Interestingly the 8.27% that did not have access to the Internet were likely to have access using a PC or smartphone. It is important to iterate that BYOD is implemented at this high school and that teachers upload Business Studies content onto the LMS, which has been operational for quite some time. Given the context and the results in Table 4, it suggests that these learners are mobile users; therefore, promoting m-learning, let alone e-learning, has resulted in 86.46% having/owning a smartphone and 91.72% having access to the Internet.

Table 5.
Platforms used.[1]

Service/App	WhatsApp	Facebook	Other
User %	97.74%	66.91%	3.75%

The majority of the respondents preferred to use WhatsApp, followed by Facebook (see Table 5). The large number of WhatsApp users (97.74%) is likely due to its ease of installation and access, unlike Facebook (66.91%), which requires personal information to be provided during registration. Facebook and some other social networks have age restrictions, making them inaccessible to specific age groups. Other platforms, such as Messenger, Twitter, Instagram, etc., were unpopular as only 3.75% indicated they used these platforms. The findings in Tables 4 and 5 are similar to the Pew Research Center results that revealed that close to 95% of learners have access to digital devices and the Internet [11].

Table 1.
Information most communicated.

Information shared	Text	Images/video	Other
User %	32.33%	54.13%	13.54%

Table 7.
Motivation.

No	Item	1	2	3	4	5	Mean	SD	Cronbach's Alpha if deleted	Order
1	I communicate freely and flexibly on social networking services.	10 7.52%	11 8.27%	16 12.03%	30 22.56%	66 49.62%	3.98	1.27	0.977	2
9	I would learn better in a class's social group than in class.	30 22.56%	14 10.53%	18 13.53%	23 17.29%	48 36.09%	3.34	1.58	0.985	5
11	I can express myself better to my teacher online than in class.	17 12.78%	5 3.76%	18 13.53%	23 17.29%	70 52.63%	3.93	1.40	0.975	3
12	Online forums will help my timid friends participate.	7 5.26%	12 9.02%	28 21.05%	30 22.56%	56 42.11%	3.87	1.20	0.980	4
15	Costs of social networks are reasonably low and affordable.	15 11.28%	11 8.27%	14 10.53%	12 9.02%	81 60.90%	4.00	1.44	0.978	1
Construct mean										3.83
Construct reliability										0.983

Table 6 indicates that images and videos (54.13%) are more often shared on social networks than text information (32.33%). Video analysis carried out by Bayrakdar et al. [8] found that of the variety of multimedia content that can be shared,

[1]Platforms used by participants – multiple selections were permitted.

images and videos dominate social networks. It is important to note that social networks are generally designed around cinematographic media sharing, including photography and videography. Other multimedia files (13.54%) are likely to include web links or audio such as voice notes and music.

In assessing learners' awareness of social networks' support of e-learning based on Connectivism Theory, data collected from 15 items, answered using a 5-point Likert scale, was analyzed. On the Likert scale, 1 referred to strongly disagree, 2 to disagree, 3 to neutral, 4 to agree, and 5 to strongly agree. Descriptive statistics were utilized to find the frequencies, percentages, means, and standard deviations, as well as the mean of each construct (Tables 7, 8, and 9). Furthermore, Cronbach's Alpha was used to determine each item's reliability and the reliability of each construct. The findings for each construct are presented in Table 7 (Motivation), Table 8 (Active role), and Table 9 (Social interaction), and the most notable findings are discussed below.

The construct mean for Motivation was 4 (3.83), which corresponds to Agree, making intrinsic motivation an essential factor when using social networks to promote learning. Learners' proficiency and flexibility in the use of social networking services (Item 1) were confirmed by 72.18% ("agree" + "strongly agree") of respondents, whose mean suggested they communicated freely and flexibly via social networks (mean = 3.98, SD = 1.27). As found by Al-Rahmi et al. [23], social networks foster easy rapport among members while promoting active collaborative learning, thus enhancing learning performance. If class discussions took place online, timid or reserved learners could be accommodated (Item 12), with a mean corresponding to "agree" (mean = 3.87, SD = 1.20). Globally, people find their voices on social networks as virtual platforms give them the freedom to speak out [24].

To use social networking services, one needs access to the Internet; this results in costs associated with data use. It was revealed that over 50% ("agree" +" strongly agree") of the learners concurred that the cost of using social networks was reasonably low and affordable (Item 15) with a mean of 4.00 (SD = 1.44). As pointed out by Di Minin et al. [25], social networks can save costs and allow access to quality information in less physically accessible areas. The reliability analysis carried out on the statements to assess Motivation comprised 5 items (Table 7). Cronbach's alpha showed that the five construct items reached acceptable reliability, $\alpha = 0.983$. Each item's Cronbach alpha, if deleted, was greater than 0.9; thus, each item was worthy of retention.

Table 2.
Active role.

No	Item	1	2	3	4	5	Mean	SD	Cronbach's Alpha if deleted	Order
2	I can write lengthy messages using social networking services.	9 6.77%	7 5.26%	15 11.28%	31 23.31%	71 53.38%	4.11	1.21	0.971	1
6	My friends and I share schoolwork on social networking services.	40 30.08%	22 16.54%	24 18.05%	19 14.29%	28 21.05%	2.80	1.52	0.962	4
7	I hardly go for a day without chatting to friends on social networks.	50 37.59%	13 9.77%	15 11.28%	18 13.53%	37 27.82%	2.84	1.68	0.967	5
8	I will likely contribute ideas to the Business Studies social group.	26 19.55%	13 9.77%	16 12.03%	27 20.30%	51 38.35%	3.48	1.54	0.954	3
14	Social networking and schoolwork can be balanced.	15 11.28%	11 8.27%	17 12.78%	23 17.29%	67 50.38%	3.87	1.40	0.961	2
Construct mean										3.42
Construct reliability										0.970

The construct mean for Active role was 3 (3.42), which corresponds to Neutral. While an Active role is critical in connectivism, two items (Items 6 and 7) had low means, which contributed to the construct's mean. Interestingly learners do not share much school work on social networks (Item 6) with a mean of 2.80 (SD = 1.52); the reason for this could be that the primary intended use of social media networks is entertainment, not work. It is important to note that the data was collected pre-COVID-19. The authors believe that the findings would change significantly if measured post-COVID-19.

Social networking sites like Twitter and Facebook are a new form of entertainment and represent a move away from the television or visiting the cinema [26]. Further affirmed by Cunningham and Craig [27], social networks are used significantly among the youth as they are likened to television. However, learners do not communicate with their friends daily on social networks (Item 7), with a mean of 2.84 (SD = 1.68); it could be that face-to-face interaction is valued over meeting virtually. Nevertheless, this response was measured just before COVID-19; now, given the pandemic, many people worldwide have restricted physical contact and opt instead for virtual greetings. The long-term effects of limited or no physical interaction are yet to be seen. However, a study carried out in Switzerland has indicated that the lack of face-to-face interactions due to the COVID-19 crisis could negatively affect learners' mental health [28].

Learners "agree" that social networking and schoolwork can be balanced (Item 14) with a mean rating of 3.87 (SD = 1.40), as indicated by the 67.67% who "agreed" and "strongly agreed." It is important to note that 19.55% ("strongly disagree" + "disagree") of learners felt that social networking and schoolwork could not be balanced, while 12.78% ("neutral") of learners were indecisive. As pointed out by Akram and Kumar [29], "many adolescent people are using their laptops, tablet computers and smartphones to check Tweets and status updates from their friends and family" (p. 347); therefore, social networks can pose a distraction. However, more than 50% of respondents were likely to contribute ideas to a Business Studies social group (Item 8), with a mean of 3.48 (SD = 1.54). A reliability analysis was carried out on the statements to assess the five items contributing to Active role (see Table 8). Cronbach's alpha showed that the five construct items reached acceptable reliability, $\alpha = 0.970$. All items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted.

Table 9.
Social interaction.

No	Item	1	2	3	4	5	Mean	SD	Cronbach's Alpha if deleted	Order
3	I can send pictures, music, and videos via social networking services.	8 6.02%	6 4.51%	8 6.02%	22 16.54%	89 66.92%	4.34	1.16	0.929	1
4	I express myself better to friends on social networks than in class.	12 9.02%	22 16.54%	21 15.79%	35 26%	43 32%	3.56	1.60	0.917	5
5	I have a group of friends I chat with on social networks.	19 14.29%	9 6.77%	14 10.53%	19 14.29%	72 54.14%	3.87	1.48	0.906	4
10	Online discussions of schoolwork with my teachers would be helpful.	8 6.02%	9 6.77%	16 12.03%	24 18.05%	76 57.14%	4.14	1.22	0.913	2
13	Social networking does not waste time that could be spent on completing tasks.	12 9.02%	14 10.53%	18 13.53%	22 16.54%	67 50.38%	3.89	1.36	0.944	3
Construct mean										3.96
Construct reliability										0.937

The construct mean of Social interaction is 4 (3.96), which corresponds to Agree, making social interaction an important factor when using social networks to promote learning. A study conducted by Al-Rahmi et al. [23] found that 95% of learners use social networking platforms for active collaborative learning and engagement. Learners' ability to send media via social networks (Item 3) was indicated by 83.46% ("agree" + "strongly agree"), with the highest mean of all items (mean = 4.34, SD = 1.16). Learners felt they could express themselves better online than in class. This agrees with the response to Item 4, in which most learners felt able to express themselves more freely than in class (mean = 3.56, SD = 1.60). Bayrakdar et al. [8] argued that "social media platforms allow users to create connections between themselves in the process of sharing content such as text, images, and videos" (p. 3).

The findings indicate that online discussions would be beneficial to learners (Item 10), as 75.19% ("agree" + "strongly agree") indicated that it would be helpful, with a mean of 4.14 (SD = 1.22). The majority of learners disagreed that social networks were a waste of time when it came to completing tasks (Item 13), with a mean of 3.89 (SD = 1.36). Al-Rahmi et al. [23] reported that social networks' usefulness in education was positive and significant. A reliability analysis was carried out on the statements (see Table 9). Cronbach's alpha showed that the five construct items reached acceptable reliability, $\alpha = 0.937$. All items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. The one exception to this was Item 13, which increased the alpha to $\alpha = 0{,}944$.

The means for the Motivation and Interaction items were higher than those for Active role. This is likely due to Items 6 and 7, as the learners had not yet really explored the use of social networks in education and valued face-to-face interaction over virtual interaction. Social networks enhanced students' learning experience by amplifying their motivation and the level of engagement between peers and teachers [23]. Overall, the most valued aspects of social networks were their low cost (Item 15) and their functionality to communicate lengthy messages (Item 2), share media files (Item 3), and participate in online discussions (Item 10).

5. Conclusion

The pandemic's crippling effects on education during this era of the 4th Industrial Revolution have caused teachers and learners around the world to increasingly embrace digital tools in education, paving the way for a smarter education system. Online modes of education that foster remote learning have gained popularity in many institutions globally throughout the COVID-19 pandemic, thus encouraging the uptake of e-education. This study sought to explore social network awareness in education among a cohort of Business Study learners. The study revealed that the majority of learners (more than 80%) have

access to the Internet and digital devices to use social networking applications. Despite some respondents being underage, they have active accounts on social networks. While this study does not focus on the underage use of social networks, learners and parents/guardians must be educated on the responsibilities of using such applications. Given the school's quantile rating and location, learners from affluent, middle-income homes are likely to have easier access to the Internet and digital devices.

This study contributes to the literature by proposing three key constructs that summarize connectivism, which have proved useful in understanding learners' awareness of social networks. These constructs can successfully categorize the eight principles of connectivism. Figure 2 depicts a visualization of how critical intrinsic motivation is as it leads to an active role, which results in interaction.

Figure 2.
Three constructs of connectivism.

The findings show that the constructs have acceptable reliability values, and the mean responses were equivalent to "agree," except for Active role. The fact that Active role has the lowest mean indicates that learners are not fully aware of the potential of social networks in education, although they remain motivated and socially interactive. This suggests guidance is needed when learners use social networks in their learning. A structured approach and implementation by teachers using social networks for subject content will promote a higher mean score for Active role. The findings also showed that the awareness among learners of social networks' low cost and perceived ease of use in communicating, sharing media files, and initiating online discussions has the potential to positively influence their education under circumstances that prevent face-to-face interaction. Learners use social networks more frequently for their personal/social lives than for education. However, because COVID-19 may have changed the status quo, a similar study should be conducted post-COVID-19 to compare the differences in the use of social networks for educational purposes and personal/social purposes. The results and findings of this study suggest that learners' awareness of social networks in education seems to have a positive effect on their learning and can create a conducive environment that is invaluable.

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