Exploring YouTube as a Collaborative Platform for Accounting Education in Developing Countries: A Social Capital Perspective

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Abstract

Given various accounting education challenges, for instance, limited resources, a shortage of qualified instructors, and insufficient access to updated materials, this paper acknowledges the need for innovative solutions. As a response, this study explores the potential of utilizing YouTube as a collaborative platform for accounting education in developing countries. This study involves 141 accounting students from higher educational institutions. The study is designed to assess students' perceptions of using YouTube for collaborative learning, to enhance the accessibility, quality, and interactivity of accounting education. The research applies social capital theory and uses the Smart-PLS tool for quantitative analysis. The findings reveal that diversity, peer support, and user trust significantly influence students' intentions to use YouTube for collaborative accounting learning. The study also highlights that user trust depends on personal, environmental, and behavioral factors. Hence, the study recommends that learners critically evaluate video content, consider the credibility of content creators, and assess the reliability of the materials when using YouTube for collaborative learning.

Keywords: YouTube, social network, collaborative learning, accounting education, higher institutions, developing countries, social capital.

1. Introduction

The rapid growth of digital technologies has opened new avenues for educational innovations. For instance, the advent of virtual reality (VR) in education has transformed the learning experience (Yildirim, Elban & Yildirim, 2018). According to Marougkas et al. (2023), VR allows students to immerse themselves in any environment, from historical events to complex scientific concepts, enhancing their understanding and retention. This innovative use of digital technologies not only makes learning more engaging but also bridges the gap between theory and practice which significantly contribute to the overall quality of education. According to Garlinska et al. (2023), digital technologies offer unprecedented access to information, foster interactive learning environments, and provide personalized learning experiences tailored to individual students' needs. These technologies have not only democratized education, but they make it accessible to people regardless of their geographical location but also have proven to be effective in improving students' engagement and academic performance according to Garlinska et al. (2023).

In light of the global significance of these digital learning technologies, higher institutions in developing countries have been actively leveraging social network (SN) tools to enhance students' skills (Greenhow & Lewin, 2019). This is because these technologies are gaining prominence in academic curricula with policies being framed around to provide essential knowledge and literacy for effective social network learning (Bakir, 2016). Social network tools, in the context of digital learning, are web-based tools that support communication, collaboration, and information sharing (Rodríguez-Moreno et al, 2021). Social network tools play a crucial role

in connecting people and facilitating user-generated content for communication and collaboration (Shriver, Nair & Hofstetter, 2013). According to Williamson (2021), the current educational landscape is undergoing significant transformations, shaped by the diverse array of social network platforms. For instance, bookmarking services and professional networking sites, microblogging tools, and video-sharing platforms including YouTube, are reshaping the way education is practiced and experienced (Bønnelykke et al., 2013; Buzzetto-More, 2014). YouTube, since its inception in 2005, has particularly gained prominence in higher education, enriching academic experiences, and addressing challenges in accessing quality educational resources, especially in developing countries (Chung, Han, & Koo, 2015). YouTube's emergence as a video-sharing platform has significantly influenced accounting education by offering an innovative and accessible medium for knowledge dissemination (Maziriri, Gapa, & Chuchu, 2020). In developing countries where access to quality educational resources may be limited, YouTube is recognized for its potential to enhance education, particularly in accounting education. Its on-demand nature provides flexibility, allowing personalized learning experiences and stimulating collaborative relationships between teachers and students (Gan, Menkhoff, & Smith, 2015).

As indicated by Mosbah et al. (2022), accounting education in developing countries faces significant challenges, including limited resources, a shortage of qualified instructors, and inadequate access to up-to-date materials. These issues create a gap in the quality of accounting education provided thereby hindering the development of competent accounting professionals. This study addresses this gap by leveraging YouTube as a collaborative learning platform.YouTube, as a Social Network (SN) tool, offers a cost-effective solution to these challenges. YouTube facilitates the creation of content in local languages and subtitles to ensure content quality control and hence addresses linguistic diversity. Similarly, the platform's affordability and accessibility contribute to digital inclusion which can bridge the educational access gap for a broader student population(Lubbe and Coetzee, 2018).

The relevance of the SN tool for collaborative learning in this context lies in its ability to foster interactive learning environments. According to Oosthuizen et al. (2021) collaborative learning, particularly in accounting education, is crucial as it promotes higher-level thinking, oral communication, self-management, and leadership skills. In the context of accounting, collaborative learning can help bridge the gap between theory and practice, fostering a deeper understanding of accounting concepts. Collaborative learning in accounting is justified by the need to equip students with skills that extend beyond traditional accounting competencies (Gerstein, Winter & Hertz, 2016). As the accounting profession evolves, there is a growing demand for accountants who can work collaboratively, understand business situations, define informational needs, deliver on those needs, and communicate the implications of financial information to non-specialists (Winfield, 2021). YouTube, as a collaborative learning platform, can help meet these demands, preparing students for the dynamic and collaborative nature of modern accounting practice. Hence, this study identifies the challenges in accounting education in developing countries and proposes the use of YouTube as a collaborative learning platform to address these challenges.

Drawing on social capital theory, this study aims to utilize YouTube for collaborative accounting education in developing countries, to improve accessibility, quality, and interactivity in accounting education. This will bridge the skills gap and prepare students for a successful career in accounting. Therefore, the study focuses on assessing the current state of accounting education in developing countries, exploring the determinants of students' use of YouTube as a collaborative learning platform, and considering its accessibility, reach, and interactive features.

2. Literature Review

2.1 YouTube for Accounting Education

Technology is indispensable in education, as highlighted by its pivotal role during the COVID-19 pandemic (Mustapha et al., 2021). Ali (2020) and Boruzie et al. (2022) emphasize the significance of incorporating technology into educational curricula, underscoring its vital role in both teaching and learning. The UNESCO Report on Education (2023) identifies five channels through which technology influences education and these are input, delivery methods, skills development, planning tools, and social-cultural context. The report advocates for the effective use of digital learning tools to enhance student engagement, improve lesson plans, and enable personalized learning, showcasing technology as a powerful educational tool for current pedagogical demands.

A considerable number of studies have highlighted the transformative impact of technology, particularly YouTube, in higher education. These studies have stressed the importance of incorporating video content and interactive elements to actively engage students (Almobarraz, 2018; Fynn, Kwegyiriba & Mensah, 2021). According to Doran (2022), YouTube not only enhances higher education, but also creates inclusive learning environments that foster collaboration, communication, creativity, and critical thinking among students and teachers. This is supported by McKnight et al. (2016) who argue that educators should use educational technology strategically to meet the diverse needs of their students, highlighting the crucial role of optimal support.

According to Hund and Getrich (2015), the traditional learning approach has recently been challenged by various virtual learning platforms including YouTube and other social learning platforms, which incorporate effective and rich features. Illustratively, a study by Topps, Helmer, and Ellaway (2013) found that learning tutorials shared on YouTube are widely regarded as effective and convenient means for sharing information with peers, faculty, and colleagues. Additionally, Jackman (2019) argued that YouTube is one of the best electronic academic resource platforms used by students in contemporary educational pedagogy in institutions of higher learning in developing countries. Hence, in some developing countries, where resource constraints and limited access to quality educational materials are prevalent, YouTube offers a cost-effective solution to bridge the gap. Access to a wide range of accounting-related videos on YouTube enables students to grasp complex concepts and supplement traditional classroom learning (Sangster, Stoner, & Flood, 2020). While YouTube has many advantages, it also comes with its set of challenges including lack of quality control, the accuracy of information presented, and the potential distraction from non-educational content. Additionally, internet connectivity and infrastructure limitations in certain developing countries may also hinder the effective utilization of YouTube as an educational tool.

2.2 YouTube and Collaborative Learning in Accounting Education

Collaborative learning is an educational approach where students work together in groups to achieve shared learning goals (Hmelo-Silver & Chinn, 2015). It involves active participation, interaction, and cooperation among students, who contribute their perspectives, knowledge, and skills to solve problems, complete tasks, or discuss course materials. According to Espey (2018) through collaborative learning, students develop critical thinking, communication, teamwork, and

leadership skills, while also deepening their understanding of subject matter through peer interaction and shared exploration.

In the context of accounting education, collaborative learning involves students engaging with peers and course materials to explore accounting principles, solve problems, and complete assignments collaboratively(Millis, 2023). This approach transforms accounting educators into facilitators encouraging active engagement and critical thinking among students. Through working together in groups, students develop the skills necessary for the professional accounting landscape, where teamwork is essential (Misseyanni et al., 2017). Collaborative learning in accounting education thus prepares students for the demands of the field by emphasizing real-world problem-solving and communication skills within the context of accounting principles and practices.

YouTube plays a pivotal role in complementing collaborative learning in accounting education within developing countries, as highlighted by Jackson, Michelson, and Munir (2023). According to their study, the YouTube platform offers free access to an extensive collection of accounting-related educational content, including tutorials, lectures, and explanatory videos. This accessibility addresses the gap in formal education, providing valuable learning opportunities for those without access to quality accounting programs. Again, through visual aids, animations, and interactive demonstrations, YouTube effectively simplifies complex and abstract accounting concepts that may be challenging to grasp through traditional textbooks alone (Holtzblatt & Tschakert, 2011; Ong & Djajadikerta, 2019).

Moreover, YouTube serves as a global hub for accounting knowledge, providing diverse perspectives on accounting practices, standards, and international contexts, as noted by Boritz and Stoner (2014). This exposure enriches students' understanding and prepares them for the dynamic nature of the accounting profession. Additionally, YouTube offers tutorials for prestigious accounting certifications and addresses soft skills essential for well-rounded accounting professionals, as highlighted by Olugbade, Dare, and Tolorunleke (2023). However, learners are advised to exercise critical thinking and verify information from reputable sources to ensure a balanced approach to utilizing YouTube as an educational resource. Therefore, accounting education in developing countries can equip students for the accounting profession’s difficulties and prospects by using YouTube’s resources to foster collaborative learning.

3. Theory and Hypothesis Development

3.1 Theory

In the realm of social networks within education, various theoretical frameworks, including the Technology Acceptance Model (TAM), Social Constructivism, Connectivism, Social Capital Theory, Community of Practice (CoP), Diffusion of Innovation Theory, among others, are commonly employed to comprehend the intricate dynamics and impact of social networks on learning and teaching. These theories, as evidenced by studies by Boruzie et al. (2022), Ibrahim et al. (2017), and Kamal, Shafiq, & Kakria (2020), offer valuable insights into the multifaceted interactions within educational social networks.

Hence, this study is grounded on Social Capital Theory (SCT) as a lens to investigate the determinants that motivate the use of YouTube for collaborative accounting education in the context of developing countries. SCT outlined the significance of resources and benefits acquired through social connections in shaping individual and societal outcomes (Lin, 2002). The SCT is framed by several determinants, including history and culture, social structures, family, education,

the built environment, residential mobility, economic inequalities, social class, the strength and characteristics of civil society, and patterns of individual consumption and personal values. These determinants are crucial in understanding the dynamics of social capital.

In the context of this study, we focus on the determinants of education, social structures, and patterns of individual consumption and personal values. Education is a key determinant as it forms the basis of knowledge acquisition and sharing, which is central to collaborative learning (Chen, Chen & Kinshuk, 2009). Social structures, particularly the digital structures provided by platforms including YouTube, facilitate the formation and nurturing of learning networks. Individual consumption and personal values influence the learners' motivation to engage in collaborative learning. According to Warren, Thompson, and Saegert (2001), by leveraging and nurturing social capital, communities, and institutions can cultivate cooperation, build trust, and create opportunities for collective growth and well-being.

This study hence extends the SCT by integrating with the dynamics of digital learning platforms, particularly YouTube. This modifies the traditional understanding of social structures in SCT to include digital structures that facilitate online collaborative learning. The study also recognizes the evolving patterns of individual consumption in the digital age, where learners actively seek knowledge from diverse online sources. Therefore, this study unveils the social capital generated through collaborative learning networks on the YouTube platform by highlighting access to diverse perspectives, information, and peer support that can enhance students' academic performance.

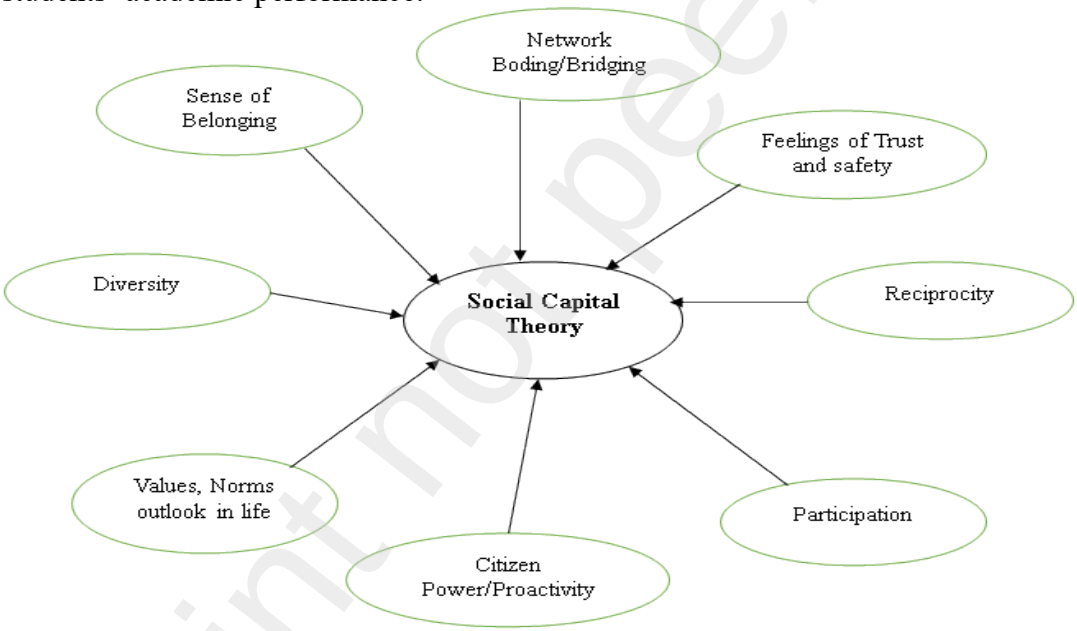

Figure 1: Social Capital Framework (Halperm, 2005)

3.2 Hypothesis Development

Diversity encompasses various individual differences, backgrounds, cultures, experiences, perspectives, and expertise (Wrench, 2016). Consequently, a learning environment that embraces diversity promotes inclusivity, making learners from different backgrounds feel welcomed and represented (Sanger & Asia, 2020). This inclusive atmosphere may attract individuals who might feel marginalized in traditional learning settings to actively participate in the YouTube platform.

This participation can contribute to a dynamic and culturally aware learning community (Luna Scott, 2015), forming the basis for hypothesis development.

H1: There is a relationship between diversity and social influence on users' decision to use YouTube for collaborative learning in accounting education

User trust plays a pivotal role in shaping social influence and the decision to utilize YouTube for collaborative accounting learning, forming a fundamental factor influencing online interactions. As emphasized by Chang, Liu, & Shen (2017), trust significantly impacts how learners engage with YouTube content. In the context of collaborative accounting learning, there is a hypothesis that users are more likely to be influenced by and engage with content creators perceived as knowledgeable and credible in accounting, as indicated by Harper, James, Joo, & Kim (2023). It is hypothesized that a consistent provision of accurate, valuable, and reliable accounting information enhances trust, leading to the attraction of a larger following for collaborative learning.

H2: There is a relationship between user trust and social influence to use YouTube for collaborative learning in accounting education

Reciprocity, defined as the social norm wherein individuals feel obligated to repay favors, gifts, or assistance received (Belmi & Pfeffer, 2015), is a crucial factor in the context of social influence and the use of YouTube for collaborative learning in accounting education. This norm is hypothesized to significantly impact people's behavior and attitudes, particularly in collaborative accounting learning situations. Supported by a study conducted by Mohammed et al. (2021), social media platforms, including YouTube, are hypothesized to facilitate collaborative learning by offering opportunities for knowledge acquisition and dissemination, as well as by enhancing social presence and trust among learners.

H3: There is a relationship between reciprocity and social influence to use YouTube for collaborative learning in accounting education

Social norms exert a significant influence on shaping social dynamics and individuals' decisions to engage in collaborative accounting learning on YouTube. These norms are the unwritten rules or expectations within a society or community that guide individual behavior and interactions (Chung & Rimal, 2016). For instance, Ansari and Khan (2020) and Allen (2016), in their studies, indicate that when learners perceive a substantial number of their peers, respected individuals, and experts using YouTube for collaborative learning, they are more likely to adopt similar behavior. This observed behavior, along with the established norms and expectations within the learning community, as well as the perceived actions of peers and authorities, contributes to shaping learners' perceptions and motivations to participate in collaborative learning activities on the platform. This sets the stage for hypothesis development.

H4: There is a relationship between social norms and social influence to use YouTube for collaborative learning in accounting education

Peer support exerts a significant influence on social dynamics and individuals' decisions to engage in collaborative accounting learning through YouTube. Peer support which is described as the assistance, encouragement, and shared experiences provided within a learning community by peers (Barber, King, & Buchanan, 2015), is hypothesized to play a crucial role. Observing peers gaining

valuable knowledge and skills through YouTube-based collaborative learning is postulated to increase individuals' motivation to seek similar benefits for themselves, as suggested by Rachman, Margana, & Priyanto (2022). Thus, it is hypothesized that, through the mechanisms of encouragement, shared experiences, learning exchanges, and emotional support, peers can shape learners' perceptions, motivations, and decisions to view YouTube as a valuable platform for collaborative learning.

H5: There is a relationship between peer support and social influence to use YouTube for collaborative learning in accounting education

The availability of resources significantly influences individuals' decisions to engage in collaborative accounting learning on YouTube. In this context, resources encompass various forms of support, materials, and opportunities that enhance learning and interaction on the YouTube platform (Balbay & Kilis, 2017). According to Maziriri, Gapa, and Chuchu (2020), access to high-quality learning materials, including well-structured videos, tutorials, and educational content, plays a pivotal role in motivating individuals to use YouTube for collaborative accounting learning. Hence, it is hypothesized that learners are more likely to be influenced by the platform's value when it offers high-quality materials, expertise, interactivity, collaboration opportunities, and personalized learning experiences.

H6: There is a relationship between access to resources and social influence to use YouTube for collaborative learning in accounting education

Active participation plays a significant role in shaping social influence and influencing individuals' decisions to engage in collaborative accounting learning on YouTube. Participation serves as a demonstration of the platform's value, fostering a sense of community, enhancing the overall learning experience, and creating a positive cycle that encourages others to join (Berry, 2017). This engagement is not only beneficial for individual learners but also contributes to the growth and vibrancy of the collaborative learning ecosystem on YouTube, as noted by Kapur et al. (2018). Active participation encompasses engaging with content, contributing to discussions, collaborating with peers, and interacting within the learning community, as highlighted by Nortvig, Petersen, & Balle (2018). Immersing oneself in the learning process through active engagement, participating in discussions, commenting on videos, and sharing insights, forms the basis for developing hypotheses.

H7: There is a relationship between participation and social influence to use YouTube for collaborative learning in accounting education.

Social influence encompasses the impact of others' actions, opinions, recommendations, and behaviors on an individual's decisions and behavior. In the context of collaborative accounting learning on YouTube, social influence is a pivotal factor in shaping users' intentions (Munaro et al., 2021). A study by Harrigan et al. (2021) indicates that recommendations, peer behavior, community norms, trust, and emotional connections collectively contribute to how users perceive the platform's value and its potential impact on their learning goals. For hypothesis development, it is proposed that positive recommendations and endorsements from peers who have benefitted from using YouTube for collaborative accounting learning can strongly influence an individual's intention to engage with the platform.

H8: There is a relationship between social influence and user intention to use YouTube for collaborative learning in accounting education.

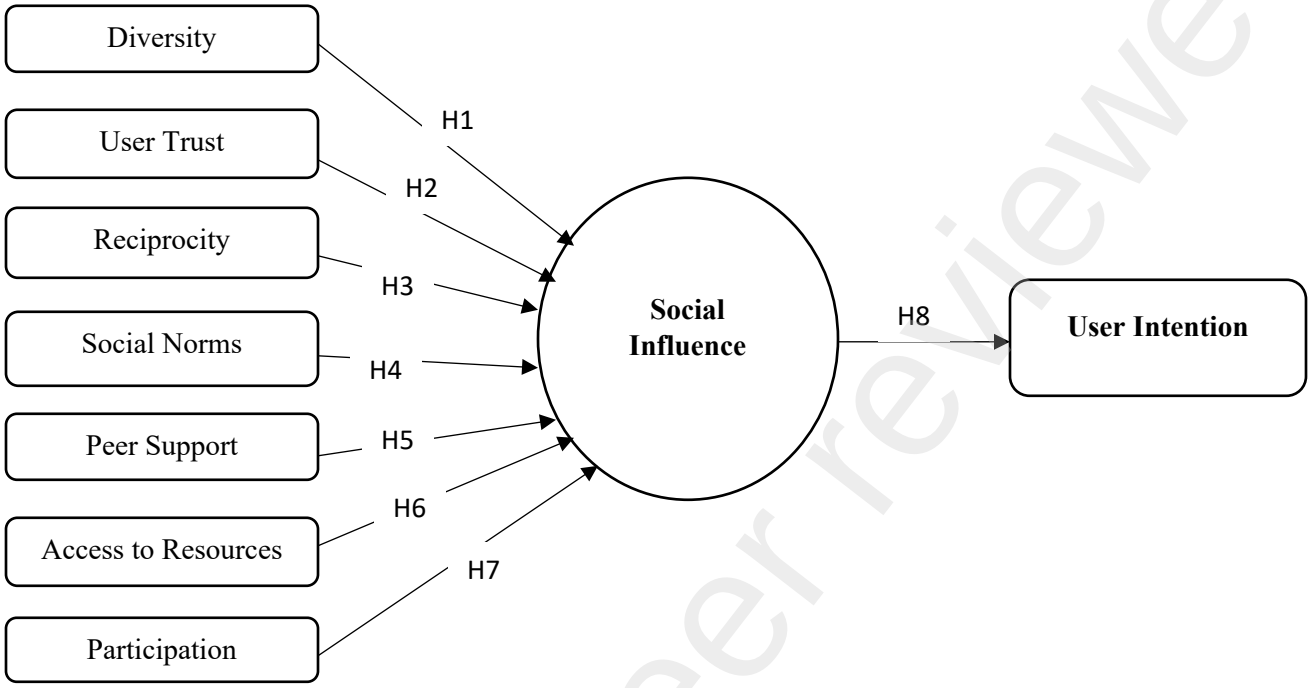

Figure 2: Conceptual framework of the research

4. Methodology

4.1 Sampling and Data collection

This study uses questionnaires to collect data from accounting students in Ghanaian higher education institutions who have experience in using YouTube for learning. The questionnaire was structured based on the research's conceptual framework (Figure 1). The questionnaire was divided into two sections; Section A sought general information from students while Section B probes into the constructs associated with the study model and its objectives. Section B employs closed-ended questions on a 5-point Likert scale (1-strongly disagree to 5-strongly agree). Participants were conveniently selected through purposive snowball sampling due to the dispersed nature of students and the target accounting students to be specific. That is, purposive snowball sampling is chosen to ensure that the researchers can effectively reach and collect data from the specific population of interest practically and efficiently, aligning with the study's objectives and research design. Ethically, participants informed consent was fundamental in this research. Participation was voluntary, free, and was done at the participants' convenience hence the right to refuse participation without any fear of negative consequences was highlighted. The study's objectives were also captured on the questionnaire, requesting the participants to be abreast of themselves before responding to the questionnaires. Before the main survey, a pre-test involving 24 students was conducted to validate the questionnaire. The "10-times rule" method in PLS-SEM was adopted to ensure sample adequacy and determine the minimum sample size. According to this rule, the minimum sample size should be 10-times higher than the maximum number of indicators for any construct in a study model (Lin et al., 2020). Hence, in this study, where User Trust has the highest construct indicators of 6, the minimum sample size required is 6×10=60. Despite this, this study had digitally administered a total of 141 students which is well exceeding the minimum

requirement according to the "10-times rule" during the two-month administration period from August 21 to October 11, 2023.

4.2 Method of Data Analysis

The data was analyzed using structural equation modeling (SEM). Structural equation modeling is a multivariate statistical analysis technique that is used to analyze structural relationships (Thakkar, 2020, Agbo et al., 2020; Boruzie et al., 2022). This technique is a combination of factor analysis and multiple regression analysis, and it is used to analyze the structural relationship between measured variables and latent constructs. While SEM encompasses the variance-based and co-variance-based techniques, this study used the variance-based (Partial least square) technique. The reason for this technique is its robustness, predictive component, and flexibility to assess both the measurement and structural models. With the use of SmartPLS, the strength of the indicators in each of the constructs (measurement model) and among the constructs (Structural model) were assessed.

5. Results

5.1 Descriptive

Table 1 provides an overview of the respondent profile, with 141 usable samples indicating a distribution of 63.12% male and 36.88% female participants. The study reveals that a significant majority employed Android phones (63.12%) for collaborative learning via social networks. Notably, YouTube emerged as the most widely utilized social networking site for collaborative learning (65.25%), followed by WhatsApp Messenger (17.02%), while LinkedIn was identified as the least used platform. The collected data further indicates that a majority of respondents had less than 6 years of experience using social networks for learning collaboratively. When addressing challenges associated with using YouTube for accounting learning, a predominant concern (53.90%) highlighted the necessity of a reliable internet connection, consistent with findings from Roodt & Peier's study (2013). Additionally, while Bećirović and Dervić (2023) underlined the cost of cellular data for prolonged use of YouTube videos, 68.79% of respondents expressed their motivation to utilize YouTube for accounting learning due to its user-friendly interface, comprehensibility, and the diverse range of voices presented in its videos.

Table 1: Descriptive statistics of respondents

Category	*Variables*	*Frequency (N=141)*	*Percentage (%)*
Gender	Male	89	63.12
	Female	52	36.88
Age Range	18-24	39	27.66
	25-34	80	56.74
	35-44	20	14.18
	45-54	2	1.42
	Above 54	0	0.00
Qualification	HND/Diploma	65	46.10
	Bachelor	62	43.97
	Master's degree	6	4.25
	Doctorate	2	1.42
	Others	6	4.25

Level of current study	Year 1	25	17.73
	Year 2	31	21.98
	Year 3	22	15.60
	Year 4	9	6.38
	Completed	54	38.30
Device used for online learning	Android Phone	89	63.12
	Apple Phone	24	17.02
	Computer	2	1.42
	Tablet	25	17.73
	Others	1	0.71
Social Networking site used for learning	Facebook	3	2.13
	YouTube	92	65.25
	WhatsApp	24	17.02
	LinkedIn	2	1.42
	Twitter	20	14.18
Have you used YouTube for Accounting learning before?	Yes	141	100
	No	0	0.00
How long have you used YouTube for Accounting learning?	Less than 2 years	77	54.61
	Between 2-5 years	54	38.30
	Between 5-10 years	10	7.09
	More than 10 years	0	0.00
Motivation you to use YouTube for accounting learning	Rich content	14	9.93
	Diversity of video voices	23	16.31
	Easy to use and understand.	97	68.79
	Peer support	2	1.42
	Frequent participation in YouTube videos	5	3.55
What challenges did you face in using YouTube for accounting learning?	Inaccurate accounting information	8	5.67
	The need to review multiple videos to find good educational content	35	24.82
	You need a good internet connection	76	53.90
	Not every video is reliable	22	15.61

5.2 Measurement Model Assessment

5.2.1 Indicators Reliability

The reliability of an indicator is defined as "the degree to which a variable or set of variables is consistent with what it intends to measure" (Urbach & Ahlemann, 2010 p.18). According to Hair et al. (2019), indicators with loadings of 0.708 and above are considered acceptable for ensuring the reliability of constructs. All indicators in this study surpassed this threshold, indicating their significant loading with the corresponding latent variables. This suggests that all variables effectively measure the latent constructs. Subsequently, the extracted results were used to evaluate both the measurement and structural models, as illustrated in Figure 3.

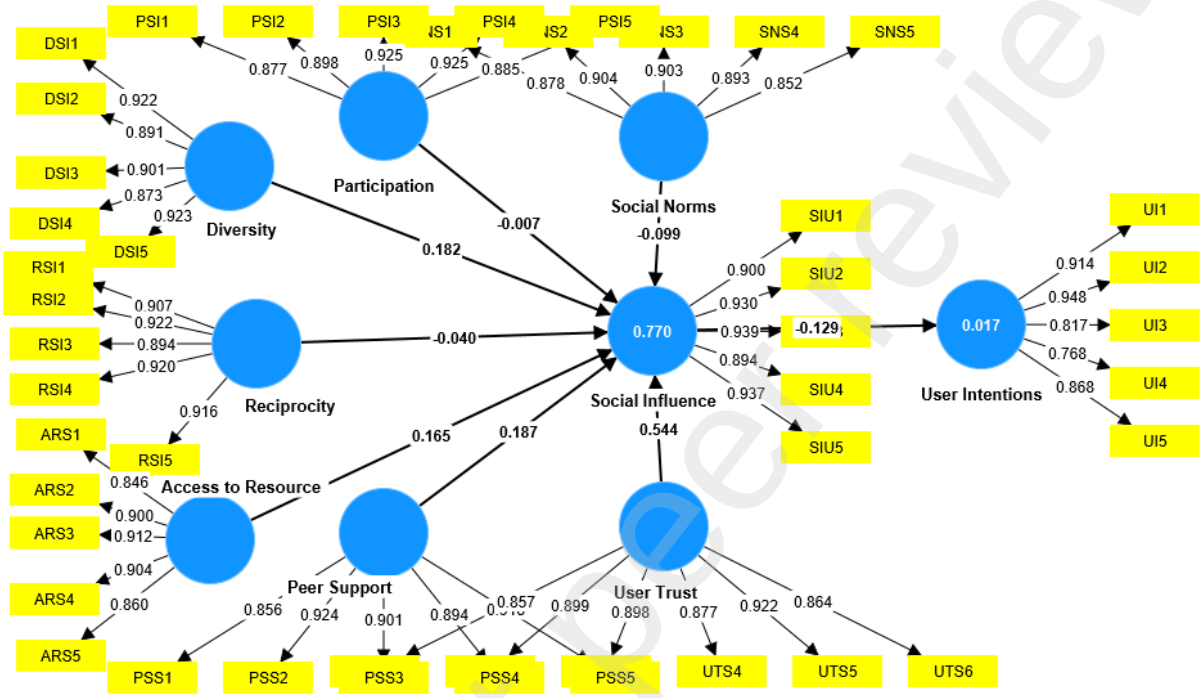

Figure 3: Measurement model of indicators

5.2.2 Internal consistency

In Table 2, all variables, excluding hidden ones, surpass the minimum Cronbach's alpha threshold of 0.70, indicating strong internal consistency (Taber, 2018). Composite reliability values (0.837 to 0.914) affirm data reliability, adhering to the criteria that values between 0.70 and 0.95 are considered good indicators. Values exceeding 0.95 can compromise model reliability. The observed composite reliability values fall within the specified range, affirming data robustness. Rho_A, an alternative reliability measure, is reliable when variables achieve values of 0.70 and above. Table 2 validates this, as all Rho_A values exceed the 0.70 threshold, providing confidence in model reliability.

Table 2: Construct Reliability and Validity

	Cronbach's alpha	*Rho_A*	*Composite reliability*	*Average variance extracted (AVE)*
Access to Resources	0.931	0.931	0.948	0.783
Diversity	0.943	0.945	0.956	0.814
Participation	0.943	0.946	0.956	0.814
Peer Support	0.941	0.943	0.955	0.808
Reciprocity	0.949	0.951	0.961	0.832
User Trust	0.945	0.949	0.957	0.786
Social Influence	0.955	0.956	0.965	0.847
Social Norms	0.931	0.933	0.948	0.785
User Intention	0.926	1.116	0.937	0.749

5.2.3 Convergent Validity

Convergent validity, defined as the degree to which individual items reflecting a construct converge compared to items measuring different constructs (Urbach & Ahlemann, 2010), is a crucial aspect of construct validation. In assessing convergent validity, outer loadings and the average variance extracted (AVE) are key metrics, as indicated by Alhassan et al. (2020). High outer loadings signify commonality among associated indicators, with Fornell and Larcker (1981) proposing a rule of thumb suggesting that all outer loadings should not fall below 0.708 to ensure significance. This rule is based on understanding the correlation between the square of a standardized indicator's outer loading and the commonality of indicators across all constructs. With a minimum threshold of 0.50 established to explain a substantial part of each latent variable indicator's variance, it follows that outer loadings below 0.708 should prompt elimination of corresponding indicators from the construct (Bagozzi et al., 1991; Sarstedt et al., 2019). This meticulous evaluation helps ensure the robustness of convergent validity in the measurement model.

5.2.4 Discriminant Validity

Traditionally, researchers have employed two main methods, namely cross-loadings and the Fornell-Larcker criterion, to assess discriminant validity in a model. The cross-loading approach suggests that outer loading indicators should not be less than their correlations on other constructs, with violations of this rule indicating inadequate discriminant validity. On the other hand, the Fornell-Larcker criterion evaluates correlations between latent variables and the square root of the Average Variance Extracted (AVE), stipulating that AVE values within each construct should surpass their correlations with other constructs in the model. The criterion posits that the achievement of discriminant validity requires constructs to share more variance with their assigned indicators than with indicators from other constructs in the model. However, recognizing critiques of the Fornell-Larcker criterion, Henseler, Ringle, and Sarstedt (2015) proposed an alternative method, the Heterotrait-monotrait ratio (HTMT), to enhance discriminant validity assessment, providing researchers with an alternative and potentially more robust approach.

5.3 Structural Model Assessment

5.3.1 Assessing Multicollinearity statistics

Multicollinearity arises when two or more indicators exhibit correlation and perfect collinearity occurs when formative indicators with identical values are entered in the same block of indicators (O'Brien, 2007). While high levels of collinearity are common in many analyses, perfect collinearity is infrequent but impactful. The challenges associated with high collinearity levels are significant as they can distort the estimation of weights and the statistical significance of formative indicators. Hair et al. (2012) have addressed these concerns by recommending a minimum threshold of 5 or less to mitigate collinearity issues. This implies that indicators meeting this threshold have a perfect linear correlation with their independent variables. The present study, as evidenced by Table 3, does not encounter collinearity issues, as all values fall within the prescribed minimum threshold, aligning with the guidance provided by prior studies (Hair et al., 2012).

Table 3: Multicollinearity Statistics (Inner VIF Values)

	Social Influence	***User Intention***
Access to Resources	4.737	
Diversity	4.813	
Participation	4.021	
Peer Support	4.426	
Reciprocity	4.556	
Social Influence		1.00
Social norms	4.727	
User Trust	3.544	

5.3.2 Assessing Structural Model Path Coefficients

In the PLS-SEM algorithm analysis, the relationships among constructs, termed path coefficients, are crucial for understanding the structural model. These coefficients, typically standardized and ranging between negative 1 and positive 1, indicate the strength and direction of relationships. High positive correlations are observed when path coefficients approximate 1, while weaker and statistically significant relationships occur with values further from 1. Bootstrapping is employed to derive both t-values and p-values for all path coefficients, as highlighted by Sarstedt et al. (2016). If, post-bootstrap, t-values surpass the critical value, it implies a significant reduction in errors for the coefficient within the model. The study utilized a t-value threshold of 1.90, following the recommendation of Hair et al. (2021). The findings, detailed in Table 4, reveal that all hypotheses, except for H1, H2, and H5, were rejected at the 0.05 significant level, suggesting the presence of significant relationships among the examined constructs.

Table 4: Path Coefficient

Hypotheses	*Path*	*Std_beta (β)*	*Std_error*	*T statistics*	*Decision*
H1	DVT -> SIF	0.337	0.152	2.290**	Accepted
H2	UTS -> SIF	0.532	0.090	6.016 **	Accepted
H3	RPC -> SIF	0.001	0.119	0.066	Rejected
H4	SNS -> SIF	0.004	0.112	0.062	Rejected
H5	PSP -> SIF	0.317	0.121	2.506 **	Accepted
H6	ATR -> SIF	0.205	0.173	1.229	Rejected
H7	PPT-> SIF	0.017	0.094	0.090	Rejected
H8	SIF-> USI	0.137	0.125	1.033	Rejected

β denotes the path coefficient; t denotes two-tailed t-statistics at ** 0.05 Significant level
ATR = Access to Resources, DVT=Diversity, PPT=Participation, PSP=Peer Support, RPC=Reciprocity, SNS=Social Norms, UTS=User Trust, SIF=Social Influence, USI=User Intention

Specifically, the observed relationship between hypotheses DVT (β=0.337, t=2.290), PSP (β =0.317, t=2.506), and UTS (β =532, t=6.016) had a significant statistical relationship with social influence (SIF) to use YouTube for collaborative accounting learning. Thus, supporting the hypotheses H2, H4 and H7. The rest of the hypotheses, however, do not support the model since their t-values were below the minimum threshold of **1.90**.

5.3.3 Coefficient of Determination (R^2 Value)

The R^2 value serves as a prominent metric for assessing the adequacy of a structural model, representing the proportion of variance associated with the relationships between endogenous and exogenous constructs within the model (Hair et al., 2015). This composite indicator influences both exogenous and endogenous latent variables, with higher values indicating greater predictive accuracy and vice versa within the range of 0 to 1. While standardized acceptable rules for R^2 are challenging due to model complexity and diverse research disciplines, Hair et al. (2011) and Henseler et al. (2009) suggest benchmarks of 0.75, 0.50, and 0.25 for endogenous variables, denoting significance, moderate, and weak relationships, respectively, with a preference for values exceeding 0.75. In the Information Systems Research field, Chin (1998) proposed thresholds of 0.190, 0.333, and 0.670, characterizing R^2 values as weak, moderate, and substantial, respectively, offering nuanced insights for researchers in evaluating model fitness.

Table 5: R-Square

Variable	R-square	R-square adjusted
Social Influence	0.770	0.757
User Intention	0.017	0.009

5.3.4 Goodness of Fit (SRMR Criterion)

The Standardized Root Mean Squared Residual (SRMR) criteria was used to assess the Goodness of Fit (DoF) of the model in this study. With the SRMR rule of thumb, the lower the value, the perfect the model fits, and vice versa. According to Fassott, Henseler, and Coelho (2016), SRMR values lower than 0.10 or 0.08 are acceptable as the best fit of a model and the reverse indicates the absence of fitness. In the foregoing, this current study model is well fit considering the values in Table 6 where the SRMR value of 0.044 is within the minimum threshold of values lower than 0.10 or 0.08.

Table 6: Model Fit

Item	*Saturated model*	*Estimated model*
SRMR	0.045	0.044
d_ULS	2.73	2.085
d_G	2.453	2.457
Chi-square	1693.146	1695.809
NFI	0.801	0.801

6. Discussion

Based on relevant literature on YouTube adoption and use in higher education, this study discovered that peer support (Barber et al., 2015; Rachman et al., 2022), diversity (Sanger & Asia, 2020; Luna-Scott, 2015), participation (Kapur et al., 2018; Nortrig et al., 2018), social norms (Ansari & Khan, 2020; Allen, 2016), user trust (Chang et al., 2017; Habes et al., 2019), access to resources (Balbay & Kilis, 2017; Maziriri et al., 2020) and reciprocity (Mohammed et al., 2021) had influence on students' intentions to use YouTube for collaborative learning in higher education.

However, the main findings of this study from the hypotheses tested in Table 4 revealed that diversity (H1) in the learning environment, peer support (H2), and user trust (H5) were observed to have a strong positive influence on students' intentions to use YouTube for collaborative accounting learning. These findings were aligned with prior studies (Luna-Scott, 2015; Rachman et al., 2022; Habes et al., 2019) which emphasized the positive impact of diversity, peer support, and user trust on active participation and sustained use of collaborative learning on YouTube platforms. The study of Luna-Scott (2015) also confirmed that a diverse learning environment including YouTube which provides different learning perspectives, inclusivity, and enriched learning content, has a collective influence on learners to actively engage with the platform and contribute to a dynamic and cultural learning community.

Jarvis's (2023) findings also indicated that learners who receive support from their peers and actively participate in discussions on YouTube-based collaborative learning platforms are more likely to develop a sense of belonging and attachment to continue to use the platform. That is, through encouragement, shared experiences, learning exchanges, and emotional support, peers can shape learners' perceptions and decisions to engage with YouTube for collaborative learning. Additionally, the study of Karampampas (2020) also confirmed the critical role of peer support and discussions in creating a sense of belonging and attachment to YouTube as a collaborative learning platform.

Again, this study agreed with previous studies (Chang et al., 2017; Habes et al., 2019; Harper et al., 2023) which highlighted the importance of user trust in shaping learners' perceptions of YouTube as a reliable and credible source of learning resource. Additionally, the study of Harper et al. (2023) revealed that, in the context of YouTube for collaborative learning, users are more likely to engage with the platform for learning if learners perceive that YouTube content creators are reliable, knowledgeable, and credible in the field of accounting. Again, other studies (Zhou et al., 2020; Maziriri, Gapa, & Chuchu., 2020) also confirmed in their studies that user trust has a significant influence on how learners evaluate the credibility, reliability, and quality of YouTube as a learning resource. However, these studies discovered that user trust in using YouTube for learning depends on various personal, environmental, and behavioral factors including users' perceptions of the usefulness and ease of use of YouTube, users' attitudes, and intentions to use YouTube, and users' actual usage and adoption of YouTube.

Furthermore, the results of the study also showed that reciprocity (0.066), participation (0.090), social norms (0.062), access to resources (1.229), and social influence (1.033) did not support the study model since their estimated t-values were below the minimum threshold of 1.90. These results were confirmed in Table 4 hypotheses H3, H4, H6, H7 and H8. This implies that these hypotheses do not have a direct influence on students' intentions to use YouTube for collaborative accounting learning. These findings were however contrary to prior studies (Mohammed et al., 2021; Rahman et al., 2020; Youens et al., 2014) which demonstrated that social network platforms, for instance, YouTube, foster collaborative learning by providing avenues for acquiring and sharing knowledge through active participation. Their study further added that these platforms contribute to the enrichment of social presence and reciprocity among learners.

In addition, prior research (Belanche, Casaló & Pérez-Rueda, 2020; Olasina, 2017) showed that social norms exert a significant influence on shaping social dynamics and students' decisions to engage in collaborative accounting learning on YouTube. According to Khan (2020) and Allen (2016), when learners perceive a substantial number of their peers, respected individuals, and experts using YouTube for collaborative learning, they are likely to adopt similar behavior.

However, though access to resources was not supported by the result in Table 4, it had a significant impact of 1.229 t-values on learners' influence to use YouTube for collaborative learning. This implies that students view access to resources in the form of learning materials, YouTube tutorials, etc as a crucial factor about the other factors; reciprocity (0.066), participation (0.090), and social norms (0.062) to adopt YouTube for collaborative accounting learning. As found by Maziriri, Gapa, and Chuchu (2020) study, having access to high-quality learning materials (well-structured videos and tutorials), plays a pivotal role in influencing learners to use YouTube for collaborative learning. The study of Berry (2017) also revealed that active participation in YouTube not only showcases its value but also nurtures a sense of community which enriches the overall learning experience. This positive cycle hence fosters encouragement for others to become part of the community.

7. Implications

The study's implications underline the transformative potential of leveraging YouTube as a collaborative learning platform in accounting education within developing countries. By relying on the study's findings of diversity, peer support, and user trust, educationalists in higher institutions can enhance active engagement with YouTube to enrich collaborative learning

initiatives. Similarly, improving access to resources and increasing social influence can further enhance the fundamentally perceived utility of YouTube for collaborative accounting learning. These insights are invaluable for informing policy frameworks, encompassing curriculum development, teacher training, infrastructure enhancement, and internet accessibility, thereby facilitating the seamless integration of YouTube into educational practices.

Furthermore, the study's contributions extend to technology-enhanced learning and accounting education research, elucidating the conceptual use of YouTube for collaborative learning in accounting. Educationalists can leverage these findings to remain abreast of the latest learning platform features and tools, ensuring adaptability and the optimization of collaborative learning experiences. Additionally, practitioners are encouraged to prioritize the creation of engaging and interactive content on YouTube, aligning with learners' preferences to cultivate a sense of community and active participation. The research also lays a foundation for future empirical studies on the effectiveness of YouTube-based collaborative learning in developing countries, offering evidence-based insights to enhance educational practices and elevate the quality of accounting education.

Finally, the study refines and expands Social Capital Theory by introducing three additional variables: peer support, access to resources, and social influence to enrich the broader field of educational research and instructional design. Theoretical insights into online learning communities, knowledge-sharing dynamics, and the evolving role of technology in educational environments are also provided, contributing to the advancement of educational theories, and informing future instructional strategies. In essence, the study's implications offer a framework for enhancing collaborative learning through YouTube, shaping the trajectory of accounting education in developing countries and beyond.

8. Conclusion

While existing research has touched on YouTube's role in higher education and accounting education, this study extends the investigation by introducing social influence, peer support, and access to resources as additional constructs into the Social Capital Theory to determine students' intentions. Data were collected from both current and past accounting students in higher education institutions in Ghana. Ethical considerations regarding human subjects, particularly students, were carefully observed. The quantitative analysis, conducted through Partial Least Square-Structural Equation Modelling (PLS-SEM), revealed a robust positive relationship between user trust, diversity, and peer support in YouTube learning materials, including video tutorials, and relevant content provided by YouTube instructors, and the users' intention to utilize the platform.

The findings of this study suggest avenues for future research in the realm of collaborative learning using YouTube in accounting education. The recommendation is to delve into testing the impact of personal, environmental, and behavioral factors on learners' intentions to use YouTube for collaborative learning. The study also recommends that teachers are trained in effective ways including how to create engaging content, facilitate discussions, and monitor students' participation in YouTube for collaborative accounting education. Additionally, future studies should consider comparative analyses of different social network platforms in the context of accounting education to offer more informed recommendations on the most effective learning platform, especially in developing countries. The study highlights the significance of continuous exploration and understanding of the factors influencing students' preferences and intentions

regarding technology-mediated learning platforms, providing valuable insights for educators and researchers alike.

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