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Gender Disparity in Digital Financial inclusion and Challenges Affecting Women in Developing Countries

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Abstract

Digital financial inclusion could help in the empowerment of women and the completion of the United Nations 2030 Sustainable Development Goals (SDGs) in developing countries, by improving access to financial services and reducing financial as well as economic exclusion. This paper examines the challenges toward the digital financial inclusion of women in developing countries. The results of the review were mixed. The findings reveal that these challenges involve gender bias and discrimination in the financial services sector, lack of collateral, social, cultural and economic factors, cost of accessing digital financial services, safety concerns and risks leading to lack of trust in digital financial services. This paper concludes by articulating that mitigating the identified challenges could improve digital financial inclusion of women in developing countries, while yielding benefits such as increased access to economic and empowerment opportunities, enhance financial security and independence of women and reduce gender inequality (SDG5). The review also established that while digital financial inclusion of women can help them gain financial autonomy, it can also indirectly fuel gender based violence as men resort to violence when losing financial control. Due to digital literacy challenges these financial services can perpetuate financial exclusion of women instead of reducing it. The paper recommends the reduction in the cost of digital financial services, increasing the safety of financial services by constructing laws against cybercrimes. Strengthening security and risk management of digital financial services, increasing education on the benefits and risks of digital financial services and address gender bias.

Keywords: *Digital Financial Inclusion; Developing Countries; Gender Disparity; Digital Literacy; Women*

1.Introduction

Financial inclusion is a topical issue poverty alleviation, sustainable development effect, in development economics and economic growth debates and agendas as well as realization of the United Nations 2030 Sustainable Development Goals (SDGs). Ghosh (2021) observes that 1.7 billion people are financially excluded globally and 30% of this estimated number is the adult population. More than half of this unbanked population is considered to be women.

Inequality affects poverty alleviation efforts in low- and middle-income countries. Financial inclusion reduces poverty indirectly by empowering the financially excluded groups by giving them access to financial services. Good financial decisions, control over finances, and access to credit when needed may reduce poverty and inequalities. There are also views on the contrary that where access to financial services such as credit is not supported with financial literacy programs can attract vulnerable people into over-indebtedness which might perpetuate poverty. In Kenya, Malawi, and Nepal access to credit was found to reduce gender inequality. Women saved more than men and expanded their expenditures and investments (Dupas & Robinson, 2013; Fiory, 2018). Financial inclusion of women can boost the usage of financial services and reduce the vulnerability of families to poverty (Koomson et al, 2020a,b). According to Lu et al. (2021:278), despite women being more prudent and risk-averse in their financial decision, “men tend to use more financial services than women”. Women are more likely to employ financial resources more efficiently and to improve the lives of families especially children as compared to men (Hazarika & Guha-Khasnobis, 2008).

According to Ghosh and Vinod (2017), for women there is 8% less probability of getting formal loans and 6% less likely chance to obtain informal loans. For female-headed households, financial inclusion was influenced by the level of income and education, together with social and political factors. Ghosh and Vidon (2017) further state that 47% of women owned bank accounts globally compared to 55% of men, pointing to women being less financially included. The low levels of financial exclusion for women are linked to the availability of finance, usage, and accessibility gender gaps. Demirgüç-Kunt, Klapper, Singer, and van Oudheusden (2015) allude to the influence of the gender gap on financial inclusion in developing economies. Demirguc-Kunt and Klapper (2013) stated that while 63% of men were financially included in developing countries only 43% of women were financially included. Demirguc-Kunt et al. (2018) adduce that in 2017, 240 million women were financially included (either with a bank or mobile money account), yet approximately 1 billion women remain financially excluded. The UN (2020) professes that women and girls are typically financially excluded. (Ghosh (2022) approximates the figure of financially excluded women to 1.1 billion, with 72% of men being financially included globally and 65% of women as well 67% of men, and 59% of women to be financially included in developing countries). Ghosh (2022:1) while focusing on how the political empowerment of women influences financial inclusion articulates that despite the existence of the UN 2030 SDG 5 that advocates for gender equality to improve economic growth, enhance productivity, reduce poverty and other social challenges such as gender parity in employment, gender-based violence, and property ownership inequalities “financial inclusion of women remains elusive”. Ghosh (2022) further states that while 67% of women with accounts (bank and mobile money accounts used DFSs for paying and receiving money, 72% of men used the accounts for similar services in developing countries. This speaks to the digital financial exclusion of women, despite the focus being on a smaller class of DFSs (paying and receiving money). DFSs encompass much more than these two services. Four out of ten girls or women are financially excluded in developing countries (Demirguc-Kunt et al, 2015; Mndolwa & Alhassan, 2020).

Digital technology emerged as a game changer in all sectors of the economy such as education, manufacturing, distribution, finance, and health. DFSs are likely to improve digital finance and DFI. In this digital era, attention is moving from traditional financial inclusion to DFI, which entails digitally accessing and using formal financial products and services (Soekarno, Mambea & Setiawati, 2020). While focusing on both developed and developing countries, Ozili (2018) proclaims that the provision of DFSs using fintech can bring convenience, affordability, and access to low- and unstable-income earners.

There is a paucity of literature on gender divide and digital financial inclusion in developing countries. A few studies have focused on gender disparity and financial inclusion in individual countries

() and in Africa (Ghosh 2022a, b; Ojo, 2022 a, b). Gammage et al. (2017) submit that DFI and financial inclusion remain greatly understudied in Middle East and Nort African countries. According to Mndolwa and Alhassan (2020:578), “The evidence on the gender gap in financial inclusion in developing countries remains heavily under-researched or with little evidence from Africa”. Kairiza, Kiprono, and Magadzire (2017) share similar concerns about the research gap. Acknowledging the need for more research on the gender divide and DFI, Aziz and Naima (2021) contend that even though there is growing research on digital finance and financial inclusion, the research has not comprehensively explored the drivers and challenges of DFI as they relate to gender disparity especially leaning towards women. Therefore, the aim of this review is to establish the challenges explaining the digital financial exclusion of women or the continued low levels of digital financial inclusion in developing countries.

It is essential to review literature on DFI and the gender gap in developing countries to show areas where evidence diverges or converges in terms of the thematic analysis of the factors explaining the gender gap in DFI, substantiating the narrative discussions with national and regional perspectives and statistics. Understanding the supply and demand factors influencing digital financial exclusion of women is an important topic because DFI can have multiplier consequences on poverty reduction, aggregate economic productivity and development, human capital development and women empowerment. An indepth comprehension of the topic can help to adequately inform programmatic and policy levers to be tweaked to maximise on the possible benefits and opportunities of DFI among women as well as to address to constraints to DFI of women developing countries.

This paper contributes to literature from three angles. Firstly, this paper adds to the theoretical body of literature on DFI in developing countries, bringing out influence of the gender divide in enabling or impeding the DFI of women. DFI is a research topic that is an important topic in developing countries where women are traditionally marginalized yet it remains understudied and contentious. Additionally, the provision of DFSs through fintech and the Fourth Industrial Revolution (4IR) technologies is in the nascent stages of implementation in developing countries. This paper sought to address the research gaps identified in the literature by Aziz and Naima (2021), Ferrata (2019), and Ojo (2022a, b) on the dearth of literature on DFI. Secondly, this paper accentuates some of the nuances and challenges influencing gender disparity on DFI and the attainment of SDGs in developing countries that researchers and policymakers would like to pay attention and explore further. Thirdly, in terms of policy and practice, the paper discusses the variables that governments and DFSs providers must pay attention to in policymaking that not only ensures DFI, but the other three aspects that support DFI are addressed, with respect to gender disparity. These aspects are digital inclusion, financial inclusion, and social inclusion. For example, without addressing inequalities in access opportunities such as education, economic opportunities, employment opportunities, financial opportunities, financial opportunities, and oppressive cultural norms that perpetuate gender inequality, gender disparity will remain a constraint to both financial and DFI.

This paper consists of six sections. Section 1 gives an introductory insight into the paper. . Section 2 unpacks the methodology employed in the review process. Section 3 reviews the literature to address the paper’s objectives. The literature review focused on financial inclusion, DFI, and the attainment of the SDGs concerning the gender gap. Section 4 presents the findings of the review and Section 5 discusses the findings while the penultimate section 6 concludes the paper, summarizing the limitations of the research, areas of further research, and recommendations.

2.Materials and Methods

A systematic literature review protocol was employed for this paper. The objective was to review, remark on, and comprehensively assess available literature on the gender gap and DFI for women to accentuate research and policy gaps. This review was guided the work Webster and Watson (2002) who proposes that research carrying out must address four critical matters in conducting an extensive and convincing review. These include "contribution ("what's new?"), impact ("so what?"), logic ("why so?"), and thoroughness ("well done?"). Mpofu (2021) and Snyder (2019) affirm the cogency of clearly showing the research contribution, the research process, and the review outcomes as doing so boosts credibility of the review process and the review findings. Tay et al. (2022) and Gammage et al (2017) in their research on financial inclusion and DFI accordingly highlight the importance of ensuring clarity in documenting the research process. The authors articles conducted systematic reviews for the review articles cited in this research.

Literature Search Strategy

This research used the "Publish or Perish" tool to search for Scopus-indexed articles which were the focus of this review. The search terms used include "digital financial inclusion and gender gap, divide or disparity", "digital financial inclusion and gender divide in developing countries", "Gender disparity, divide or gap and financial inclusion in developing countries", "Women and digital financial inclusion in developing countries", and "Digital financial inclusion and challenges faced by women in developing countries and " Constraints or hindrances to digital financial inclusion of women in developing countries". Some of the search terms used were borrowed from Gammage et al. (2017). As highlighted by Mpofu (2021a) that review articles provide a vital source of information or a road map to find research gaps as well as leading scholars in the research domain being studied, this review used previous studies to identify the research articles to be reviewed. The most vital source was the work of Tay et al. (2022) who in their review on financial inclusion grouped the articles they reviewed following the databases where the article was accessed and the area of focus (whether it focused on financial inclusion in general or with a specific focus on gender as well as whether the article centered on developing or developed countries). Considering that this article focused on gender, financial inclusion, and DFI in developing countries, 12 of the financial inclusion gender-oriented articles used by Tay et al. (2022) were reviewed in the current research. By clicking on each of the selected articles on the reference list of Tay et al (2022)'s paper, the link automatically took the researcher to the paper. Most of the papers were open-access and accessible. Those that were not accessible were accessed using the university's institutional login. In some of the databases such as Science Direct, Elsevier, Emerald, and Routledge (Taylor and Francis), while accessing the articles mined from the reference list of Tay et al (2022), suggestions of other articles on gender and financial inclusion or DFI that the researcher could access were made automatically by the system. The suggested articles were also accessed. For the leading scholars such as Ghosh (2013), Demirguc-Kunt and Klapper (2013), Ozili (2018), and Ojo (2022a), the researchers conducted backward and forward snowballing to identify prior work and contemporary work of the researchers. This not only enhanced the number of studies reviewed but also gave an into the previous and current work as well as the progression and development in the field as evidenced by arguments in the various articles. The progress in the research and evolving views also reflected the dynamism in the research and business environment as well as to move from traditional to DFI.

Inclusion and Exclusion Criteria

In addition to journal articles, policy briefs, working papers, and policy evaluations from development bodies such as the World Bank, International Monetary Fund (IMF), Institute of Development Studies, and Organization of Economic and Development were reviewed to enhance the policy and practice angle of the review. Newspapers, blog spots, and magazine articles were excluded from this review. The review process showing the inclusion and exclusion criteria is presented in Figure 1.

Figure 1: Flowchart of the literature review process
Source: Author's Compilation

The schematic presentation outlines how literature was gathered during the preliminary search, the exclusion and inclusion criteria as well as how data was analyzed, integrated, and presented. Literature was reviewed until the point of saturation was reached. This was when further reviewing of the literature no longer revealed any new information or perspectives that were different from those already gleaned. At this point, further examination of information was considered non-value adding (Sebele-Mpofu, 2020; Mpofu, 2021b). Sebele-Mpofu (2020) advocates a review of the literature until the saturation point is reached. Wee and Banister (2016) encourages researchers to cover at least 50 to 100 papers to make a review comprehensive and convincing.

Analysis and Discussion of Findings

Thematic analysis was used during the analysis and presentation of findings. Braun and Clarke (2021) encourage the use of thematic analysis in presenting and discussing findings in qualitative research-oriented studies. This being a review article the researcher used direct quotations for enhancing discussions on findings, development of evidence, thought provocation, emphasis, and elaboration where necessary as suggested by Mpofu (2021b) and Dai et al. (2016). In the same vein, Morse (2015 argues that direct quotes can be used to show the audit trail of literature and discussions to enhance the credibility of research.

3.Literature Review

This section reviews the literature on gender disparity as it affects financial inclusion and DFI as it affects the attainment of the SDGs.

3.1. The Gender Divide, Financial Inclusion and Digital Financial Inclusion in Developing Countries

Rashdan and Eissa (2020) allude to the gender gap in developing countries. Ghosh and Chaudhury (2022) affirm the gender gap in financial inclusion. The researchers portend that despite the gender gap being slowly reduced by demonetization in India, account ownership is still not significant enough to entirely eradicate the gender gap in financial inclusion, hence women continue to be financially excluded. Whether fintech and the provision of digital financial services have reduced the gender gap in developing countries remains debatable. Focusing on India, Ghosh and Chaudhury (2022:353) assert “Gender is also negatively influencing all indicators of digital financial services, except credit card usage and online payments, all co-efficients are significant.This means women are less likely to have and use digital financial services compared to men”. The researchers citing data from the 2014 and 2017 Global Index further state that, despite the improvement in DFI among women in 2017 as compared to 2014 which points to the minimization of the gender gap, women are still digitally financially excluded when compared to men. The questions is why have DFSs not ensured the DFI of women as envisaged. Figure 2 shows the level of financiall inclusion for women and men in 2014 and 2017.

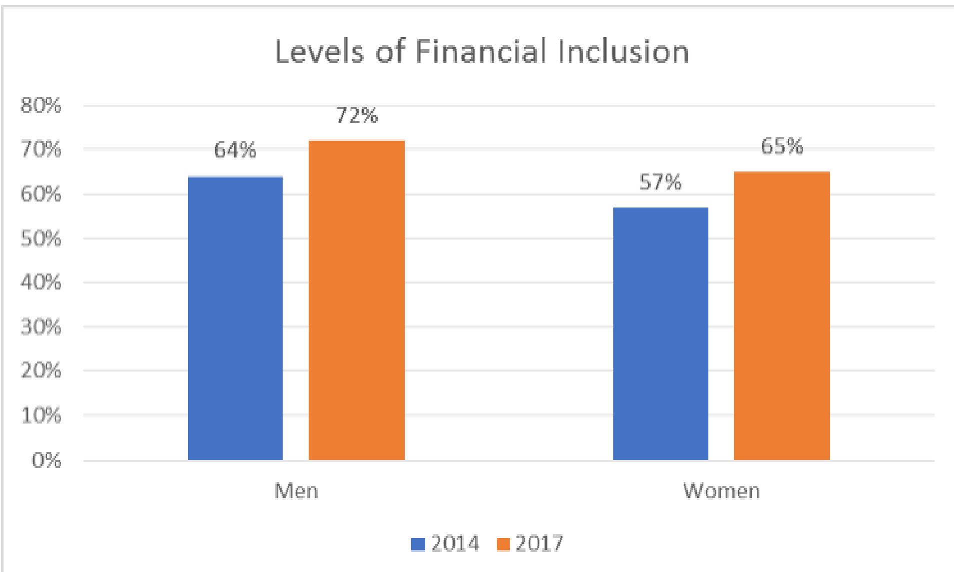

Figure 2: Financial Inclusion for women and men in 2014 and 2017
Source: Author’s Compilation

From Figure 2, while 43% of women were financial excluded in 2014, despite the provision and usage of DFSs financial inclusion among women slightly increased, but 35% of women continue to be financially exclude in 2017. Simatele (2021) emphasizes that the gender gap is high among the poor.

Demirguc-Kunt (2013) alludes to Middle East and North Africa countries as having a higher gender gap in in financial inclusion. Women were less likely to have formal accounts and had the least amounts of formal savings, when compared to men. Only about 12% of women or below have a chance to have access to DFSs such as electronic payments, debit and credit cards. Affirming the gender gap in DFI of women, Mouna and Jarboui (2021:419) state “Although digital financial services help women to be included in the financial system, the gender gap persists. Besides in the African context, generally women prefer to use informal financial services than formal financial services. This is also observed by Zins and Weill (2018). The gender gap in financial inclusion was also affirmed in developing countries such Pakistan, Bangladesh, Asian countries and the Pacific ().

The United Nations (2021) articulates that the gender disparity in financial inclusion is a critical issue that requires attention and that in many developing economies money is a male dominated domain. This is because due to cultural values and norms, society ignores the rights and capabilities of women to earn income, work or contribute to financial decisions (Mhlanga, 2022). According to the United Nations (2021) and Mouna and Jarboui (2021), women in developing countries are observed to be 14% unlikely to have a bank account as compared to men, 12% less likely to possess a mobile phone, 35% unlikely to access internet and 32% unlikely to access energy in comparison to men.

Financial inclusion is considered gender-biased with significant gaps in access levels between males and females globally. The gender gap is considered systematic and persistent. Globally, 36% of women are observed to have bank accounts as compared to 46% of men (Demirgüç-Kunt, & Klapper, 2013). The gender gap relating to financial inclusion is prevalent across all income groups though more pronounced among the poor and low-income earners. The gender gap is also arguably more prevalent in low- and middle-income countries. Demirgüç-Kunt and Klapper (2013) allude to legal discrimination, gender cultural norms such as legal restrictions on women's rights to own and inherit property, work, and head the family as some of the constraints impeding women's capacity to have bank accounts, save and make financial decisions, borrow, or even purchase assets. The gender divide in financial inclusion is restrictive to women's participation in the labor force, entrepreneurship, political dialogue and empowerment, and economic opportunities (Ojo, 2022a). Affirming the gender disparity in financial inclusion, Ojo (2022b) posits:

"In spite of the universal recognition of financial inclusion as one of the nine key pillars of sustainable development agenda, yet the problem still remains unabated and efforts to expand financial inclusion for the marginalized remain feeble, especially with regard to women and girls to have access to finance as their constitutional right".

Even though the literature on financial inclusion and DFI emphasize the gender gap with women being less financially included, in Zimbabwe Chamboko (2022) established that gender did not significantly influence the use of financial services such as receiving money, making payments, and the frequency in the usage of DFSs. The researcher points to education, geographical location, source, and level of income as some of the critical determinants of financial inclusion in addition to age and gender. The findings on the influence of gender not being significant in DFI in Zimbabwe could be linked to the contextual environment in the country. Zimbabwe is characterized by a myriad of macro-economic difficulties such as extreme poverty estimated at 49% in 2020 and cash shortages leading to cash being available at a premium. Corruption and bribes are also associated with cash shortages, thus pushing people to use DFSs such as mobile and plastic money (transfers and swipes). These challenges were pointed out by Dzawanda et al. (2021), Njaya and Siwela (2021), Simatele (2021) and Zikhali (2022). Therefore, the use of DFSs in Zimbabwe could be attributed to existing economic settings that leave consumers with no choice but to resort to the available DFSs in the absence of cash. This argument could be buttressed by the lack of trust in financial services in the country as articulated by Chamboko (2022) and Zikhali (2022). The researchers posit that with chronic currency changes, a multi-currency environment as well as inconsistency in policy prescriptions, and the loss of savings experienced by citizens due to inconsistent policy changes and inflation, there is little if any trust in financial institutions and DFSs.

While focusing on Kenya and Uganda, Mugume (2021) point to a narrower financial inclusion gender gap in Kenya as compared to Uganda, stating "Notably 19% of women are said to be less likely to use digital financial services in Kenya as compared men. In Uganda 30% of women are in Uganda were found to be less likely to utilise digital financial services as compared to men". Therefore generally in the two countries men are more likely to use DFSs than women, pointing to gender driven financial exclusion.

3.2. The Role of Digital Financial Inclusion of Women in Developing Countries

3.2.1 Digital Financial Inclusion

DFI is arguably essential in building a more financially inclusive society. DFI is contemporary in academic, economic, and business research. DFI refers to having access to financial services that are affordable, reliable, convenient, and diverse using digital technologies by all groups of the population (Shipalana, 2019; Tay et al., 2022). Digital technologies such as mobile money, fintech, mobile banking, or internet-supported money transfer platforms are described as vital enablers for the provisioning and access of DFSs. Mpofu and Mhlanga (2022:5) articulate that "Though women are considered financially excluded when compared to men, DFSs have been identified as a panacea to address this inequality, through platforms such as electronic and mobile money. These platforms are considered key to heightening financial inclusion of women". DFI is inextricably linked to financial inclusion and social inclusion. Digital inclusion and social inclusion contribute to DFI as highlighted by Aziz and Naima (2021:4) who assert "We argue that digital financial inclusion is the intersection of financial inclusion (financial access and literacy), digital inclusion (accessibility, affordability, and ability) and social inclusion (social network and social capital)". According to Koomson et al (2021) and Kofman and Payne (2021), financial literacy can help intensify financial inclusion. Figure 3 presents a schematic relationship between digital financial inclusion, social inclusion, digital inclusion, and DFI

Social inclusion focuses on technology in society, social capital, and social networks that can have an impact on DFI. Social inclusion focuses on information availability or asymmetry, resource sharing, trust in financial institutions and regulatory frameworks, and general social norms, values, and responsibilities. Social inclusion can promote both financial inclusion and digital financial inclusion. The availability of adequate and reliable information on financial services and DFSs, opportunities, and risks as well as remedial processes can encourage or discourage their usage. The connectivity of users and financial institutions as well as the quality of communication, interaction, and feedback can affect trust and the willingness to use both traditional and modern financial services. Digital inclusion is a strong driver for social inclusion, financial, and DFI inclusion. Digital inclusion addresses issues relating to the availability of digital infrastructure and digital devices and mobile devices, the ability and know-how to use digital tools (digital literacy), and the affordability and convenience of using these digital tools. Digital literacy has to do with digital skills and the ability to use digital tools. Digital literacy influences the attitudes and willingness to use digital tools and ultimately concerns the study motivations and attitudes of women towards fintech and DFS, thus affecting, DFI. When then combined with financial literacy, which relates to knowledge of financial management, and usage of financial resources (spending, savings, accessing loans, financial risk, or over-indebtedness), digital literary results in digital financial literacy which affects DFI. As shown in Figure 3, DFI principles encompass not only access to financial services, their affordability, and usage, but to cover the incorporation of technology which brings into the equation such other aspects of digital infrastructure, technical abilities, affordability of digital technologies, and the risks associated with the use of technology among other. Therefore, to contribute effectively to DFI, it is important to take note that the assumption that access to DFSs or financial inclusion and access to digital technologies alone might not lead to DFI, especially for women where the digital divide is high. Several other key considerations must be addressed.

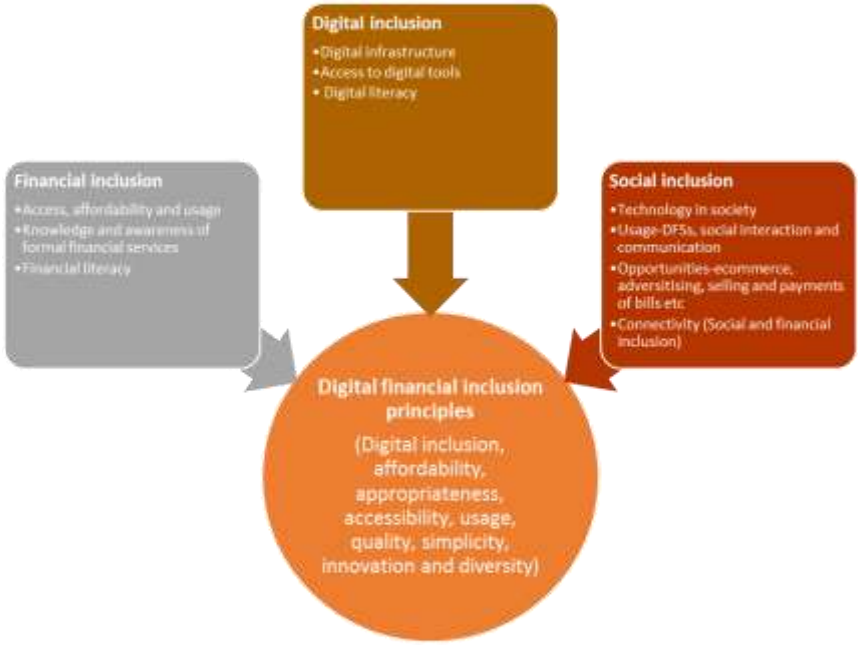

Figure 3: Aspects of Digital inclusion, Social and Financial inclusion as they relate to DFI
Source: Own Compilation

The combination of social, financial, and digital inclusion all contributes to ensuring DFI, and its core principles as schematically presented in Figure 3. In terms of DFI as it relates to women when the three different types of inclusions are fused to promote DFI, they can help address the challenges of financial inclusion in the traditional sense such as the usage gap, inequalities linked to resource usage, and distribution, costs, and geographical dispersion challenges. It is important to note that while the principles of DFI presented in Figure 3 to are fundamental in enabling DFI for women, there is a need to consider factors that relate to the gender gap such as socio-economic factors, cultural norms, gender education gap, empowerment gaps (socially, economically, and politically) and male dominance.

3.2.2 The Importance of DFI of Women in Developing Countries

Gender bias and gender inequality affect financial inclusion and DFI for women (Ojo, 2022a). The gender divide perpetuates the inequality that generally exists in access to economic opportunities, education, and health, thus explaining the higher income inequality and lower literacy levels among women. Alsan et al. (2017) allude to a strong relationship between gender inequality in financial inclusion and overall inequality. The impact of the gender divide on financial inclusion is also affirmed by Delechat et al. (2018). Naumenkova et al (2019) assert that financial exclusion as reflected in the unbanked population is high in low- and middle-income countries. The researchers while focusing on DFI, posit that poverty and inequality reduction are positively associated with ICT usage and dissemination. The use of DFSs is associated with the availability of digital infrastructure, especially for vulnerable groups. Kitzmann (2020) defines a vulnerable population as a group of people who do not have adequate documentation, the requisite capabilities, or opportunities to allow them to access financial services. Opportunities encompass cultural, social, political, economic, psychological, and physiological opportunities. Vulnerable groups, therefore, include the elderly, women, and girls, the unemployed, the homeless, prison inmates and immigrants, and the poor. Forty percent of the world's poorest people are in developing countries. Thus, ensuring financial and DFI in developing countries is critical for the realization of the SDGs.

Owning a bank account encourages savings by small businesses and individuals, empowerment of women and girls, responsible consumption behavior, and use of financial resources and access to credit. Financial inclusion is generally considered key to poverty reduction, lowering of inequalities (income and gender) as well as facilitating economic growth (Demirgüç-Kunt, & Klapper, 2013). Affirming the importance of financial inclusion, Gammage et al. (2017) asseverate:

"Better and more meaningful financial inclusion may prove to be the key to unlocking the potential for micro and small enterprises to grow, reducing the exposure of poor and rural communities to income shocks, dynamizing growth, and promoting more sustainable and equitable development. A recent analysis of financial inclusion underscores that where individuals have access to financial services and products, even in poor communities they are better able to plan and manage their income and households to hold savings and those invest those savings in productive uses".

Though there are arguments that financial inclusion does not necessarily translate to the usage of accounts, savings, or an increase in assets, access to finance is still pivotal to sustainable development and the realization of SDGs. One might own an account but still be irresponsible in consumption, savings, or investments including in accessing credit leading to over-indebtedness. These unfavorable actions might contribute negatively to economic development, poverty alleviation, and reduction of inequalities (Shipalana, 2019). The issue of financial inclusion is fraught with debates and disagreements on the definitions and on how to appropriately measure it. Other researchers have suggested that it must be measured from the user perspective using bank account ownership ((Demirgüç-Kunt, & Klapper, 2013), while others advocate for measuring from the service provision (supply) perspective, assessing the number of bank accounts, automated teller machines (ATMs) and bank branches ( ). The UN Agenda on Sustainable development as covered in Target goal 8.10 of SDG 10 on facilitating decent work and economic growth refers to assessing inclusive finance based on three metrics, that are bank branches, number of ATMs, and account holders (both bank and mobile money) (Ferrata, 2019). Financial inclusion is described as multidimensional and can be understood, analyzed, and measured from an array of angles to cover access, affordability, usage, efficiency, and convenience. DFI brings the digital or technology aspect into financial inclusion to mitigate the challenges to financial inclusion such as costs, distance, infrastructural and regulatory challenges, and documentation requirements among others (Ozili, 2018).

While focusing on gender and DFI in Indonesia, Soerkamo et al. (2020) established that while women experienced DFI in their daily activities, digital and financial education was fundamental to promoting DFI among women. Focusing on mobile money taxation, Mpofu (2022a), Clifford, 2020, and Pushkareva (2021) portend that mobile money and digital technologies have facilitated financial inclusion in developing countries such as Zimbabwe, Kenya, Brazil, Nigeria, India, and Cote d'Ivoire. Digital finance is also observed to have improved sales for women owned business during the Covid-19 pandemic.

3.2.3 Factors Explaining Digital Financial Exclusion/Barriers to DFI for Women in Developing Countries

Financial exclusion of vulnerable groups such as women and girls, the elderly, the youth and low income earners is a concern in developing countries as it leads to underutilisation of DFSs and is an impediment to economic growth and poverty reduction efforts. Nargis and Ahsan Habib (2020) asseverates "Financial exclusion mean incapability of individuals, households, communities and/or groups to access essential financial services in an appropriate form and financial services are offered in formal and informal financial markets to address these aspects of financial exclusion".

Researchers table various barriers to DFI for women. These include the use of DFSs, access, hence internet connectivity is a challenge, lack of digital knowledge, and time constraints (Mariscal et al., 2019). Furthermore, the impediments to DFI for women include, not having digital equipment such as laptops and mobile phones, high cost of internet data, discriminatory legislation, digital knowledge, and skills gaps as well as social beliefs, together with trust, confidence, and inadequate technical skills and competences (Molinier, 2019; Sorgner &Krieger-Boden, 2017). Socio-cultural factors, education and digital exclusion, affordability and access concerns, low literacy levels, safety and security concerns, discouragement from those close to them and low incomes Information asymmetry, and lack of awareness are some of the barriers to DFI for women (Chetty et al., 2018; Rowtree & Shannahan, 2020). Disadvantaging social norms that deprive women of their rights and educational opportunities are also responsible for the gender divide in the use of technology, financial illiteracy, digital illiteracy, and ultimately for financial exclusion and digital financial exclusion (Ojo, 2022a). Too much reliance on males to assist with digital issues compromises privacy and confidentiality issues among women who are then demotivated to use digital technologies and DFSs. The gender norms fuel the economic barriers to DFI. Ahmed and Gillwald (2021:6) articulates that "other factors that hinder women's access to digital financial services include a lack of digital identification documents, lower financial independence, little control over resources, a lack of digital and financial capability, greater risk aversion and social cultural norms".

Employing Finscope Survey in Tanzania and Cameroon, Mndolwa and Alhassan (2020) point out that financial inclusion gender disparities were significant in formal accounts and formal savings as well as mobile money accounts. The gender divide in financial inclusion was linked to education, lack of income and overreliance of women on men. Ghosh and Vinod (2017) associated the digital financial exclusion to education, gender, income as well as with political and social factors. Klapper and Lursardi (2020) attributes financial exclusion of women in both developed and developing countries to gender, lower levels of education, digital literacy, wage discrimination and financial literacy. The findings are shared by Kumar et al. (2019) in India and Ndoya and Tsala (2021) in Cameroon. Ezzahid and Elouaourti (2021) argues "Most literature faultily generalizes that women are a handicapped group with lower levels of education and fear of dealing with with official documentation and inclusion". The researchers argue that there must be a distinction between uneducated and educated women. Additionally, there must be an acknowledgement that there are women who are empowered, employed, digitally conversant and financially included. Ezzahid and Elouaourti (2021) articulate that financial literacy, gender discrimination, lack of identity documentation, lack of property rights for collateral purposes and general existing inequalities are barriers to financial inclusion of women in developing countries. Financial exclusion of women in developing countries is further linked to inadequate financial resources, cultural factors and societal attitude that perpetuate male dominance and relegates the role of women in households, potraying men as breadwinners and responsible for financial decisions. For example, Mhlanga (2022) citing the United Nations (2021) points out that in some societies money is generally regarded ad male domain, hence women's money earning and financial decision making abilities are disregarded. The researcher further women are also faced with the agency challenge, because other than constraints linked to constraints and failure to access digital devices, gatekeepers such as brothers, husbands, fathers and mothers in law are less likely to allow them to own and use digital devices. Such gender discriminatory behaviors impede DFI of women in developing countries.

In Nigeria, the financial inclusion gender gap among smallholder farmers was linked to legal, institutional, regulatory, and socio-cultural factors (Adegbite & Machete, 2020). The researchers further point out that half of the smallholder farmers are women and argue that agriculture has a multidimensional role in economies and more so in the accomplishment of the SDGs. For example, agriculture affects food security, poverty alleviation, employment creation, reduction in inequalities, and the creation of employment as well as economic growth, thus affecting not only SDG 5 but SDGs 1, 2, 8, and 10. Indirectly productivity in agriculture, the income generated as well as the agricultural methods used affect the other remaining SDGs. Income generated can be used to fund education, health, innovation, and investing in infrastructure, clean water, and energy, building strong communities, encouraging responsible consumption, promoting peace and justice, and partnerships for the goals (SDGs 3, 4, 6, 7, 9, 11, 12, 16, and 17). Agricultural processes and technologies would impact SDGs 13, 14, and 15. Adegbite and Machete (2020) therefore call for DFI and agricultural finance innovations that are responsive to gender. While focusing on Nigeria also, Abdu et al. (2015) identify education, levels of income, and gender as well as knowledge and awareness of financial services as factors that influenced financial inclusion. Efobi et al. (2014) and Chamboko et al. (2018) allude to education poverty, literacy, lack of adequate documentation, lack of numeracy skills, and the lack of digital or mobile tools as constraints to financial inclusion for females. Demirgüç-Kunt and Klapper (2013) refer to gender, socioeconomic factors, education, and income as impediments to the financial inclusion of women. Grohmann et al (2018) attribute the financial exclusion of women to factors that include affordability and accessibility, political; economic, social, and legal environment as well as low literacy levels, while Xu (2020) explains it from the lack of social trust perspective. Botric and Broz (2017) affirm that women generally lack trust in DFSs. The researchers further explain that owing to digital illiteracy, financial illiteracy and generally low levels of education, the level of DFI for women is generally low. Women are more financially excluded from accessing both formal and informal funding or credit. Le et al (2019) and Demirguc-Kunt et al. (2018) attribute the financial exclusion of women to not having accounts due to a lack of appropriate documentation. Le et al (2019: 312) state that “Nevertheless, the share of women having a bank account in developing economies remains nine percentage points less than that of men”.

The World Bank (2020) attributes the gender void in account ownership and usage of DFSs to lack of political and economic empowerment and calls for the political empowerment of women, economic inclusion, and financial inclusion. Ghosh (2022) states that education, marital status, income level, and age are linked to financial inclusion and women's entrepreneurship. Mndolwa and Alhassan (2020) also attribute the financial exclusion of women concerning access to loans to “self-selection bias”, not applying for the loans due to pessimistic perceptions or strong feelings that their application will be rejected. Ouechtati (2020) points out to financial literacy, unavailability of legal documentation such as national identity documents and ineligibility concerns (collateral), and lack of stable income as some of the factors explaining the financial exclusion of women in developing countries. In Tanzania, Mndolwa and Alhassan (2020) observe gender disparities of 10.6%, 21.3%, and 9.4% for formal bank account ownership, formal savings, and mobile money accounts accordingly. The researchers link these disparities to the lack of employment opportunities and education, which make women less likely to have formal savings or access to credit. Some of the compounding factors identified include low levels of income, lack of access to financial services, and high reliance on men by women.

Adegbite and Machete (2021) submit that sustainable development in developing countries is constantly challenged by the financial inclusion gender gap and the DFI gender gap in the modern economy in developing countries. Factors explaining the gender gap include socioeconomic, legal, sociocultural, and regulatory factors as well as the taxation DFSs (such as mobile money), digital, and financial exclusion including digital, financial, and digital financial literacy.

During the Covid-19 pandemic due to lockdown, restriction measures on the use of mobile money (e-wallet) expanded by 44%. The increased usage was accompanied by cybercrime attacks increases as the occurrence of the attacks increased by 86%. Therefore security concerns, the socio-economic environment, comfortability, and psychological acceptance of DFSs are factors affecting their usage (Undale et al., 2020). The researchers found that females were more worried about their security in using DFSs than men, which has explained the low DFI among women in India. Chamboko et al (2021) affirm this argument, attributing digital financial exclusion of women to the prevalence of male agents in DFS networks such as mobile money, microfinance institutions, and banks. Therefore, due to trust, confidentiality, and safety concerns, women prefer dealing with other ladies, hence having male agents discourages them from using financial services.

Zalaria and Sabri (2013) link the financial exclusion of younger people and women to low financial capabilities owing to low income and education levels. In Africa, GSMA (2020) explain the low levels of financial inclusion of women to be connected to social cultural norms, affordability and access challenges, low levels of education and other historical biases that curtail women and girls' abilities to exploit digital transformation opportunities.

While acknowledging that in SSA mobile money has made significant strides in financially including vulnerable groups of the population and enabling the processing of smaller transactions in less costly ways, Mpofu (2022a), warns that mobile money taxes risk reversing the gains of financial and DFI in the continent, especially for vulnerable groups such as women and the youth as these taxes impact on usage, affordability, and access (costs of data and transaction costs), thus impeding DFI. According to Mpofu and Mhlanga (2022), this is further worsened by digital services taxes such as taxes for swiping and making transfers (a good example being Zimbabwe's 2% and 4% Intermediate Monetary Tax on Transfers) on local currency and foreign currency transaction respectively (Mpofu, 2022a). Mpofu (2022 c, d) also alludes to the compounding effect of digital services taxes (DSTs), both direct (Mpofu, 2022d) and indirect through value-added tax (Mpofu, 2022c). These taxes make digital devices and digital service platforms expensive, thus impacting affordability, access, and usage, thus affecting DFI for disadvantaged groups and increasing their vulnerability.

3.2.4 Digital Financial Exclusion of Women and the Digital Divide

The impact of the digital divide on digital financial inclusion in developing countries is a contested topic. Researchers arrive at inconclusive outcomes on whether women have access to and utilise digital technologies in developing countries. While others describe women as technophobic, others describe them as keen to adopt digital technologies and communication but are limited by certain barriers such as education, employment and low incomes as well as societal norms and values togetherwith religion that prohibit women from owning and using digital gadgets in some countries (Ahmed & Gillwald, 2021; Mhlanga, 2022)

According to Antonio and Tuffley (2014:673) "Empirical studies clearly sow that women in developing countries would have significantly lower technology participation rates than men, as a result of entrenched sociocultural attitudes about the role of women in society". The gender digital divide and digital illiteracy are challenges to digital transformation in developing countries. Affirming that the gender divide negatively affects digital financial inclusion developing countries Ahmed and Gillwald (2021) state the relationship between information communication and technology (ICT) and digital financial inclusion is connected, complex and dynamic because the use of DFSs depends on technology usage, internet access and mobile phone ownership as well as aequate digital infrasctructure.

Twenty seven percent of women are observed to have access to internet connectivity and only 15% of the are able to utilise it and there is also significant rural to urban divide which compounds digital financial exclusion of women (Simatele, 2021). Women in urban areas are more likely to use DFSs because of internet connectivity, access and exposure to DFSs. Emphasising the importance of digital inclusion in facilitating digital financial inclusion, Gammage et al. (2017) portends "Since digital financial services typically rely on mobile communication, network, access to mobile technology and the ability to use it, how and desired, are critical factors in ensuring digital financial inclusion".

In South Asia the gender gap is observed to be broader, with 38% of women less likely to have amobile phone, while in SSA the gender gap is arguably smaller, though this varies with countries. In East Africa, both males and females tend to own mobile phones, pointing to high levels of digital financial inclusion through mobile phone usage. In the Democratic Republic of Congo and Niger, women are less likely to own phones, thus leading to digital financial exclusion as fewer women can use DFSs especially mobile money for making transfers, receiving money, accessing credit and making financial decisions. Without mobile phones the women equally become socially exclusded yet social inclusion is important in promoting financial inclusion.

Ahmed and Gillwald (2021) and Antonio and Tuffley (2014) argue that the digital divide is enshrined in the historically founded and prevailing gender disparities linked to barrariers to internet access and technology use. The digital divide is linked to the skills gap and leck of access to ICT. Therefore the lack of opportunities to access technology perpetuates the technical skills gap, there is nowhere to develop the technical skills. In addition, having access to technology and no skills to use it also contributes to the digital divide, especially the gender digital divide in developing countries. Antonio and Tuffley (2014:673) argue that women are generally disadvantaged because they are considered "less tech savvy, more technophobic and the technology itself has nott been designed to meet their needs".

It is also important to acknowledge that the term digital divide encompasses more than just the lack of access or digital device deficit centred divide but also the barriers to usage and access. "Exploring the digital divide must not be an issue of the ICT "haves" and "have nots" because the provision of physical ICT products does not guarantee that individuals will have the necessary skills to enjoy the benefits brought by ICT". (Antonio & Tuffley, 2014:675). Therefore digital inclusion and promoting digital literacy among women is pivotal for financial inclusion of women in developing countries. Table 1 summarises a few studies on the reasons explaining the financial and DFI gender divide

Table 1: Summary of Studies on the reasons for the financial and digital financial exclusion of women in developing countries

Studies	Countries	Findings
Mwenge and Bwalya (2020)	Zambia	Women generally have lower levels of risk tolerance, they are risk averse. Women are also prohibited by low incomes as they are generally involved in low income jobs such as faming, domestic work and sef employment. They also have low access to economic opportunities
Odhiambo (2021)	Developing countries	Women are less likely to be financially included because of low credit worthniness due to lack of collateral and lack of property rights which leads to higher interest rates being charged on loans
Were et al (2021) and Mndolwa and Alhassan (2020)	Tanzania	Gender gap attributed to lack of digital devices and infrastrcure, lack of income, digital and financial illiteracy and socio-economic factors.
Tusubiru and Mbabazi () and Cheronoh (2019)	Kenya	Financial exclusion of women linked to gender inequality and other inequalities, socio-economic factors that include access costs (unaffordability), financial literacy, poverty and unemployment, These factors impede digitization among girls and women
Zulfiqar, Chaudhary, & Aslam (2016)	Pakistan	Financia inclusion found to be key to inclusive economic growth yet the levels of financial inclusion were found to be low. This was attributed

Source: Author's Compilation

3.3 DFI Inclusion of Women and the Sustainable Development Goals in Developing Countries

Several researchers argue that the fruition of the SDGs hinges on the achievement of financial inclusion efforts (Ojo, 2022a,b; Ghosh, 2022a, b; Tay et al., 2022). Affirming this Simatele (2021:30) portends “Furthermore, financial inclusion is a target in 8 of the 17 SDGs of the United Nations. It is positioned as an enabler for poverty eradication, alleviation of hunger, gender inequality and economic empowerment of women, promotion of economic growth and jobs, reduction of inequalities as well as industry innovation and infrasrtructure”. For example, SDG1 (poverty alleviation), SDG2 (eradicating hunger), SDG 3(good health and wellbeing), SDG4 (quality education) and SDG 5 (gender inequality) can all be facilitated by the financial inclusion of vulnerable groups.The inclusion of women could promote productive investments and financing of human capital development, access to funding, savings and their financially empowerment.

Gutierrez-Romero and Ahmed (2021) project that 231 million of the global population would survive on less than US$5.5 per day and of these people 107, 8 million would be driven to extreme poverty and survive on less than US$1.90 per day. Most of the people affected by poverty and extreme poverty are in developing countries. Financial inclusion is essential to poverty reduction. Huang et al (202), asseverate “Financial inclusion describes a process that leads to an improvement in the quality, quantity, and efficiency of financial services and this helps to improve people’s welfare, creating opportunities and building stronger economies”.

Financial empowerment of women makes it easy to access funding support from non governmental organisations, social security grants and other forms of financial aid from government. This improves household access to finance and welfare as women tend to participate in financial matters not just to achieve their individual goals but also to meet the needs of the whole family. They invest more on children’s health and education, make household investments and pay utilities such as rent, water and electricity for the family (Allen et al, 2016; Klapper, El-Zoghbi & Hess, 2016).

Financial inclusion can also lead to the reduction of risks and vulnerabilities among the poor, empowering women to have financial autonomy and make independent decisions. Financial inclusion improves investment capabilities of women and household business performance, supporting the entrepreneurship of women. (Karlan et al., 2017). Women can easily have savings groups that can enhance social capital and promote local development (Postelnicu & Hermes, 2018). Okello et al. (2018) emphasise the role of social capital in heightening financial intermediation in Uganda.

Gammage et al. (2017) argues that digital finance is crucial for improving livelihoods, incomes and resilience for marginalised groups such as women and youth. DFSs are significant in driving financial inclusion by reducing provision and access costs associated with financial services, increasing security and reducing risks of using financial services. Fintech increases the speed of financial transactions and ensures the provision of customised survices that meet the needs of low income earners.

According to Simatele (2021:112) 72% of men used financial services as compared to 65% of women, hence understanding digital financial exclusion of women is imperative. The researcher further state that “unequal access between men and women is still an important policy question”. Simatele further states that “Digital financial services also help to reduce risks of loss, theft and other financial crimes posed by cash based transactions and this reduced costs associated with transacting in cash and using informal providers. Again it can also promote economic empowerment for women, in particular increasing economic participation

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4. Presentation and Discussion of Findings

This section discusses the results of the review as they relate to the challenges affecting the DFI of women in developing countries as well as how DFI inclusion or digital financial exclusion of women in developing countries would affect the accomplishment of the SDGs in developing countries.

4.1 Challenges Explaining Levels of Financial and DFI Inclusion among Women in Developing Countries

From the reviewed literature several factors were gleaned as impediments to financial inclusion and DFI or variables explaining the low levels of financial inclusion among women in developing countries. These factors include socio-cultural factors (education, age, demographics, discrimination in terms of gender, lack of property ownership rights, and other vulnerabilities), institutional factors, and regulatory factors. While these were the most common among researchers especially concerning financial inclusion, concerning DFI the review found new other factors that are not prevalent in the literature, these include the impact of inclusions (digital, social, and financial on DFI, (Aziz & Naima, 2021), the impact of taxation on the usage of DFSs (Indirect taxes such as VAT, DSTs and mobile money taxes, (Mpofu, 2022a, c, d; Mpofu & Mhlanga, 2022)). In addition, the other constraints include the lack of political empowerment together with the lack of knowledge and awareness of DFSs and the associated risk. The most topical factors that were prevalent across most developing countries were socio-economic factors that are embedded in the historical discrimination of women. For example the low levels of education among women which in turn compound digital and financial literacy challenges, the lack of collateral or property ownership rights which affects access to DFSs such as loans and leads to high interest rates that compensate for women being risky clients. Furthermore the lack of financial resources makes it difficult for women to acquire digital gadgets or even afford data for internet and lastly cultural limitations that prohibit women from owning or using digita devices. These factors are also made worse by some other factors such as unemployment, low incomes, poverty and poor digital infrastructure in developing countries. The factors gleaned from the review are summarised in Figure 4

Figure 4: Summary of the Factors Affecting financial and DFI of women in developing countries
Source: Own Compilation

4.1.1 Socio-Cultural Factors

Due to cultural norms and societal stereotypes most women lack formal education. The general beliefs in some societies are that a woman's place is in the kitchen and women and girls were only prepared for marriages and denied education and empowerment opportunities such that many of them lack formal education, yet education is important in making economic, social, political, and environmental decisions. While SDG 4 speaks to the importance of quality education for all and developing countries are working towards addressing, education inequality and other inequalities such as gender SDG 5 and others such as equal access to employment and economic opportunities (SDG 10), the inequalities are still rampant concerning women. Education is key to poverty alleviation, reduction of inequalities, and achieving many of the 17 SDGs These negatively affect financial inclusion and DFI. The complexity of some of the processes to access DFSs as well as the fact that the instructions in most of these digital platforms are in English excludes women due to their low levels of education, thus education was a prominent constraint to financial inclusion identified by most of the researchers in the reviewed literature. In addition, the other prevalent constraint in literature was the discriminatory laws and societal values against women regarding property ownership and inheritance.

In some countries, women are discriminated against and cannot own property, head a family, or work and in some cases, they are not allowed to inherit property as that right is given to male children. The argument is that women will get married so the property must remain in the family by passing it on to male children. Such repressive laws and norms disempower women socially, economically, and financially thus perpetuating male dominance. Women become unable to access financial services, thus they continue to be financially and digitally financially excluded. The issue of discriminatory laws being a hindrance to DFI of women was affirmed by Mhlanga (2022) stating "Reportedly, approximately 115 economies have laws prohibiting women from starting businesses compared to men and at least 167 nations with at least one law limiting wome's economic opportunity". In cases where women have no collateral, the required documentation, or educational knowledge they would tend to rely on men to access loans. In most cases, men would only offer support when they stand to benefit from the loan. This dependence on men takes away women's financial independence and decision-making autonomy, thus leading to financial and digital financial exclusion. Ghosh (2022) alludes to further discrimination of women in marketing their products and bargaining when selling their products.

4.1.2 Institutional Factors

The institutional factors center around sustainability, affordability, accessibility, quality of financial services, and the responsiveness of DFSs, digital and financial innovations, and other financial products offered to the challenges faced by women concerning financial and DFI. These challenges relate to geographical distances, rural settings, digital and financial literacy, digital financial literacy, socio-cultural and socio-economic restrictions, and the lack of property or asset ownership rights

4.1.3 Regulatory and Legal Factors

Regulatory factors include collateral requirements, documentation, creditworthiness, financial history and records, socio-economic status, and the level of interest rates. Despite efforts by many developing countries to promote gender equality, equal access to employment and other economic opportunities, and encourage property ownership for women, these regulatory challenges continue to hinder access to financial services in the digital era. Fintech and digital finance have not addressed such issues as documentation and collateral, and financial and digital illiteracy, otherwise in some cases DFSs have further perpetuated the financial exclusion of women. Some of the processes of accessing digital financial services platforms require the ability to read in English and follow the instructions accordingly. In some cases, the instructions might be complex even for the educated, compounding the case for those with lower levels of education. The effectiveness of DFSs such as branchless banking, mobile banking, mobile loans, internet banking, and others are still hindered by the intractable socio-economic and socio-cultural challenges affecting women in most developing countries. DFSs are meant to reduce access, affordability, and usage challenges but more needs to be done pay taking a holistic picture of the challenges affecting the financial inclusion of women.

4.1.4 Taxation

To broaden domestic revenue mobilization some developing countries have constructed tax policy frameworks to collect taxes on DFSs, mobile money, and digital platforms. Tax is a cost that increases the costs of service provision for service providers and usage or access costs for consumers. The mobile money taxes and taxes on DFSs and DSTs (both direct and indirect) affect the access, usage, and affordability of DFSs for consumers and women in developing countries in particular owing to their low incomes and other socio-economic challenges. Taxes were referred to as a constraint to the usage of DFSs and digital services by Mpofu (2022a, b, c, d) and Mpofu & Mhlanga (2022)

4.1.5 Digital, Social and Financial Exclusions

The review established that most women in developing countries were digitally, socially, and financially excluded because of several reasons that emanate from socioeconomic, sociocultural, regulatory, and institutional factors. Digital, social, and financial exclusion ultimately leads to digital financial exclusion. As presented in Figure 2, digital exclusion is linked to a lack of the requisite digital infrastructure and equipment, digital illiteracy, lack of access to and affordability of DFSs as well the fear of using technology. Financial exclusion is connected to financial illiteracy, discouraging costs of financial services and lack of access to financial services and social exclusion is explained concerning the level and quality of interactions using digital and mobile technologies, lack of shared knowledge, information asymmetry, and the general lack of trust on the financial sector and DFSs. Regarding digital, social, and financial exclusion, literacy was the topical challenge among researchers.

Literacy was found to be a major constraint to DFI as it hinders or discourages the adoption of digital technologies, especially among women in developing countries. Literacy comes in four forms as highlighted earlier in the review, general literacy (linked to the level of education) and financial literacy (linked to understanding financial services, having the necessary financial knowledge to make informed decisions such as spending, saving, investing, accessing credit as well as comprehending the risks and opportunities associated with the use of financial services). The third and fourth dimensions of literacy concern digital literacy and digital financial literacy respectively. Digital literacy relates to understanding how to use digital technologies, in this case, digital platforms and DFSs, and use them safely, securely, and effectively. Digital financial literacy combines digital literacy and financial literacy and to some extent digital financial literacy is influenced by general literacy as well. Therefore, the degrees of the different types of literacy among women affect the three types of exclusion (digital, social, and financial) and ultimately DFI among women. It was established from the literature that women in developing countries are excluded from the three dimensions, thus discouraging them from using DFSs and digital technologies and platforms (Aziz & Naima, 2021; Ferrata, 2019). Women lack the necessary digital equipment as well as the know-how to use DFSs. This is linked to the low literacy levels associated with the socio-cultural and socioeconomic factors in some societies.

The four dimensions of literacy have psychological influences on women in the use DFSs in developing countries. Women tend to have "techno fear" or fear of technology, they are afraid of making mistakes due to fear of misinterpreting or failing to follow digital instructions because of digital financial literacy as well because of low levels of education. This discourages the use of DFSs, or leads to the suboptimal use of DFSs and products by women. In such cases, women tend to just use the basic DFSs and products. They might also not be aware of other additional digital financial services and platforms. In some cases, even if they are aware, they become afraid to explore additional platforms and services. Social inclusion in connection with DFSs relates to trust in DFSs. The review established that women tend to lack trust in the financial sector and DFSs due to their risk-averse nature, fear because of limited knowledge of digital technology, and because of the risks associated with the use of DFSs in general and more so for people with limited digital knowledge and low education levels. The use of English and no local languages on DFS platforms compounds the digital, financial, and digital financial exclusion problems among women in developing countries. The lack of access as well as the unaffordable access costs associated with financial and DFSs also leads to exclusion of women in the dimensions of social, financial, and digital participation.

4.1.6 Lack of Political and Economic Empowerment

The lack of political empowerment was also found to affect the economic and financial empowerment of women as well as their capacity to use financial services. This was also raised in literature by Koomson et al (2020b) who advocates for empowering women to make sound financial decisions by equipping them with financial literacy skills. The researchers further explain that their enhanced financial decision-making skills would aid in quality decision-making on household finances,

4.1.7 Risks Associated with DFSs

The risks linked to the use of DFSs such as fraud, hacking, and phishing were found to be also responsible for the digital financial exclusion of women in developing countries. The fear of financial losses and lack of trust in DFSs and in financial institutions to address the financial losses and privacy infringements, fairly, adequately, and timeously dissuades women from using DFSs, thus increasing digital financial exclusion in developing countries.

5. Discussion of Findings

The benefits of financial inclusion and DFI of inclusion of women cystallise themselves in several advantages such as the creation of a customer base for financial institutions, increased opportunities for risk management and savings, improvement in family welfare, and sustainable economic development as well as inclusive economic growth. DFI inclusion can improve the acess and affordability of financial services and the economic empowerment of women. All these advantages could contribute positively to the attainment of the SDGs in developing economies. This is not to overlook the potential negatives associated with DFI that can negativewly impact the fruition of the SDGs. These adverse effects include the risks of financial loss due to fraud and theft, overindebtedness and overspending as well the complexity of some DFSs leading to costly mistakes. Even though there are several advantages associated with DFI of women, the review established that such financial inclusion was vcondtrained by factora that include the digital divide, unfavourable laws that perpetuate gender inequality and discrimination, historical imbalances that disadvantage women such as lack of property ownership rights and digital illiteracy. The other factors include taxation of digital financial services, digital financial illiteracy, lack of economic and job opportunities, cultural norms and values and the risk averse nature of women among others.

6. Recommendations

Therefore, the review makes some recommendations on how to address some of the challenges identified in literature. Some the recommendations include reduction in the costs of digital financial services, strengthen cyber security, enhancing legal and regulatory frameworks as well as reducing gender bias.

➢Addressing the Socio-Economic Inequalities Ingrained in the Past as Well as the Laws That Are Repressive against Women

There is a need to address the social and cultural factors hin dering the DFI of women in developing economies. Increasing the provision of and access to DFSs without addressing the imbalances of the past will not address the gender gap. Women need to be empowered, starting with societal engagement to change the mindset the mindset that their place is only the kitchen. Women's rights as equal beings and citizens capable of making economic decisions need to be advocated for. Equal opportunities in education, labour and economic activities need to be availed to both men and women. The gender discrimination against women need to be addressed in developing countries.

➢Dealing with the Institutional and Infrastructural Challenges Impeding the DFI of Women

Developing countries' governments a nd their financial institutions need to deal with institutional challenges that prohibit or discourage women from accessing DFSs. In some developing countries as shown in literature the costs of accessing DFS s are still out of reach for some of the rural population due to lack of mobile network connectivity, internet connectivity challenges due to challenges geographical distances that are far away from urban areas as well as high costs of internet data.These factors do not only lead to gender digital financial exclusion, as most women are in the rural areas but also a rural urban digital financial inclusion gap in most developing countries. Government and internet service providers have to make efforts to improve the digital infrastructure and ensure internet and mbobile etworks reach far and wide**.**

➢Enhancement of Digital Financial Literacy among Women

Developing countries must work toward improving digital and financial literacy among women. Even though efforts are being made to fulfill SDG 4 and SDG 5 on increasing access to education and on reducing gender inequality respectively in most developing countries, access to education, poverty, inequality and gender based violence still remain as formidable challenges especially about women and girls. Governments need to invest in increasing in increasing access to education for women and girls, discourage child marriages and forced marriages and in addition, make education more affordable and accessible. This could improve literacy levels among women in these developing countries, which could then make easier to improve digital and financial literacy levels. Financial education should also be increased to make sure women understand the benefits and risks associated with the use of DFSs. Otherwise, these risks if not well understood and mitigated might make women more vulnerable to fraud and financial losses as well as unwarranted spending and over indebtedness. These negative consequences might increase the lack of trust in DFSs and lead to self digital financial exclusion

➢Review of Tax Policies on the Taxing of DFSs and Mobile Money Services

There is a need to review DFSs taxes in indeveloping countries especially mobile money as these increase the cost of accessing financial services. In order to promote DFI, developing countries especial African governments such as Zimbabwe, Malawi, Ghana and Tanzania among others who have introduced mobile money taxes need to asses the impact of these taxes on the financial inclusion of women. Tax policy should not only aim and broadening the tax base and maximizing revenue mobilization but also on stimulating inclusive economic growth in the economy.

References

Adegbite, O. O., & Machethe, C. L. 2020. Bridging the financial inclusion gender gap in smallholder agriculture in Nigeria: An untapped potential for sustainable development. *World Development*, *127*, 104755.

Adil, F., & Jalil, A. 2020. Determining the financial inclusion output of banking sector of pakistan—supply-side analysis. *Economies*, *8*(2), 42.

Aker, J. C., Boumnijel, R., McClelland, A., & Tierney, N. 2016. Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in Niger. *Economic Development and Cultural Change*, *65*(1), 1-37.

Allen, F., Demirguc-Kunt, A., Klapper, L., & Peria, M. S. M. 2016. The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation*, *27*, 1-30.

Aslan, G., Deléchat, C., Newiak, M. M., & Yang, M. F. 2017. *Inequality in financial inclusion and income inequality*. International Monetary Fund.

Aziz, A., & Naima, U. 2021. Rethinking digital financial inclusion: Evidence from Bangladesh. *Technology in Society*, *64*, 101509.

Belayeth Hussain, A. H. M., Endut, N., Das, S., Chowdhury, M. T. A., Haque, N., Sultana, S., & Ahmed, K. J. (2019). Does financial inclusion increase financial resilience? Evidence from Bangladesh. *Development in Practice*, *29*(6), 798-807.

Botric, V., & Broz, T. 2017. Gender differences in financial inclusion: Central and South Eastern Europe. *South-Eastern Europe Journal of Economics*, *15*(2).

Braun, V., & Clarke, V. 2021. Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern‐based qualitative analytic approaches. *Counselling and Psychotherapy Research*, *21*(1), 37-47.

Chamboko, R., 2022. On the Role of Gender and Age in the Use of Digital Financial Services in Zimbabwe. *International Journal of Financial Studies*, *10*(3), p.82.

Chamboko, R., Cull, R., Gine, X., Heitmann, S., Reitzug, F. and Van Der Westhuizen, M., 2021. The role of gender in agent banking: Evidence from the Democratic Republic of Congo. *World Development*, *146*, p.105551.

Chamboko, R., Heitmann, S. and Van Der Westhuizen, M., 2018. Women and digital financial services in Sub-Saharan Africa: Understanding the challenges and harnessing the opportunities.

Chetty, K., Qigui, L., Gcora, N., Josie, J., Wenwei, L., & Fang, C. 2018. Bridging the digital divide: measuring digital literacy. *Economics*, *12*(1).

Cicchiello, A. F., Kazemikhasragh, A., Monferrá, S., & Girón, A. 2021. Financial inclusion and development in the least developed countries in Asia and Africa. *Journal of Innovation and Entrepreneurship*, *10*(1), 1-13.

Clifford, K. 2020. The Causes and Consequences of Mobile Money Taxation: An Examination of Mobile Money Transaction Taxes in Sub-Saharan Africa.

Dai, N. T., Free, C., & Gendron, Y. 2016. Interview-based research in accounting 2000-2014: A review. *Available at SSRN 2711022*.

Dawei, L., Anzi, H., & Gen, L. 2018. Big data Technology: application and cases. In *Handbook of Blockchain, Digital Finance, and Inclusion, Volume 2* (pp. 65-82). Academic Press.

Delechat, M. C. C., Newiak, M. M., Xu, R., Yang, M. F., & Aslan, G. 2018. *What is driving women's financial inclusion across countries?*. International Monetary Fund.

Demirgüç-Kunt, A., & Klapper, L. F. 2012. Financial inclusion in Africa: an overview. *World Bank Policy Research Working Paper*, (6088).

Demirgüç-Kunt, A., & Klapper, L. 2013. Measuring financial inclusion: Explaining variation in use of financial services across and within countries. *Brookings papers on economic activity*, *2013*(1), 279-340.

Demirgüç-Kunt, A., Klapper, L. F., Singer, D., & Van Oudheusden, P. 2015. The global findex database 2014: Measuring financial inclusion around the world. *World Bank Policy Research Working Paper*, (7255).

Demirguc-Kunt, A., Klapper, L., Singer, D., & Ansar, S. 2018. *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank Publications.

Demirgüç-Kunt, A., Hu, B., & Klapper, L. 2019. Financial inclusion in the Europe and Central Asia region: Recent trends and a research agenda. *World Bank Policy Research Working Paper*, (8830).

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. 2020. The global Findex database 2017: measuring financial inclusion and opportunities to expand access to and use of financial services. *The World Bank Economic Review*, *34*(Supplement_1), S2-S8.

Dupas, P., & Robinson, J. 2013. Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, *5*(1), 163-92.

Dzawanda, B., Nicolau, M.D. and Matsa, M., 2021, December. Impact of virtual cash economy on livelihood outcomes of informal cross border traders in Gweru, Zimbabwe. In *Urban Forum* (Vol. 32, No. 4, pp. 521-539). Springer Netherlands.

Edelman, R. 2019. Edelman trust barometer. http://refhub.elsevier.com/S2214-6350(21)00054-X/sb18

Edelman 2020. Trust and the Covid-19 Pandemic (financial services), Chicago, USA.

Efobi, U., Beecroft, I., & Osabuohien, E. 2014. Access to and use of bank services in Nigeria: Micro-econometric evidence. *Review of development finance*, *4*(2), 104-114.

Emara, N., & Mohieldin, M. 2020. Financial inclusion and extreme poverty in the MENA region: a gap analysis approach. *Review of Economics and Political Science*.

Fareed, F., Gabriel, M., Lenain, P., & Reynaud, J. 2017. Financial inclusion and women entrepreneurship: Evidence from Mexico.

Feghali, K., Mora, N., & Nassif, P. 2021. Financial inclusion, bank market structure, and financial stability: International evidence. *The Quarterly Review of Economics and Finance*, *80*, 236-257.

Ferrata, L. 2019. Digital financial inclusion–an engine for "leaving no one behind". *Public Sector Economics*, *43*(4), 445-458.

Ferdous, J., & Uddin, N. 2020. Women in Decision-Making Positions: Developments and Stumbling Blocks. *Journal: Encyclopedia of the UN Sustainable Development Goals Gender Equality*, 1-13.

Flory, J. A. 2018. Formal finance and informal safety nets of the poor: Evidence from a savings field experiment. *Journal of Development Economics*, *135*, 517-533.

Gammage, S., Kes, A., Winograd, L., Sultana, N., Hiller, S., & Bourgault, S. 2017. Gender and digital financial inclusion: What do we know and what do we need to know. *International Center for Research on Women (ICRW)*.

Ghosh, S. 2021. How important is trust in driving financial inclusion?. *Journal of Behavioral and Experimental Finance*, *30*, 100510.

Ghosh, S. 2022. Political empowerment of women and financial inclusion: Is there a link?. *Social Sciences & Humanities Open*, *5*(1), 100267.

Ghosh, S., & Sahu, T. N. 2021. Financial inclusion and economic status of the states of India: An empirical evidence. *Economic Notes*, *50*(2), e12182.

Ghosh, S., & Vinod, D. 2017. What constrains financial inclusion for women? Evidence from Indian micro data. *World Development*, *92*, 60-81.

Girón, A., Kazemikhasragh, A., Cicchiello, A. F., & Panetti, E. 2022. Financial inclusion measurement in the least developed countries in Asia and Africa. *Journal of the Knowledge Economy*, *13*(2), 1198-1211.

Grohmann, A., Klühs, T., & Menkhoff, L. 2018. Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, *111*, 84-96.

Gutiérrez-Romero, R., & Ahamed, M. 2021. COVID-19 response needs to broaden financial inclusion to curb the rise in poverty. *World Development*, *138*, 105229.

Hazarika, G., & Guha-Khasnobis, B. 2008. Household access to microcredit and children's food security in rural Malawi: a gender perspective.

Hasan, M., Le, T., & Hoque, A. 2021. How does financial literacy impact on inclusive finance?. *Financial Innovation*, *7*(1), 1-23.

Hendriks, S. 2019. The role of financial inclusion in driving women's economic empowerment. *Development in Practice*, *29*(8), 1029-1038.

Herbert, S. 2017. Digital development and the digital gender gap. Accessed from https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/13455/249%20Digital%20development%20and%20the%20digital%20gender%20gap.pdf?sequence=1.

Huang, R., Kale, S., Paramati, S. R., & Taghizadeh-Hesary, F. 2021. The nexus between financial inclusion and economic development: Comparison of old and new EU member countries. *Economic Analysis and Policy*, *69*, 1-15.

Kairiza, T., Kiprono, P., & Magadzire, V. 2017. Gender differences in financial inclusion amongst entrepreneurs in Zimbabwe. *Small Business Economics*, *48*(1), 259-272.

Kitzmann, S. 2020. Ensuring Financial Inclusion for the most vulnerable: A call for Action.

Kofman, P., & Payne, C. 2021. Digital financial inclusion of women: An ethical appraisal. *Handbook on ethics in finance*, 133-157.

Koomson, I., Villano, R. A., & Hadley, D. 2020a. Effect of financial inclusion on poverty and vulnerability to poverty: Evidence using a multidimensional measure of financial inclusion. *Social Indicators Research*, *149*(2), 613-639.

Koomson, I., Villano, R. A., & Hadley, D. 2020b. Intensifying financial inclusion through the provision of financial literacy training: a gendered perspective. *Applied Economics*, *52*(4), 375-387.

Koomson, I., Villano, R. A., & Hadley, D. 2021. Accelerating the impact of financial literacy training programmes on household consumption by empowering women. *Applied Economics*, *53*(29), 3359-3376.

Kulkarni, L., & Ghosh, A. 2021. Gender disparity in the digitalization of financial services: challenges and promises for women's financial inclusion in India. *Gender, Technology and Development*, *25*(2), 233-250.

Lagarde, C. 2014. Economic inclusion and financial integrity. In *Economic Inclusion and Financial Integrity*. International Monetary Fund.

Lee, S. 2015. Digital literacy education for digital inclusion. In *Encyclopedia of Information Science and Technology, Third Edition* (pp. 2149-2157). IGI Global.

Le, T. H., Chuc, A. T., & Taghizadeh-Hesary, F. 2019. Financial inclusion and its impact on financial efficiency and sustainability: Empirical evidence from Asia. *Borsa Istanbul Review*, *19*(4), 310-322.

Liyanage, S. I. H., Netswera, F.G., & Motsumi, A 2020. Insights from EU policy framework in aligning sustainable finance for sustainable development in Africa and Asia. *International Journal of Energy Economic Policy*,11, 459-470.

Lu, W., Niu, G., & Zhou, Y. 2021. Individualism and financial inclusion. *Journal of Economic Behavior & Organization*, *183*, 268-288.

Mpofu, F. Y. 2021a. Review Articles: A Critical Review of the Pitfalls and Guidelines to effectively conducting and reporting reviews. *Technium Soc. Sci. J.*, *18*, 550.

Mpofu, F. Y. 2021b. Addressing the Saturation Attainment Controversy: Evidence from the Qualitative Research on Assessing the Feasibility of Informal Sector Taxation in Zimbabwe. *Technium Soc. Sci. J.*, *19*, 607.

Mpofu, F. Y. 2022a. Industry 4.0 in Financial Services: Mobile Money Taxes, Revenue Mobilisation, Financial Inclusion, and the Realisation of Sustainable Development Goals (SDGs) in Africa. *Sustainability*, *14*(14), 8667.

Mpofu, F.Y. 2022b. Green Taxes in Africa: Opportunities and Challenges for Environmental Protection, Sustainability, and the Attainment of Sustainable Development Goals. *Sustainability*, *14*(16), p.10239.

Mpofu, F. Y. 2022c. Taxing the Digital Economy through Consumption Taxes (VAT) in African Countries: Possibilities, Constraints and Implications. *International Journal of Financial Studies*, *10*(3), 65.

Mpofu, F. Y. 2022d. Taxation of the Digital Economy and Direct Digital Service Taxes: Opportunities, Challenges, and Implications for African Countries. *Economies*, *10*(9), 219.

Mpofu, F. Y., & Mhlanga, D. 2022. Digital Financial Inclusion, Digital Financial Services Tax and Financial Inclusion in the Fourth Industrial Revolution Era in Africa. *Economies*, *10*(8), 184.

Mndolwa, F. D., & Alhassan, A. L. 2020. Gender disparities in financial inclusion: Insights from Tanzania. *African Development Review*, *32*(4), 578-590.

Molinier, H. 2019. Leveraging digital finance for gender equality and women's empowerment. UN. Accessed from https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2019/leveraging-digital-finance-for-gender-equality-and-womens-empowerment-en.pdf?la=en&vs=4715.

Morse, J. M. 2015. Data were saturated... *Qualitative health research*, *25*(5), 587-588.

Naumenkova, S., Mishchenko, S., & Dorofeiev, D. 2019. Digital financial inclusion: Evidence from Ukraine. *Investment Management & Financial Innovations*, *16*(3), 194.

Ohiomu, S., & Ogbeide-Osaretin, E. N. 2019. Financial Inclusion and Gender Inequality Reduction: Evidence from Sub-Saharan Africa. *The Indian Economic Journal*, *67*(3-4), 367-372.

Ojo, T. A. 2022a. Digital Financial Inclusion for Women in the Fourth Industrial Revolution: A Key towards Achieving Sustainable Development Goal 5. *Africa Review*, *14*(1), 98-123.

Ojo, T. A. 2022b. Financial Inclusion and Women Empowerment in BRICS Countries: Perspectives on India and South Africa. In *The Political Economy of Intra-BRICS Cooperation* (pp. 175-203). Palgrave Macmillan, Cham.

Ouechtati, I. 2020. The contribution of financial inclusion in reducing poverty and income inequality in developing countries. *Asian Economic and Financial Review*, *10*(9), 1051-1061.

Ozili, P. K. 2018. Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, *18*(4), 329-340.

Pasara, M. T., & Mhlanga, D. 2022. Accelerating sustainable development goals in the wake of COVID-19: The role of higher education institutions in South Africa. *Emerald Open Research*, *4*(30), 30.

Pradhan, R. P., Arvin, M. B., Nair, M. S., Hall, J. H., & Bennett, S. E. 2021. Sustainable economic development in India: The dynamics between financial inclusion, ICT development, and economic growth. *Technological Forecasting and Social Change*, *169*, 120758.

Pushkareva, N. 2021. Taxing Times for Development: Tax and Digital Financial Services in Sub-Saharan Africa. *Financing for Development*, *1*(3), 33-64.

Rowntree, O., & Shanahan, M. 2020. Connected women: the mobile gender gap report 2020. *London, England: GSM Association*.

Safari, M. 2019. A Conceptual Model to Explain Key Factors Affecting Islamic Banking Acceptance Among Banks and Financial Services' Customers. *South Asian Journal of Marketing & Management Research*, *9*(7), 13-29.

Shipalana, P. 2019. Digitising financial services: a tool for financial inclusion in South Africa?.

Sebele-Mpofu, F. Y. 2020. Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review. *Cogent Social Sciences*, *6*(1), 1838706.

Sergeev, A., Arner, D., & Charamba , K 2021. Policymakers, BigFintechs and the United Nations Sustainable Development Goals. Dialogue on Global Digital Finance Governance. Technical Paper 3.1 UNDPD.

Simatele, M., 2021. E-payment instruments and welfare: The case of Zimbabwe. *TD: The Journal for Transdisciplinary Research in Southern Africa*, *17*(1), pp.1-11.

Singh, N., Park, J. E., & Kalliny, M. 2012. A framework to localize international business to business web sites. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, *44*(1), 56-77.

Siwela, G., & Njaya, T. 2021. Opportunities and challenges for digital financial inclusion of females in the informal sector through mobile phone technology: evidence from Zimbabwe. *International Journal of Economics, Commerce and Management*, ix (3), 60-77.

Snyder, H. 2019. Literature review as a research methodology: An overview and guidelines. *Journal of business research*, *104*, 333-339.

Soekarno, S., Mambea, I. Y., & Setiawati, M. 2020. Women and Digital Financial Inclusion in Indonesia as Emerging Market. *International Review of Management and Marketing*, *10*(5), 46.

Sorgner, A., & Krieger-Boden, C. 2017. Empowering women in the digital age. *G20 Insights*.

Suri, T. and Jack, W., 2016. The long-run poverty and gender impacts of mobile money. *Science*, *354*(6317), pp.1288-1292.

Tariq, B., Najam, H., Han, H., Sadaa, A. M., Abbasi, A. A., Christopher, N., & Abbasi, G. A. (2021). Examining mobile financial services in Pakistan: Rural and urban perspective with gender as a moderator. In *Recent advances in technology acceptance models and theories* (pp. 225-245). Springer, Cham.

Tay, L. Y., Tai, H. T., & Tan, G. S. 2022. Digital financial inclusion: A gateway to sustainable development. *Heliyon*, e09766.

Undale, S., Kulkarni, A., & Patil, H. 2020. Perceived eWallet security: impact of COVID-19 pandemic. *Vilakshan-XIMB Journal of Management*.

Webster, J., & Watson, R. T. 2002. Analyzing the past to prepare for the future: Writing a literature review. *MIS quarterly*, xiii-xxiii.

Wee, B. V., & Banister, D. 2016. How to write a literature review paper?. *Transport Reviews*, *36*(2), 278-288.

Xu, X. 2020. Trust and financial inclusion: A cross-country study. *Finance Research Letters*, *35*, 101310.

Yan, C., Siddik, A. B., Akter, N., & Dong, Q. 2021. Factors influencing the adoption intention of using mobile financial service during the COVID-19 pandemic: the role of FinTech. *Environmental Science and Pollution Research*, 1-19.

Zulfiqar, K., Chaudhary, M. A., & Aslam, A. 2016. Financial inclusion and its implications for inclusive growth in Pakistan. *Pakistan Economic and Social Review*, *54*(2), 297-325.

Zikhali, W., 2022. Changing money, changing fortunes: experiences of money changers in Nkayi, Zimbabwe. *Canadian Journal of African Studies/Revue canadienne des études africaines*, *56*(1), pp.199-216.