

A Systematic Review of ICT Integration in the Teaching and Learning of Social Sciences

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Received: April 17, 2025; received in revised form: May 26, 2025
accepted: May 27, 2025

Abstract:

Abstract:

Introduction: With the growing trend of technology adoption in teaching and learning, this integration must continuously be studied to track its status. Social Sciences, also known as Social Studies in other countries, is one of the subjects that the South African government has designed to accommodate technology adoption. Therefore, this qualitative review systematically analyses published data on integrating ICT in the teaching and learning of Social Sciences. Understanding the level of ICT integration in teaching Social Sciences in schools will open avenues for designing evidence-based intervention strategies to bridge policy and practice gaps in curriculum implementation.

Purpose: The purpose of this study was to identify the attitudes and perceptions, extent of integration and challenges of SS teachers in integrating ICT in their instruction. It is hoped to eventually identify gaps in existing literature and to guide future research.

Methods: The review was guided by the PRISMA guidelines and utilised three search engines, Google Scholar, EBSCOHost and Sabinet, from which a total of 25 records from the last ten years were deemed suitable for the purpose of this study. Thereafter, data were analysed using the thematic analysis method based on the attitudes and perceptions, level of integration and challenges.

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Acta Educationis Generalis

Volume 15, 2025, Issue 3

Conclusions: Overall, integration is in its infancy, but there is an eagerness to integrate ICT if the challenges are mitigated. This analysis was significant in pointing out areas of future research.

Key words: ICT, integration, Social Sciences, Social Studies, systematic review, PRISMA.

Introduction

Technology is an undeniably beneficial innovation worldwide, and according to Gül (2023), its existence can be detected in almost all areas of our lives. Of course, the impact will not be similar between different income classes (Ghalayani et al., 2020), but the positive impact is still reported by numerous scholars researching this aspect. These scholars commonly use fixed broadband subscriptions, mobile subscriptions, Internet, and telephone communication as indicators. Ghalayani et al. (2020) suggest that the effect level on the economy for each region studied will differ according to the technological indicator studied. However, a general overview indicates that despite the differing levels, the effect of ICT on the economy is favourable.

As already mentioned, the world consists of various countries with differing income classes, which results in the varying effects of ICT on each economy. The high and upper-middle-income classes have positive results for all indicators since they have adequate technological infrastructure and advanced knowledge of its use. Still, even in this case, the lower middle-income class reportedly shows an even more significant impact of digital technology on its economy compared to the high and upper middle-income classes. In contrast, the impact is still positive in low-income classes. Still, mainly fixed broadband and cellular subscriptions significantly impact economic growth (Ghalayani et al., 2020). The studies in Asian countries also presented findings similar to those of lower-income classes (Nipo et al., 2022). Studies suggest that mobile telecommunication makes significant economic growth within South Africa, Libya and Gabon, showing a higher level in South Africa with the most evident impact on economic growth (Adeleya & Eboagu, 2019; David & Grobler, 2020). Without a doubt, studies have clearly shown that technology is a widespread trend that seeks to bring revolution in different sectors, especially education, and it can be argued that building a sustainable future has been technology's primary focus (Das & Barman, 2023). For instance, multimedia tools are a common technological integration in education. They are software applications and platforms designed to create, edit, and manage various forms of media, including text, images, audio, and video. They enable users to combine these elements to

Acta Educationis Generalis
Volume 15, 2025, Issue 3

produce rich and engaging content for different purposes, such as education, marketing, entertainment, and communication. Digital technology enhances verbal instruction by incorporating static and dynamic visual aids, facilitating improved expression and understanding (Alemdag & Cagiltay, 2018). Furthermore, there is accelerated production of information, with access to it enhanced as technology continues to develop (Gül, 2023).

Technology in education is not a recently emerging concept, as it has been around for decades. According to Mdhlalose and Mlambo (2023), the 1920s were the earliest recorded time when ICT was used to teach history and political sciences through a radio broadcast. In the 1950s, the University of Illinois developed a computer-based teaching system, and in the 1960s, audio and video cassettes were popularised for lectures. Carlos et al. (2022) also noted an introduction and growing use of personal computers, signifying a tremendous educational turn. Thereafter, from the 1990s to date, the Internet has been widely used, allowing for digitalised teaching such as virtual learning (Mdhlalose & Mlambo, 2023).

Interestingly, Social Sciences (SS) is one of the subjects that the Department of Education has outlined to make room for technology integration. Different scholars conceptualise SS as a school subject in several ways. According to Bariham (2019), this subject is an inquiry-based subject which seeks to study problems that exist within society. He adds that it is a multidisciplinary subject that aims to instil the relevant skills, attitudes and values to help combat poverty and societal issues. Likewise, Bariham (2020) highlights the origin of this learning area in Britain from the 1920s and its dissemination to the US as time progressed.

In essence, the learning area in South Africa is offered in grades 4-9 and the Intermediate and Senior Phases. This subject offers the History and Geography disciplines, in which language and writing are integral. At the same time, they are trained to debate and speculate on issues and questions (Department of Basic Education [DBE], 2011). The two disciplines branch out independently from grades 10 to 12. The resources prescribed for its instruction include textbooks, magazines, newspapers, maps and globes, audio and visual material, and the Internet for programs such as Google Earth.

Moreover, the subject's curriculum and policy statement further outline the envisaged learners (DBE, 2011). It clearly indicates that learners' inquisitiveness must be encouraged, having to ask is/are, should, could, who, what, why, when, where, and how questions, which advance to "if" as they progress to the next phase. The history part aims to create learners who enjoy the study of the past, are knowledgeable and appreciative of the past and related dynamics, can partake in historical enquiries, and possess knowledge of historical concepts, sources and evidence. On the other hand, the geographical side aims to produce

learners who want to know more about their environment, are knowledgeable about it and the relationship between society and the natural world, are independent thinkers, care about the environment, can communicate effectively, etc.

In addition, Ibrahim et al. (2020) emphasise that “ICT integration in Social Sciences education refers to the purposeful and systematic incorporation of ICT tools and resources into the teaching and learning process of the subject”. According to the report of Whitworth and Berson (2002), the popularity of technology in SS can be traced back to 1996 and 2001. The emphasis around this time was still on the location and utilisation of the World Wide Web resources. Around this time, Martorella (1997) described technology integration in this area as a “sleeping giant”, seeing as it was lagging in adoption compared to other disciplines.

Most significantly, reports have brought forth various reasons for ICT’s importance in SS education. A study by Mwinkaar (2018) on ICT integration in Social Studies reported on three crucial contributions of technology in classrooms: effective and better lesson delivery, lessons more interactive and easy teaching of the lesson and better understanding by learners, which is similar to what Mensah and Osman (2022) posited about Social Studies lessons being more engaging, varied and well presented with the use of technology, derived from their participants’ perceptions. In addition, Ibrahim et al. (2020) found that it promotes engagement and motivation, a similar notion also reported by Anim (2024). Furthermore, Atubi (2022) added to the list that the innovation makes Social Studies lessons more practical, which is in line with what Anim (2024) reported from her participants’ responses that highlighted the practical nature of multimedia usage and that with ICT, learners do not only read about SS, but they also apply the knowledge, resulting in active learning. Access to a vast array of resources is another widely reported importance of the concept (Bariham, 2022). These reports strengthened the argument on the importance of ICT in SS education.

Clearly, the progress of ICT incorporation in this subject’s teaching and learning must be tracked and understood to maximise learning and enhance teaching experiences with the innovation. The aim of this analysis was to unveil the progress and level of technology integration in SS and to set a clear path for future research on this phenomenon. Thus, this systematic review addresses the following questions on ICT integration in Social Sciences teaching and learning:

1. What are the attitudes and perceptions of Social Sciences teachers on integrating technology?
2. To what extent are they integrating ICT in their teaching?
3. What challenges do they encounter with the process?

1 Methodology

This study sought to uncover the extent to which Social Sciences teachers integrate ICT. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline was invaluable in the development of the study. In addition, the main research questions were equally significant in creating a criterion for studies to be included in the analysis. Suitable studies had to adhere to Table 1.

Table 1

Inclusion and exclusion criteria

<u>Included</u>	<u>Excluded</u>
Focus on primary school/Junior High, or Secondary school SS.	High school SS
Primary research	Secondary research
Published between 2015 and 2025	Older
From peer-reviewed journals	Non-reputable journals
In English	Other languages

1.1 Database search and key terms

In search for relevant studies to be analysed, a total of three search engines were utilised: Google Scholar, EBSCOhost, and Sabinet. A thorough delve through these databases was guided by using a few critical keywords to ensure the results highly matched the main topic of this study. These keywords included:

- ICT/Information and Communication Technology integration AND/OR Social Sciences
- Technology Integration AND/OR Social Sciences
- Computer-based instruction AND/OR Social Studies
- Technology use AND/OR Social Studies
- Geography AND/OR ICT
- Perceptions/attitudes AND/OR ICT
- Challenges/barriers AND/OR ICT
- Extent AND/OR ICT integration

1.2 Study selection

The selection of studies was guided by the PRISMA framework, as shown in Figure 1. PRISMA was initially developed to improve systematic reviews and meta-analyses (Moher et al., 2019) and elaborate on complete and transparent reporting (Liberati et al., 2009). It suggests that the process commonly commences with many identified records, which are then sequentially excluded based on the eligibility criteria formulated by the authors. The step-by-step

process includes the following stages: Identification, Screening, Eligibility, and Inclusion.

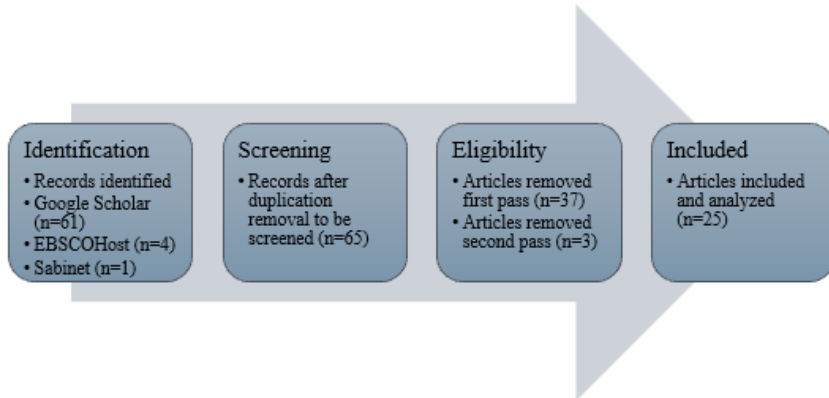


Figure 1. PRISMA flow chart for inclusion and exclusion process.

1.2.1 Identification

A total of 66 records were retrieved from three databases. Sixty-one studies were retrieved from Google Scholar, four from EBSCOhost, and one from Sabinet.

1.2.2 Screening

Briefly screening the records, it came to light that one of the records was a duplicate and was removed, leaving a total of 65 records to be screened.

1.2.3 Eligibility

Based on titles and abstracts, 37 records were removed, deemed irrelevant to the study's goal. This is because the studies addressed other subjects that are not SS; some addressed the subject at the high school level, while there were also some with pre-service teachers as participants, and others focused on the learning area at the tertiary level. Equally important, some of the studies were published before 2015. A further total of three more articles were removed after a full read because they were not primary data as set on the criteria of this systematic review.

1.2.4 Included

With the help of the PRISMA guideline on inclusion and exclusion, 25 total articles were included and analysed as they were found to closely relate to the

study's goal and adhered to the given criteria: they were published between 2015 and 2025, they addressed Social Sciences/Studies/Geography/History at primary/junior high/secondary schools, from peer-reviewed journals, and they were primary research published in the English language.

2 Results

This section presents the findings and a discussion after the analysis of the included 25 articles in accordance with the mentioned research questions, with the help of a thematic analysis procedure. First, a description of the publications is presented according to the year of publication, followed by the research approach used, the countries of publication, the theoretical frameworks used, and the authors who published.

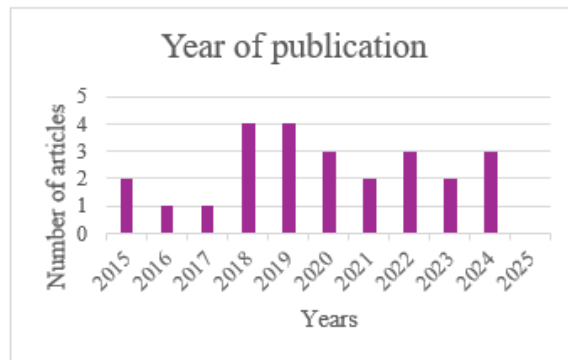


Figure 2. Publications by year.

The included data were filtered by the year of publication, as each article had to be no more than ten years old since its first publication. According to Figure 2, most of the included studies were published in the years 2018 and 2019, with four publications each, followed by 2020, 2022 and 2024 with three each; then 2015, 2021, and 2023 have two publications each, whereas years 2016 and 2017 had the least number with one publication each and 2025 has not yet seen any publications related to this review.



Figure 3. Sampled studies by research approach/design.

The publications included were also analysed based on the type of research approach they used in their studies. Findings, as shown in Figure 3, showed that most of the studies were qualitative in their approach, with a total of 10, and quantitative, with a total of 10, and five used a mixed approach.

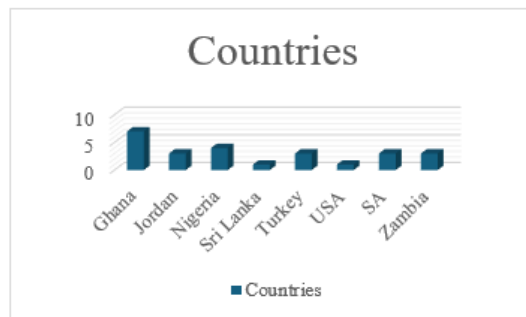


Figure 4. Country of publication.

Countries of publication were also taken into consideration during this analysis. The publications originated in Ghana, Jordan, Nigeria, Sri Lanka, Turkey, the USA, South Africa and Zambia, as shown in Figure 4. Sri Lanka and the USA had the fewest publications, with only one each. On the other hand, Ghana was leading with seven, followed by Nigeria with four, while Jordan, Turkey and Zambia had three publications each. South Africa followed closely with three publications, two focusing on geography in primary schools and one focusing on SS.

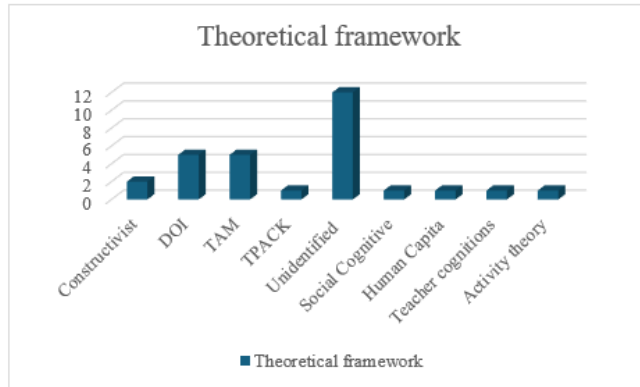


Figure 5. Theoretical framework.

The theoretical foundations of the studies were also considered. It was found that most of the studies did not have any theoretical foundations/frameworks (12), as shown in Figure 5 (unidentified). Five of the studies grounded their research on the Technology Acceptance Model (TAM). Two of the studies employed Constructivism, the other five used the Diffusion of Innovations Theory (DoI), only one used TPACK, and one used Social Cognitive Theory and Human Capital Theory simultaneously. Additionally, one of the studies used DoI, TAM, teacher cognitions, and activity theory as simultaneous frameworks.

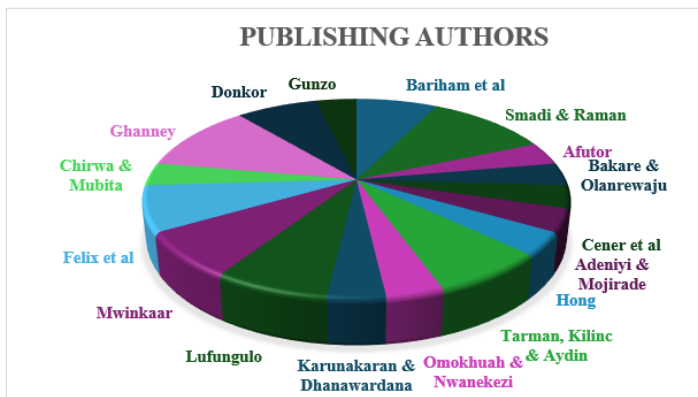


Figure 6. Publishing authors.

Upon analysis, it became significant that the articles' publishing authors were considered. Based on Figure 6 above, it is clear that Smadi and Ghanney are the

leading authors of this review as they appear three times each in publications, followed by Tarman, Kilinc, Aydin, Lufungulo, Mwinkaar, Donkor, Bariham and Felix as the next prominent authors with two publications each. Bariham had two publications, one independent and one with colleagues. Smadi had three publications, two with colleague Raman and one independent. On the other hand, Tarman, Kilinc and Aydin also had two publications, one with Tarman as a lead author and one with Kilinc as a lead author. Lufungulo also had two publications as a sole author. Felix appeared as a prominent author in two publications, but in each of these publications, the co-authors differed. Donkor was the prominent author of two publications with colleagues, Ghanney appeared as a co-author of both these publications and was a prominent author of a study with Mwinkaar. Mwinkaar also had a publication as a sole author. The rest of the authors had one publication each.

2.1 Thematic analysis

Thematic analysis, as the chosen data analysis method for this study, describes data in patterns by creating and interpreting codes and is deemed flexible for its capability of being used among different theoretical and epistemological frameworks (Kiger & Varpio, 2020). They further comment that its flexibility also stretches to be used in various study questions, designs, and samples of different sizes. The data here were analysed thematically according to the three research questions of the study.

Thematic analysis has a simplified guide for researchers to follow when they commence with the analysis of their data (Terry et al., 2017):

- *Data Familiarisation:* This first step is crucial in determining whether or not the interpretations and descriptions emerging from the dataset will be free of defects. The scholars highlight that this step begins before the actual analysis, when researchers still collect data by noticing patterns. During this first step, researchers must read and reread, ask questions, and make notes.
- *Code Generation:* In this second step, researchers have already made notes, understood data, and noticed patterns. Now, they have to create codes, which is a means of reducing and organising the data. This is done by systematically and thoroughly identifying concepts, finding relations between them, and creating labels. At this stage, irrelevant data will also be discarded as it serves no purpose towards answering the research questions.
- *Theme Construction:* Following the generation of codes, researchers now identify patterns, which are then turned into themes. The creation of these themes should align with the research questions, as the scholars suggest that these questions should guide this step. Thereafter, the scholars also recommend using visuals such as thematic maps.

- *Theme Revision and Theme Definition:* This step acts as an editing step, ensuring alignment by checking whether the themes answer the research questions. This stage will either see researchers modifying their themes, removing some themes, or starting afresh with creating themes because each theme should contain rich detail to be independent; themes that do not include this in-depth detail are either expanded, merged with other themes or dropped altogether.
- *Producing the Report:* This is the final step of the analysis, in which the researcher's position shifts back to the bigger picture of the overall study from the analytic mode. They begin to write and report on their findings using either the illustrative style of writing, which relies on examples to make a point, the analytic style, which uses logic and reasoning, or even both.

After completing this analysis, emerging themes were: a) Perceptions and attitudes; b) ICT usage in SS and factors affecting integration; and c) Challenges.

2.1.1 Perceptions and attitudes of social sciences teachers and students

Undeniably, teachers are the key role players in the process of technology integration in classrooms (Ersoy & Kavaklioglu, 2020), and the decision to eventually adopt the idea of teaching with technology and its success is highly dependent on their perceptions and attitudes (Boonmoh et al., 2021; Islahi, 2019). Eteokleous (2018) defines perception as the view, understanding or even interpretation of things, while Teyo and Noyes (2011) define attitude as a person's positive or negative emotional tendencies. Clearly, then, if the integration of ICT in the discipline is to be successful, these two components need to be assessed closely.

The analysis of the studies provided sufficient insight into the perceptions and attitudes that the subject's teachers and learners have on ICT integration in teaching and learning. It was commonly found that they had positive attitudes and perceptions towards the incorporation of technology in their teaching (Adeniyi & Mojirade, 2022; Bakare & Olanrewaju, 2022; Bariham et al., 2019; Bariham, 2019; Cener et al., 2015; Felix, 2021; Felix et al., 2018; Ghanney & Mwinkaar, 2019; Gunzo, 2020; Hong, 2016; Lufungulo, 2017, 2015; Tarman et al., 2019). For example, the participants showed eagerness to use ICT and learn more about it in the process, as they viewed it as an effective teaching tool (Donkor et al., 2023) and a resource bank (Hong, 2016). Furthermore, SS teachers view technology as a valuable innovation to enhance learning (Felix et al., 2018; Gunzo, 2020; Mwinkaar, 2018; Tarman et al., 2019). Teachers were generally interested in ICT integration in teaching and learning (Ghanney & Mwinkaar, 2019). In addition, Lufungulo (2017, 2015) reported that teachers and learners were excited and confident with the use of technology in lessons as they

found it easy to use, helpful to enhance curriculum implementation, useful for learners to retain what they learnt and engaged most, if not all, the senses of the learners. Similarly, Donkor et al. (2023) and Mwinkaar (2018) found that teachers had good content and practical ICT knowledge, making integration effortless. The implication of this finding suggests that technology integration will most likely take place (Bakare & Olanrewaju, 2022; Cener et al., 2015), aligning with the findings of Mensah and Osman (2022) who asserted that SS teachers were found to hold positive perceptions of ICT integration in the teaching and learning of SS, which signalled that teachers were going to readily adopt technology if the necessary training and resources were provided for.

On the other hand, some teachers perceived technology as useful but experienced extreme levels of demotivation with its adoption. Although they understood the benefits of the innovation, they had poor attitudes towards it as they reported the disadvantages to outweigh the advantages (Chirwa & Mubita, 2021). Even more concerning, other teachers complained that they simply viewed it as a waste of time (Mwinkaar, 2018); this, unfortunately, suggests that such schools will record much lower levels of ICT integration in their teaching and learning.

2.1.2 ICT usage in social sciences and factors affecting integration

Generally, the integration of ICT in SS classrooms can be observed using different techniques, depending on the infrastructural wealth of each school. Bariham (2019) found in his study that teachers used videos and DVDs in their SS lessons to present certain concepts to learners, expose them to diverse viewpoints and even play educational movies to learners, such as snippets on events of the past. Atubi (2022) placed emphasis on the Internet, social media, computers, and PowerPoint as substitutes for the textbook. Moreover, Bariham (2020) reported that mobile phones and the Internet were popular technological tools that learners and teachers used in his study. Similarly, findings in Mwinkaar's (2018) study suggested the Internet is the commonly integrated technological tool in the area's classrooms, allowing learners to explore various online content that can further explain complex concepts or open them up to new ideas. Several reports have shown that learners use smartphones and the Internet for research purposes when they have projects to complete.

In as much as teachers exhibited positive attitudes and perceptions towards incorporating it in teaching and learning, it is still important to find out if they are indeed doing it. According to the analysis of the studies, it was uncovered that the teachers' adoption is very low (Adeniyi & Mojirade, 2022; Bariham et al., 2019; Bakare & Olanrewaju, 2022; Gunzo, 2020), even though in some cases, efforts to provide video facilities to teachers were made (Bariham et al., 2019). Similarly, Gunzo (2020) found that even though ICT facilities were available in some schools, teachers still kept technology integration in its

infancy. Furthermore, some of these studies tested whether or not the teachers' characteristics influenced their level of adoption in teaching and learning the subject. Young teachers reportedly integrated more than the older teachers, while males integrated more than females; and finally, the inexperienced teachers integrated more than the experienced ones (Bariham et al., 2019). Bariham (2019) had previously reported an opposite finding on this when it was found that teachers with more experience integrated more than the newer teachers.

2.2 Factors affecting the integration of ICT

There were more factors affecting integration, other than the characteristics of teachers, such as support, technological skills, location of schools, and exposure to gadgets. Support of the teachers is said to directly impact technology integration because it fuels their willingness to integrate more than those without support (Smadi, 2024). On the other hand, technological skills are just as significant to the process as they influence the level at which teachers participate (Afutor, 2020). Smadi and Raman (2024) reported that because the teachers in their study had technological skills and knowledge, they effectively used ICT in their teaching, which is closely related to the exposure factor; teachers who were already using ICT had higher chances of integration than those who did not (Omokhuah & Nwanekezi, 2018). This aligns with the findings of Olatunde and Okusaga (2015), who reported that ICT usage in SS teaching and learning was below average due to technological competency inadequacies.

2.2.1 Challenges

Social Science teachers face numerous challenges that affect their integration process of ICT in their teaching related to the Internet, ICT labs, professional development, time, finances, and technological support. The Internet issue is a commonly reported issue among various studies on technology adoption, as shown in Figure 7.



Figure 7. Challenges identified.

- *Internet access:* Many schools do not have internet access, or it is problematic, making integration of ICT difficult for SS teachers (Atubi, 2022; Bariham et al., 2019; Bariham, 2019; Chirwa & Mubita, 2021; Donkor et al., 2024; Felix, 2021; Karunakaran & Dhanawardana, 2023; Mwinkaar, 2018; Tarman et al., 2019). Many Websites, such as Google Maps, YouTube, Google and more, require that one has internet access. However, if this is not provided for, teachers cannot maximise their utilisation of ICT in their teaching and learning. For example, Felix (2021) reported that teachers used pictures from Google in the classroom; however, teachers also reported a lack of Internet in their school, which means they are not always able to do this. Atubi (2022) also found that teachers used internet browsing and educational websites in their lessons, but due to poor Internet usage, this is hindered on some days.
- *Lack of ICT labs and facilities:* In addition, unavailability and inaccessibility of ICT labs and tools/facilities in schools was another reported barrier for SS teachers in their technology use (Adeniyi & Mojirade, 2022; Atubi, 2022; Bariham et al., 2019; Bariham, 2019; Donkor et al., 2024, 2023; Felix et al., 2018; Felix et al., 2021; Ghanney & Mwinkaar, 2019; Hong, 2016; Karunakaran & Dhanawardana, 2023; Kilinc et al., 2018; Lufungulo, 2017; Mwinkaar, 2018; Tarman et al., 2019). For example, Lufungulo (2017) found that the sampled schools had short supplies of tablets, laptops, projectors and speakers. These shortages can create even more challenges for teachers and learners, such as learners

having to share these tablets in class (Lufungulo, 2017), which may affect the smooth progress of lessons.

- *Lack of ICT-related professional development:* Moreover, SS teachers are unable to integrate technology because of a lack of ICT-related professional development. Teachers were not granted an opportunity to engage in professional development programmes, and when they did, sometimes they were irrelevant, resulting in a lack of technological skills (Bariham, 2019; Bariham et al., 2019; Feix et al., 2021; Ghanney & Mwinkaar, 2019; Hong, 2016; Karunakaran & Dhanawardana, 2023; Kilinc et al., 2018; Tarman et al., 2019). Unfortunately, this leads to teachers' limited ICT knowledge and skills (Donkor et al., 2024; Ghanney & Mwinkaar, 2019). This lack of technological competency resulted in teachers' inability to utilise technology in their lessons effectively.
- *Time constraints:* The issue of time is also viewed as a hindering matter of ICT integration in SS teaching and learning. The time factor ranges from ICT being seen as time-consuming due to long set-up time (Hong, 2016) to lack of time to learn and practice technology (Hong, 2016; Smadi & Raman, 2020) to the SS curriculum not being designed to allow enough time for technology integration (Bariham et al., 2019; Bariham, 2019; Gunzo, 2020; Kilinc et al., 2018; Smadi & Raman, 2020; Tarman et al., 2019) to a lack of transitioning time moving to computer labs (Felix, 2021; Gunzo, 2020; Karunakaran & Dhanawardana, 2023) and limited time to plan lessons (Felix, 2021; Gunzo, 2020) as some teachers had to make use of school computers/laptops which they could only access while at school (Felix, 2021). For instance, it was found that when teachers integrated technology into their lessons, they did not complete the lessons on time as they spent a lot of time setting up the gadgets or moving learners to labs (Gunzo, 2020). As a result, teachers minimised their utilisation of technology.
- *Financial constraints:* Furthermore, financial constraints in schools block the effective adoption of innovations as they are not able to purchase the necessary tools or even maintain them (Bariham et al., 2019; Chirwa & Mubita, 2021; Felix, 2021; Gunzo, 2020; Karunakaran & Dhanawardana, 2023). Participants in one study blatantly echoed that they had challenges because the school reported that they could not afford to pay for internet subscriptions, leading to teachers having to purchase their own data (Chirwa & Mubita, 2021). Consequently, teachers became demotivated and ended up avoiding using ICT.
- *Lack of technological support:* Finally, the teachers are yearning for technological support, especially as non-ICT teachers. They experience challenges manoeuvring the technological tools at times (Bariham et al.,

2019; Bariham, 2019; Donkor et al., 2024, 2023; Gunzo, 2020; Hong, 2016; Kilinc et al., 2018; Tarman et al., 2019). When teachers do not get the necessary support with the integration, they become demotivated and reluctant to proceed.

- These reported findings on challenges faced by these teachers are similar to the findings of other scholars, such as Heafner (2013), who found that they were faced with barriers associated with access to the resources, the lack or unavailability of consistent internet access, lack of professional development leading to lack of technological skills, and generally finding technology integration time-consuming

3 Discussion

The goal of this study was achieved through a systematic review of the literature guided by the PRISMA guideline. The analysis revealed that most studies were published in 2018 and 2019. The situation of the analysed studies was in Nigeria, Sri Lanka, the USA, Ghana, Jordan, Turkey, South Africa and Zambia. Ghana had the most publications in this review. These studies were primarily qualitative and quantitative with equal statistics, and most had unidentified theoretical foundations; however, DoI and TAM seemed more dominant among those with theoretical frameworks. Finally, the leading authors in this analysis were Smadi, Ghanney, Mwinkaar, Donkor, Bariham, Tarman, Kilinc, Aydin, Felix and Lufungulo.

Moreover, the reviewed publications managed to answer the research questions of this paper and the results were thematically presented. The findings showed that Social Sciences teachers and learners have a positive and eager outlook on integrating ICT in teaching and learning. However, they reported minimal integration, possibly due to the challenges listed. These challenges are related to the Internet, ICT labs, professional development, time, finances, and technological support.

This analysis has uncovered a few limitations to the issue of technology adoption in this subject. Firstly, in the last ten years, only a few primary studies have focused on ICT integration in SS in primary school/junior high school/junior secondary school. Secondly, only one publication could be retrieved from within the South African context, published in the last ten years, about the integration of technology in Social Sciences. The other two that have been included did not focus on Social Sciences as a whole but rather on only one of the two disciplines that make up the subject, which was Geography. Consequently, this leaves a considerable gap in knowledge to be filled.

Conclusions

The education sector faces significant transformations as technological innovations are becoming increasingly popular. Interestingly, Social Sciences are one of the subjects designed to incorporate technology in teaching, and it is crucial to investigate whether or not this is happening and at what rate. Thus, this analysis has been a cornerstone in answering this question. It sought to discover what perceptions and attitudes Social Sciences teachers and learners held for this integration, to what extent the Social Sciences teachers were integrating, and what challenges they faced in the process. Therefore, a total of 25 publications were analysed to answer these questions successfully. Findings revealed that teachers showed positive perceptions and attitudes towards technology adoption in Social Sciences classrooms, even with challenges such as lack of internet services, professional development and financial constraints, which led to limited integration. Most importantly, the major finding emerging from the review was the limited literature on ICT integration in Social Sciences within the South African context. It can therefore be recommended that, firstly, future research on this phenomenon must be done within South Africa. Secondly, the government must develop policies and guidelines that ensure that teachers receive continued adequate and relevant support and professional development, along with the provision of the necessary resources. Thirdly, practitioners must not shy away from technology-related professional development opportunities available to them and must commit themselves to ongoing training. Finally, they must also be willing to adapt their instructional methods to the demands of the digital age.

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