http://jates.org

Journal of Applied Technical and Educational Sciences jATES

ISSN 2560-5429

jATES Journal of Applied Technical and Educational Sciences

Perspectives of Teachers and Parents on Parent-Teacher Communication and Social Media Communication

Yushawu, Abubakari

University of Wroclaw, Plac. Uniwersytecki 1, 50-137 Wroclaw, Poland,

Yushawu.abubakari@uwr.edu.pl

Abstract

The study was designed to examine the perceptions of teachers and parents on Parent-Teacher communication (PTC) and integrating social media Communication (SMC). Many studies have been done in this area, but little is known about how the perceptions of parents couple with their educational level plays a role in accepting technology. The study aligned with the mix-methods design with triangulation in the data collection process. The study was divided into two stages. While the first stage collected qualitative data through interviews, the second stage collected quantitative data using a questionnaire. The data was presented using quotes from participants and both correlation and descriptive statistics in SPSS. The study used random, purposeful, and snowball sampling techniques to recruit the participants for the study. It was revealed that both teachers and parents in the Sagnerigu District of Ghana have a positive stand on PTC that is centred on children educational development. Parents educational level has no effect on parents' perception on PTC, but parents educational level has a positive significant correlation with social media acceptance. further, the study presented barriers that hinder the integration of SMC. Finally, the study proposed Social Media Integration Triangle (SMIT) for organizations' SMC integration.

*Keywords***:** Parent-Teacher Communication; Social Media Communication (SMC); Sagnerigu District; Social Media Acceptance; Social Media Integration Triangle (SMIT).

1. Introduction

Communication is the steppingstone in ensuring and maintaining the success of every organization, group, or interpersonal relationship. Therefore, for the several past decades, organizations and individuals have always strive for alternative interventions to improve communication. The current study aligns with Parent-Teacher Communication (PTC) and the role digital media plays to ensure the improvement of PTC. Unlike communication in business organizations that aims at binding the organization and its customers together to maximize profit, the main aim of PTC is to build a lasting relationship between teachers and

parents (De Quan & W. Rod Dolmage, 2006; Lemmer, 2012; Willis & Exley, 2018) and the general development of the child (Linek, Rasinski, & Harkins, 1997; Ozmen, Akuzum, Zincirli, & Selcuk, 2016; Willis & Exley, 2018).

The represent study employed a mix-methods approach to substantiate the perceptions of both teachers and parents on PTC and how social media can be an antidote to enhancing the two-way communication between teachers and parents. The study focused on how the educational level of parents influence their perception on social media communication as an intervention to enhance PTC and how the purpose of PTC which varies adversely among schools or countries can influence the perception of parents to Parent-Teacher communication. This study provided a correlation between the parents' educational level and social media communication acceptance and how the purpose of Parent-Teacher communication influences teachers and parents perception to prioritize such two-way communication.

1.1 Background

The relationship between teachers and parents has experienced several transformations since the latest part of the 18thth century (Epstein, 2011; Linek et al., 1997). The family and communities directed the activities of schools in the 1900s (Prentice, 1975) until the 20th century when schools started distancing themselves from the community to prioritize the pedagogical skills and the autonomy of the teacher, and to define separate responsibilities for teachers and the community (Epstein, 2011). Parents and community had the role to provide life skills to students whereas teachers and schools prepared students for their professional life. However, the third revolution of teachers and parents' partnership to work together to develop children emanated in the 1990s where parents and communities wanted to monitor the progress of their children at school and to offer their support (ibid). Many studies have uncovered that the involvement of parents in the school pedagogical practices helps the development of the child (Eccles & Rena D, 1996; Epstein, 2011; Hoover-Dempsey & Sandler Howard M, 1995; Joyce L., 1987; Linek et al., 1997; Ozmen et al., 2016). Meanwhile, Epstein (2011) identified six types of parents involvement; parenting, communication, collaboration, decision-making, volunteering, and learning at home, and argued that each type of involvement has an impact either on the child, parents, teachers, or administrators. For example,

> "*The expected results for parents' involvement include not only leadership in decision making, but also confidence about parenting, productive curriculum-related interactions with children, and many interactions with other parents and the school. The expected results for teachers include not only improved parent-teacher conferences and clearer school-home communications, but also helping teachers understand students' families, take new approaches to homework, and make productive connections with families and the community* (Epstein, 2011, p. 397)*"*

However, this study contends that communication is the key to all the other forms of parental involvement. Each of the type of involvement requires communication to be successful. For example, to collaborate or to include parents in decision making, teachers need to communicate with parents, before, during, and after the process. Most teachers and parents recognize the importance of parents' involvement in the affairs of the school (Joyce L., 1987; M. A. Lawson, 2003; Lemmer, 2012; Logan & Cruz, 2014; Sheridan & Kim, 2015). Lemmer (2012) argued that communication between teachers and parents creates an enabling platform for them to buttress the problems related to the child' academic development, and to support the learning needs of the child (Graham-Clay, 2005). The trajectorial essence of PTC includes parents becoming active decision-makers in the child's educational needs (Willis & Exley, 2018), enhancing the efficacy of parents (Olmstead, 2013; Ozmen et al., 2016), and both teachers and administrators (Ozmen et al., 2016). Quan and Dolmage (2006) also noted that the frequent contact between teachers and parents is meaningful for students' academic engagement, both at home and school. Olmstead (2013) and many researchers (Beycioglu, Ozer, & Şahin, 2013; Epstein, 2011; Schwartz, 2017) shared the contribution of Quan and Dolmage, and added that such contact develops confident in parents in terms of supporting and mentoring children's learning. Parent-Teacher partnership is also proven to be useful in improving students' school attendance and retention, behaviour control, and wellbeing of the student (Povey et al., 2016; Schwartz, 2017)

However, PTC faces facet challenges just like other directed forms of communication, including business communication, industrial, organizational, and interpersonal communication. As communication involves two parties sharing information through a channel in a defined context (Fred & Jonathan P., 2012), the challenges that prevent the effective flow of communication between parties is associated with that same constituents: sender, recipient, context, channel, and context (Hoover-Dempsey, Walker, Jones, & Reed, 2002; Murray, McFarland-Piazza, & Harrison, 2015). According to Murray (2015), the

parties, sender's, and recipient's psychological and emotional state play an important function in effective communication. The psychological or emotional stress and trauma of either party turns to prevent the effectiveness of communication. The essentiality of the information plays a paramount function in determining the flow of communication (L Davern, 2004). The information presented for communication, when not crucial for one party, hinders the effectiveness of such interaction. Murray *et al* (2015) also pointed out how the context at which information is exchanged can obstruct the effectiveness of communication. In the context of PTC, these factors are not excluded in posing challenges to it.

Techers and Parents have varied perceptions about PTC and parents' involvement (Molin, Sorbring, & Löfgren-Mårtenson, 2015), partly for their diverse epistemologies, power, or culture. Perceptions that parents conceptualized about their role in their children education determine their participating in PTC and their participation in the affairs of the school in general (Graham-Clay, 2005; Guo, 2010; Hoover-Dempsey & Sandler Howard M, 1995). In view of this, parents who posit that their children's education is their absolute responsibility and that, connecting with the school is a core principle of supporting the child's educational success are more likely to effectively engage with the school (Bronfenbrenner, 1979; Eccles & Rena D, 1996; Epstein, 2011; Hoover-Dempsey & Sandler Howard M, 1995; Povey et al., 2016). A study carried out in Turkey in 317 elementary schools to investigate the impediments of teachers' and parents' communication revealed that the working hours of parents affects PTC. The study showed that parents with tight work schedule exhibit less frequent communication with schools. Also, some of these PTC effective deficits are related to novice teachers (Graham-Clay, 2005) since most of these teachers have less training on how to conduct Parent-Teacher conference or engage in PTC (Lemmer, 2012). Lawson & Briar-Lawson (1997) maintain that the meaning and the function of the parent in PTC should be made explicit to avoid ambiguity, which eventually impede effectiveness of communication. Therefore, even teachers with experience in conducting parent-teacher conference or interacting with parents must ensure the clarity about what they required the parent to do and the importance of the task assigned to parents to effectively engage the parent. Teachers work overload in Ontario was revealed to be an impediment to PTC (King & Wong, 2015), making parents lose their trust in them, since teachers with work overload have little time space to provide a substantial information about students' academic records to parents (Martin, 2006).

Trust is another trajectory of human experience that is considered vital in human society. The binding constituents of human relationships, including cultural factors (Enochsson, 2011), epistemological perspectives, perceptions, family relations, and many others cannot exit independently without trust. Studies undertaken by Ekici (2013) and Mansson (2014) revealed that there is a positive correlation between trust at one hand, and relationship and successfully outcome of partnership at another hand. As noted by Garbacz, Mclntyre, and Santiago (2016), trust is needed in Parent-Teacher relationship to hold the relationship for longer time. Some scholarly works revealed that families' trust for schools is associated with parents' involvement (Adams, Kimberly, & Christenson, 2000; Beycioglu et al., 2013). Therefore, parents who trust teachers have a high tendency of building partnership with teachers and the school as compare to their untrusting counterparts. Houri, Thayer and Cook (2019) showed in their study that PTC strengthens the trust between teachers and parents, which eventually translates to students' academic development (Froiland & Davison, 2014). The position of parents' demographic characteristics, including gender, socioeconomic status, and educational level on their trust for teachers is unclear in the literature. While some studies found a significant relationship between parents' gender and educational level and trust for teachers (Kikas et al., 2011; Westergård & Galloway, 2004), other studies have not found any correlation between these variables (Janssen, Bakker, Bosman, Rosenberg, & Leseman, 2012; Lerkkanen, Kikas, Pakarinen, Poikonen, & Nurmi, 2013). Ertmer (1999) argued that educated parents show more interest in interacting with the school than parents with less education. With all the mentioned, both teachers' and parents who have placed importance to teachers and parents' partnership always find measures to communicate.

1.2 Social Media and Computer-mediated Communication

The emergence of technology in this present globalized era, and the persistent and rapid development of this technology has provided opportunities to many organizations to intensify and improve their communication systems (Collins Tidwell & Walther, 2002). Though this development of technology, especially interactive web2.0 technology, where users can interact, and exchange information instantly is largely used by people to communicate with their family, friends, and business partners, it has become particularly important for both teachers, parents, and students since these parties have been soliciting alternatives to improved communicate amongst themselves (Graham-Clay, 2005). A study carried by Bordalba and Bochaca (2019) in Spain to know the beliefs of teachers and parents on using

emails and online platforms for two-way communication revealed that both teachers and parents consider digital media as an effective intervention to enhance two-way communication between schools and families. Because digital media is potential to providing alternatives for teachers (schools) to communicate with parents (community), many researchers have carried out studies to understand the essentiality of digital media in PTC. Social media and education are now intertwined, such that, both teachers, students, and parents depend on social media platforms to facilitate both their internal and external communication, especially in the developed countries (Hendricks, 2013). For example, Schwartz (2017) showed how schools in the USA use a variety of computer-mediated communication (CMC) to update parents about the activities of school, students' assignment and attendance, and scheduling. Similarly, schools in UK and Canada and many others adopt technology to enhance PTC (Goodall, 2016). Further, Oscar and Nathan (2011) noted how both teachers and students use social media to facilitate their lessons' engagement, and how student use social media to engage in collaboration learning (Barhoumi, 2020). These platforms have also made learning to occur without teachers and students coming to the four corners of the classroom to engage in the learning process through virtual classrooms (Amry, 2014).

Meanwhile, it is important to note that CMC, including social media platforms like WhatsApp, Facebook, Twitter, Instagram, Skype, phone calls, and many others do not replace the face-to-face communication between teachers and parent; instead provide easy accessibility and convenience to enhance it (Wasserman & Zwebner, 2017), and to supplement teachers and administrators' interaction with parents (Kraft & Rogers, 2013; Palts & Kalmus, 2015) since parents sometimes faces challenges to communicate with school due to their busy work schedule (Graham-Clay, 2005) or live far away from the school setting (Bordalba & Bochaca, 2019). Egoza Wasserman (2017) carried out a study to examine the implications of teacher's work schedule on the communication between teachers and parents and concluded that social media groups are effective tools to enhance PTC, especially when teachers have high workload. This has solved the undelivered messages schools send to parents through children when technology was not prevalence (ibid). Schectman and Boucherian cited in (Wasserman & Zwebner, 2017) concluded that social media communication increased the frequency of teachers and parents' communication. In case of timely and emergency of communication, social media and CMC play a crucial function to ensure the fastness and convenient interactivity between teachers and parents (Grant, 2011; Willis & Exley, 2018). Logan (2014) noted that social media do not only provide a platform

for parents and teachers communication, but also useful for parents to acquire parenting information through group posting.

Despite the benefits associated with digital media, many individuals and organizations have not been able to take full advantage of its effectiveness to providing information exchange. Many scholars have identified some of the barriers that are responsible for the underused of social media communication at the individual level to the organizational and societal level. The barriers associated with social media communication have been revealed to include personality, cultural, skills, and resource constrains. Manca and Ranjeri (2016) revealed that cultural resistance, security and privacy issues, and institutional resource constraints were the main barriers for the integration of social media at the various universities. Cultural resistance is described in the context of people's counter-attitude to any form of practices or innovation that goes contrary to the conventional life of the people (Jan et al., 2012, para. 1). Also, In 2018, Keenan, Slater, and Matthan surveyed 67 teachers in a UK medical faculty and revealed that the teachers did not adopt social media as a tool to communicate in the school because they perceived social media as a distractive tool for both students and teachers (Keenan, Slater, & Matthan, 2018). The use of social media and digital communication requires internet connectivity; however most people, especially those living in deprived areas where internet connective is low, are not able to benefit social media and computer-mediated communication fully (Heath, Maghrabi, & Carr, 2015). Even with internet connectivity lack of perceived benefit and ability to use technological tools poses a problem to the efficient utilization of social media communication in schools (Hidayanto et al., 2015). Literature also showed that generational differences also plays a part in technology acceptance and usage. Raper (2015) identified the Silence generation, Baby Boomer Generation (BBG), Generation X, Generation Y, and Generation Z. She described the BBG as those born between the 1946 and 1964 when televisions were the emerging technology, Generation X as those born between 1965 and 1976 where technology began to develop, and General Y, also known as Millennial generation-people born in the 1990s where technology became more developed and accessible. In communicating with technology, those born before the millennial general exhibit resistance (Wiley, 2016). As technology-mediated communication, including emails and other written form of computer communication portrays less clues, including gestures and emotions interpretation, they often create ambiguity in two-way communications (Thompson, 2009). This condition is revealed to cause stress to teachers as they strive to use appropriate words to avoid ambiguity and uncertainties (Ramirez, 2002).

1.3 Internet Connectivity in Ghana

Ghana is one of the sub-Saharan African that first got internet connectivity (Foster, Osiakwan & Bernstein, 2004). This is dated back in the late 1980s when Fidonet connection was established between the Greennet in London and the Ghana National Scientific and Technological information Network, the Association of African Universities, and the Technology Transfer Centre as an intervention for Pan African to develop information system (ibid). Before the end of 1990s, the country had gained three internet service providers. This made the prevalence of internet cafes in the Ghana more rapidly in the 2000s. However, before the advent of internet connectivity and communication Ghanaian societies used the talking drums, gongs, and other nontechnological channels to disseminate information to the wider society. Ayensu(2003) described this conventional media communication as the African technology disposition. It is important to note that this African technology disposition was accompanied by mass communication sources such as Radios and Akan Political System (APS) to deliver information across the wider society (Ansu-Kyeremeh, 2001).

In contemporary Ghana, the government identified and adopted information and communication technology (ICT) policies to harness the full utilization of ICT in the niches of economic development in the country. As part of the technology development, the Ghana Education Service (GES) has integrated ICT into the curriculum both at the basic, secondary, and the tertiary level of education which will provide a steppingstone for effective mastering of technology usage in the country. However, Charles and Issifu (2015) revealed that, though ICT has been integrated into the curriculum, teachers use the internet as a personal information driven platform and not interactive tool for teaching and learning. This, couple with lack of required resources especially in the northern region hinders the development of ICT learning at the schools. The internet and social media usage in Ghana are predominant at the individual level and among the youth (Buami, 2013), especially in the northern region where the current study is established. Quarshie and Ami-Narh (2012) study on the adoption and penetration of internet usage in Ghana revealed that 45.6% of internet users use it for educational purposes and 33.7% use it for news. Most of the youth in the northern region use social media and computer-mediated communication as a platform to amass wealth through internet fraud. As noted by Don Slater and Janet Kwami (2005, p. 3), ". Internet use is widespread and is predominantly used to chat with or email foreigners, generally in the North, as part of a strategy of accumulating foreign social, economic and cultural capital; it is

part of a poverty reduction strategy of 'escape' that is generally conducted in a fantasy modality". However, in her quantitative study in southern part of Ghana, Accra, Buami(2013) revealed that most students use social media to find information for their homework and assignments. Little studies have been carried out in the northern region to explore the use of internet at the schools and educational institutions. Therefore, this study will provide a steppingstone for more researchers to undertake studies to substantiate the use of internet and social media at the educational institution in the northern region of Ghana. It is inevitably a fact that social media communication has a major impact on businesses, organizations, and educational institutions. This study posits that communication is the most paramount component to ensure a continue and more frequent school, parents and community relation, and that social media plays a role to improving the quality of PTC. However, not every organization or institution is able to integrate social media communication due to the barriers associated with its implementation and usage.

2. Conceptual Framework

In the background of the literature, the concepts embedded in digital communication present the underlining benefits of social media and technology-mediated communication to users (Echols & Graham, 2013; Wasserman & Zwebner, 2017), beliefs, cultural, Security, and resource required barriers (Manca & Ranieri, 2016), perception barriers (Keenan et al., 2018), generation (Raper, 2015), barriers related to internet connectivity (Heath et al., 2015), and lack of perceive benefit and knowledge of usage barriers (Hidayanto, Limupa, 2015). Also, Parent-Teacher Communication (PTC) is presented in many diverse circumstances that determine the attitude of both teachers, administrators, and parents towards it. Teachers and parents trust is presented in the literature to be important determiner of PTC effectiveness (Ekici, 2013; Enochsson, 2011; Mansson, 2014). The socioeconomic status, perceive benefits of PTC, and educational level of parents also dictates PTC effectiveness (Kikas et al., 2011; Westergård & Galloway, 2004).

The growing application of technology in this 21st century has brought about variety of perspectives to comprehend the condition necessary for the implementation of technology in any discipline or area of knowledge. Most important studies have made a great deal of attempt to understand the use of technology from the perspective of Decomposed Theory of Planned Behaviour (DTPB), in which the beliefs of people are the most essential factors that determine their actions (Taylor & Todd, 1995). Within the framework of this theory, the

elements/antecedents – the attitude towards the behaviour, the social impact on the behaviour (subjective norm), and the perceived behaviour control**,** are put into two important perspectives/models such as Technology Acceptance Model (TAM; Davis, 1985), and Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1977).

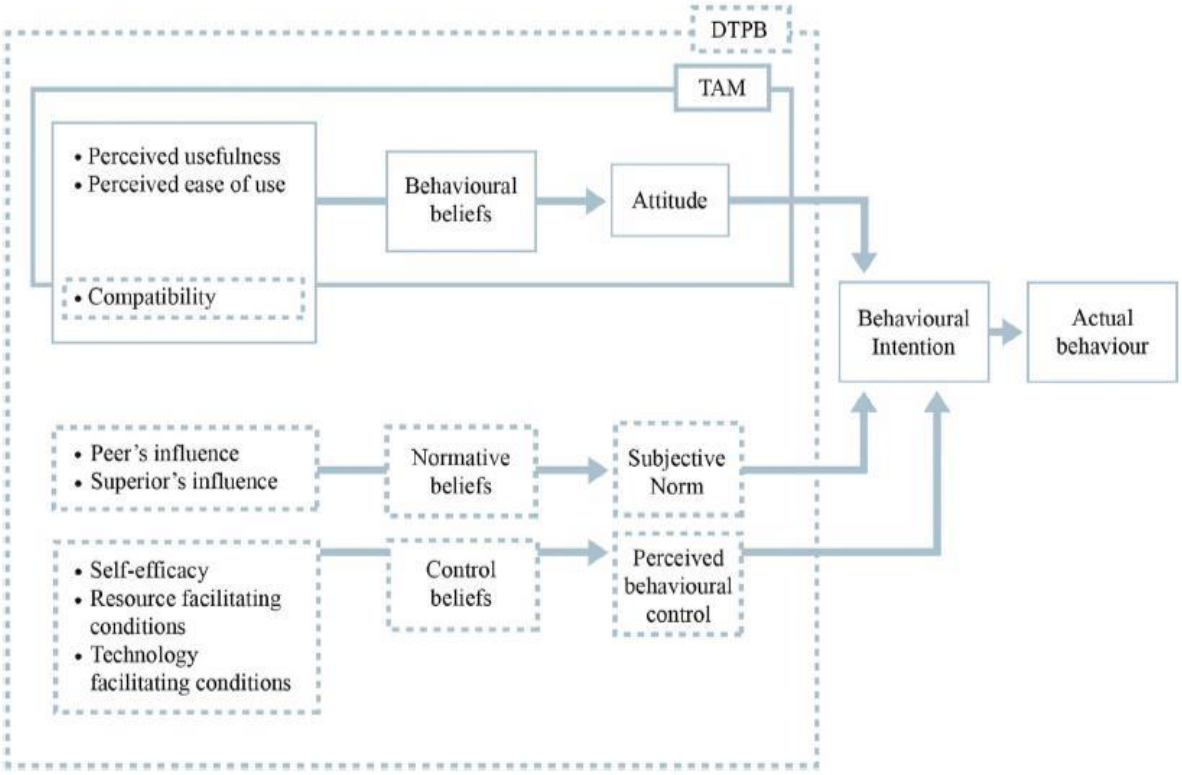
The attitude towards the behaviour place attention of the consequence of behaviour. People accepts an innovation or a principle base on a perceived benefits or setbacks. When favourable impacts are attributed to an associated behaviour, people accept such behaviour, but a perceived unfavourable consequence repels the acceptance of innovation or idea. In the case of Technology usage, people accept its implementation base on the perceived benefits associated to its functions. Subjective norm on the other hand is "the person's perception of the expectation of the important others (reference group) about a specific behaviour" (Fygenson, Anderson, & Fygenson, 2006) The acceptance of an innovation or a behaviour is based on the effects that such innovations or behaviours have had on important reference others or group. The tendency of a behaviour or innovation being accepted, and use depends on the positive impact it demonstrated to have on other people or group who are influential. It translates to mean that technology acceptance is based on reference group recommendation. The last element of DTPB model is the perceived behaviour control**,** which explains the perception of people about how easy or difficult is it to practice a certain behaviour (Fygenson et al., 2006). Perceived behaviour control is affected by the perception of people about their skills and competence in executing a behaviour. In the case of using technology, people without technology know-how are most likely not to accept technology as an intervention to improve their work (Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

TAM analyses the acceptance and adoption of technology base on two main belief, usefulness, and the ease of use (Davis et al, 1989). The belief of usefulness discusses how people accept technological tools and concepts believing that it will enhance them to work effectively and accurately. The belief of ease of use explains the relationship between the benefit of using technology and the effort involve. When perceived effort suppresses perceived benefits, the acceptance of technology is rejected. However, when people perceived more benefits than effort of usage, technology acceptance is achieved (ibid). TRA is the other stream of Decomposed Theory of Planned Behaviour (DTPB) and Innovation Diffusion Theory (IDT). TRA explains that a person's readiness and intention to accept a principle, situation or innovation is the main predictor of his attitude. In the spheres of technology

application, people intentions and readiness to accept technology is the sole determiner of technology integration and usage (Fishbein & Ajzen, 1977).

For this study, the decomposed theory of planned behaviour (DTPB) and its two broader antecedences; TAM and TRA, adopted from (Taylor & Todd, 1995, p. 146) as shown in Fig 1 would be employed to understand the perceptions teachers and parents hold on social media as a tool to enhance PTC. These antecedences will also be used to understand the underlining conditions that are necessary for parents and teachers to prioritize or reject PTC.

Figure 1. Decomposed Theory of Planned Behaviour (DTPB)



The main objective of the current study is to examine the perceptions of parents and teachers on PTC and social media integration in the PTC structures. However, to achieve this objective, the study formulated sub-objectives that will contribute to understanding the spheres of the main objective. The following sub-objectives accompany the study; (1) the perceptions of teachers and parents on Parent-Teacher Communication, (2) the satisfaction of teachers and parents on pre-existing Parent-Teacher Communication, and (3) the perception of parents and teacher on using adopting social media to enhance PTC, taking a considerable note on the influence of parents' education level. The following questions would be answered during the findings

1. What are the perceptions of teachers and parents on Parent-Teacher Communication?
2. How Satisfactory is Parent-Teacher Communication to teachers and parents?
3. What Perceptions do both teachers and parents hold on social media as a tool to enhance PTC?
4. How does parents' education level influence their perception of social media communication?
5. What barriers are associated with social media integration into PTC structures?

3. Methodology

The study design employed for this study is the mix-methods. This type of research design entails the study to solicit both qualitative and qualitative data for the study. Mix-methods approaches are primary use to widen the scope of a research to provide insight into peoples' beliefs, pattern of behaviour, and perceptions (Greene, Caracelli, & Graham, 1989). This method was selected for the study to find out the perceptions of the respondents and the extent of that perception within the population. The main instruments used to collect data from the field was interviews, observations, and questionnaires.

The participants of the study were sampled from the Sagnerigu District Junior High Schools. Overall, 250 participants were recruited for the study. The sample included 130 teachers and 120 parents. The study was divided into two stages. The first stage was devoted to conducting face-face interviews to obtain qualitative data that will provide a guide for the second stage of the stage. The researcher used interviews at this stage to clearly present the questions to the participant and to collect clear responses from the participants without ambiguity (Phellas, Bloch, & Seale, 2011). At the second stage, the researcher designed a questionnaire based on the issues that emanated during the qualitative data coding and sorting. This enabled the researcher to cover many participants to draw a realistic and generalizable conclusion (ibid). The researcher randomly selected 10 Junior High Schools from 46 schools in the district. This technique was used to ensure that the sample was fair and represents the population (Sharma, 2017). This sampling was done using the Statistical Package of Social Science (SPSS) randomizer. For the first stage, 30 teachers and 20 parents were selected using purposeful and snowball sampling techniques, respectively. The snowball provided easy accessibility to parents (ibid). The headteacher (Principal) and two Information and Communication Technology (ICT) Teachers were selected from each school, and two parents from each

school. The teachers and parents that were selected at the first stage of the study administered the interview. This interview was conducted to examine the perceptions that both teachers and parents have about Parent-Teacher communication and the effectiveness of the pre-existing communication. It was also conducted to examine the perception of parents on integrating social media communication into the communication structures to enhance PTC and the barriers that are associated to integrating these platforms. The interviews were recorded, transcribed, and sorted according to the research questions. The themes presented here provided a ground for the researcher to construct a self-design questionnaire to find out the extent at which teachers and parents hold those perceptions. For instance, the researcher designed a questionnaire to find out the extent at which both teachers and parents' belief about the improvement of PTC.

At the second stage of the study, the research recruited 200 more participants to administrator the questionnaire. These participants included 100 parents and 100 teachers. The questionnaire had three sections, of which parents were to administer all the sections and teachers to administer two section. The first was to examine the educational level of parents. The second part presented questions regarding the extent of which both parents and teachers need to enhance PTC and the third section was about the extent at which teachers and parents accept SMC integration. The responses at second and the third section of the questionnaire were ranked in a 5-point Likert scale (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree).

3.1 Data Analysis

The data was analysed using two scientific traditions, qualitative and quantitative analysis in SPSS. To analyse the qualitative data, the interview scripts were transcribed, coded, and presented using direct and indirect quotes from the respondents. However, it is important to note that, some of the recordings were done in the predominant language in the area; "*Dagbani* (language predominantly use in the Sagnerigu district)". Therefore, such responses were translated by the researcher and presented. The quantitative data was analysed using descriptive statistics and correlation analysis in SPSS. While descriptive statistics were employed to reveal the extend at which teachers and parents perceive the satisfactory nature of the existing PTC, the correlation analysis was used to find the relationship between parents' educational level and social media communication acceptance.

3.2 Ethical Consideration

The study was conducted in accordance with ethical principles of the university, Khazar University. To ethically conduct the study without violation of participants rights, the study provided participants consent forms, which detailed the objectives and the rights of the participants. Also, participants were assured confidentiality. The study anonymized and eliminated any identifiable demographic information that could be used to identify the participants. The names of all the 10 schools, principals/headmasters and ICT teachers were coded using S1, S2, S3 to S10 and P/H1, P/H2, P/H3 to P/H10, and T1, T2, T3 to T10 respectively. Also, P1, P2, P3, to P10 were used to identify the parents who administered the interviews. Finally, the study was aligned with the declaration of Helsinki.

4. Findings and Results

The first part of the study presents the findings from the data. Both qualitative and quantitative data were collected to answer the research questions. The first part of this section is devoted to understanding the qualitative data, using the antecedence of the DTPB and supported by the theories that emanated in the literature background. The first question that this section answered is "What are the perceptions of teachers and parents on Parent-Teacher Communication?". The answer to this question will form the basis to further substantiate how teachers and parents perceived social media as a tool to enhance PTC.

Research Question One. What is the perception of teachers and parents on Parent-Teacher Communication?

To answer the question, the study presented some quotes from the respondents to help readers to understand the interpretations that follow the respondents' perceptions. However, it is important to mention that, not all responses were quoted. The study prioritized the most comprehensive responses what entail other respondents' perception. For example,

> "*Effective communication is the lifeline of everything. If there is effective communication between teacher and parents, learning behaviours, attitudes and progress can effectively be monitored. With effective communication between teachers and parents, the parents can communicate the special problems of the child to the school so that, the school can take necessary measures to help the child to eliminate*

behaviours that can hinder learning. Also, with communication, teachers and parents can work collaboratively to check the attitude of child. I believe that Parent-Teacher communication is the most good to check pupils attitudes and performance" (T2).

A principal of a school also shared his perception:

*"*I *think it is very Parent-Teacher communication is crucial without any debate. This because it helps us to identify the strengths and weaknesses of the learner. Thus, it helps us provide the child's needs in order to build or mold the learner's potential together" (P/H8).*

A parent added her thoughts about Parent-Teacher communication:

*"*I find it necessary talking to the school about my child's performance and attitude. I think that every parent should go to the school time to time to talk to the teachers to know about the progress of their children. As we the parents, sometimes the children are not telling us the truth about the activities at the school" P8H

Another parents shared her experience and perception:

"It *is good to talk to the school but the school doesn't tell talk to us about the children's achievement. Anytime the teachers send for me, I know why they want to talk to me. They will never send for you for anything if not to ask you to pay money. Whenever I receive information from my son about PTA meeting or the headmaster wants to see, I feel anxious especially when I do not have money at that moment" P4S.*

From the responses, both teachers and parent have a positive stand on Parent-Teacher communication. They perceived Parent-Teacher communication to be a monitory tool for both the performance and attitude of students. They all believe that PTC is needed to acquaint parents about the progress of the children's academic performance. The Parent-Teacher communication is also believed to provide a ground for teachers to know the special educational and health needs of the learners, and to identify the strength and weakness of the child. Some parents and teachers also hold that PTC is a flatform for, children's moral

training, reliable source for fees information, and checking students' attendance. However, some parents perceive PTC to be important, but because schools usually concentrate on fees instead of the progress of the children, such parents do not see the relevance of PTC. Therefore, main purpose for engaging parents in communication influences parents' attitude and beliefs about PTC. The second research question this study wants to answer is how satisfactory the pre-existing PTC at the various schools.

Research Question two (2). How Satisfactory is Parent-Teacher Communication to teachers and parents?

This question aims to solicit information regarding how efficient the pre-existing PTC in producing a positive feedback to both schools and families, and whether PTC needs improvement. To answer this question the study asked parents and teachers about how satisfy they are about the effectiveness and frequency of PTC. Averagely, the schools in Sagnerigu Districts hold Parents and Teachers Association (PTA) meetings three (3) times a year to deliberate on both the financial needs of the school and the children's educational needs, and occasional invite parents to talk to them. However, it was revealed that teachers hardly have Post-PTA communication with individual parents regarding the children's education progress, instead send reminders to parents regarding the school's financial requirement. Meanwhile, most parents and teachers believe that there should be more communication between parents and teachers that gears towards children's educational progress as shown in table 1 below. For instance,

> *"Yes, we always have feedback when we express interest. Parents also do honor invitations when extended to them, but we need more meetings with parents to achieve gigantic results" (P/H1).*

A teacher shared his intake:

> "*Yes it is. It has really helped us both to know much about our strength and weaknesses especially in handling our learners. But we don't have call PTA often, because the parents are busy" (T7).*

A parent also shared:

"*The policies at the PTA meetings help improved how the students go to school. As I said before, children of this days are liar. So, they sometimes lie about holidays but when this was discuss at PTA meeting, the teachers are telling us about holidays. Yes, I think they we should more PTA meetings to help our children" (P9).*

The meetings we have with the school do not change anything. The children are still the same. The school is just wasting our time and money for nothing. Because, they don't care about the children. They only care about money (P5)

Also

"*I think it is not effective because parents find it very difficult to leave their work to attend PTA meetings or visit the school of their wards. In my formal school parents were not like this" (T8).*

Table 1. The extend of PTC improvement: Teachers and parents' perception

Status	Count	Sufficient	Needs	Total Contacts
Parents:	Number	17	83	100
	% Within number of times	56.7%	48.8%	50.0
Teachers:	Number	13	87	100
	% Within number of times	43.3%	51.2%	50.0%
Total	Number	30	170	100
	% Within Number of times	100.0%	100.0%	100.0%

From the table most of the respondents see the need to extend the Parent-Teacher communication. Out of 100 parents and 100 teachers who took part of the survey, only 17 parents and 13 teachers responded that the rate of Parent-Teacher communication is enough and do not need to be extended. However, 83 parents and 87 teachers believed that the number of times teachers and parents communicate should be extended

Research question three (3). What Perceptions do both teachers and parents hold on social media as a tool to enhance PTC?

The perception of parents and teachers play a vital role in using social media to communicate among them. Therefore, it was necessary for the study to get information about the parents

and teachers perception concerning the use of social media to exchange information. Teachers and parents have conflicting perceptions about social media communication. While most teachers hold that social media communication can help improve PTC, few teachers and many parents believe that social media communication is not the solution to the effectiveness of PTC. The extent to this perception is presented in table 2 below. While those few teachers who reject social media communication (SMC) attribute it to some barriers that are associated with using SMC, most parents attributed it to their inability to use them and inappropriateness of such platforms. These would be presented later in this section. Example

> "*I think it is very important to integrate social media for fast communication purposes, but many parents don't have smartphones. Most of them can't even use simple WhatsApp"* (T10)

A parent also shared

> *Is good because school can easily send message to us without telling the children to us* (P2).

Another teacher expressed his view:

> "*It's the fastest way to talk to someone. In just a minute you can send message to 100 parents at the same time"* (T3).

A headmaster believe that social media communication lacks the effectiveness in a formal forum:

> "*Social media should not be use for formal communication. It's for casual conversation. I think parents will not take social media communication serious"* (P/H7).

However, some parents have negative perceptions about using social media as a communication tool in the school. They believed that social media communication will not be effective or even will encourage internet scam in schools.

For instance

> *We don't need social media. Can't you see the children use facebook and WhatsApp to do "Sakawa (a term coined to mean internet fraud)? I don't think it's a good idea for the school to use such things to communicate to us. The school is not there to train Sakawa children*" (P8).

Table 2. Perceptions of parents and teachers on SMC integration

Status	Count	Good for school	Not Good	Total
Parents	Number	28	72	100
	% Within number of times	25.7%	80.9%	50.5%
	Number	81	17	98
Teachers	% Within number of times	74.3%	19.1%	49.5%
Total	Number	109	89	100
	% Within Number of times	100.0%	100.0%	100.0%

Research Question 4. How does parents' education level influence their perception of social media communication?

The study also examined the perception of parents to social media and CMC communication based on their educational level. This was to reveal the correlation between parents' educational level and social media communication or technology acceptance. The levels of education was coded and ranked (1=no education, 2=Basic education, 3=secondary education, and 4=Tertiary education) and acceptance was coded and ranked as (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly agree). The nonparametric spearman's correlation was used to determine the relationship between the level of parents' education and social media communication (SMC) Acceptance. This is shown in the table 3 below. The results showed that there is a significant positive correlation between Parents' level of education and accepting social media communication into PTC structures.

Table 3. The correlation: Parents' educational level and social media communication acceptance

			Educational level	SMC Acceptance
Spearman's rho	Educational level	Correlation Coefficient	1.000	.534**
		Sig. (2-tailed)	-	.000
		N	120	120
	SMC Acceptance	Correlation Coefficient	.534**	1.000
		Sig. (2-tailed)	.000	-
		N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

The table illustrates the correlation between parents' educational level and social media communication acceptance. The correlation significant was at the p=0.01. However, the level of significant between educational level and social media communication acceptance is p<0.001 with correlation coefficient (r=0.534). This means that there is a positive significant relationship between the level of education and the social media communication acceptance.

Research Question 5. What barriers are associated with social media integration into PTC structures?

The last research question that the study examined was the barriers that hinders the integration of social media into the communication structures in the Sagnerigu District schools. The barriers included lack of education of most parents, as shown in table 4 that translate to lack of skills to use social media. Another perceived barrier were the perceptions of teachers and parents about the social media and lack of material resources to support the integration of social media. Also, lack of financial resources to support the was revealed Therefore, the barriers of integrating social media into the communication system of schools in the Sagnerigu district include, lack of material resources, technological skills, negative perception, and poor internet resources. For example,

Barriers related to lack of knowledge

> "*Most of the parents of the learners are rural folks not all are educated. So they can't use WhatsApp or facebook" T5. "I do not know how to use social media (P4). I cannot read because I did not go to school" (P1). "I cannot use a smartphone. I just want to be able to make calls*" P10.

Barriers related to lack of resources

> "*90% of our people are not users to devices that will aid them get access to any social media handles. Eg. Android phones, computers etc (T6). Luck of the necessary facilities (T2). Most parents do not have smart phones (P/H9)*

Barriers related to perceptions

> "*To me it is not a formal way" T1*
>
> *We do not need social media. Can't you see the children use facebook and WhatsApp to do "Sakawa? P8*

Table 4. Parents level of education

		Frequency	Percentage	Valid Percent	Cumulative percent
Valid	No Education	39	32.5	32.5	32.5
	Basic	34	28.3	28.3	60.8
	Secondary	22	18.3	18,3	79.2
	Tertiary	25	20.8	20.8	100
	Total	120	100.0	100.0	

The table showed that the parents who have education level below secondary education are more than the population of parents with secondary and tertiary education. Overall, 120 parents took part in the survey and 73 parents representing 60.8% of them has education below secondary level and 47 parents representing 39.2% has secondary and tertiary education.

5. Discussion

The main purpose of this study was to examine the perceptions of both teachers and parents on Parent-Teacher communication and the intake of social media to enhance this communication. The study formulated research questions that, which when answered, as a unit, achieves the main objective of the study. The research was carried out in the Junior Higher Schools (JHS) in the Sagnerigu District of northern Ghana. The educational background of parents was also used to compute the correlation between parents' educational level and computer-mediated communication or social media communication acceptance.

One of the major finding of the study is that both teachers and parents have a positive stand on PTC. This findings contradicts the findings of Ertmer(1999). Ertmer findings showed that the level of education of parents determines their likelihood of engaging with schools. However, in this current study, most of the parents are revealed to be less educated, but still perceive engaging and communicating with the school as a crucial practice to support children's education. The intake of teachers and parents presented in this study aligns with previous findings, such as academic development (Graham-Clay, 2005; Lemmer, 2012), identify and provide health needs of the child (Schwartz, 2017), and improve students attendance (Povey et al., 2016; Schwartz, 2017). However, the qualitative responses showed that schools emphasize on financial requirements after PTA meetings rather than children's

educational need. This makes some parents overlook and reject the essentiality of PTC. This attitudinal formation of some parents aligns with the Ivan Pavlov's classical learning which explains organism's external stimulus response (Montgomery & Kirsch, 1997). The parents believe that anytime the school or teachers require parents' involvement, the purpose of such involvement is for them to settle monetary obligations to the school. Therefore, most parents argue that PTC would be more essential if it is centered on the development of the child rather than concentrating on parents' obligations for the school. Though, teachers and parents believe the importance of PTC, they believe that the frequency of PTC should increase to create a strong connection between the school and the family. Meanwhile, it was shown that some parents are not able to attend to PTA because of their work schedule. This confirms the findings of (Graham-Clay, 2005) that showed that parents with tight work schedules exhibited less frequent communication with schools.

Further, the perception of teachers and parents on social media communication was diverse. While most teacher believe that social media communication will enhance PTC, more parents believe that social media communication is inappropriate for schools. Whereas skill to use technology is a requirement to using social media and other CMC (Davis, 1985; Taylor & Todd, 1995), It was revealed that most of parents have less education, therefore, lack the skills, self-efficacy and resources facilitating conditions to use social media platform. Some parents also believe that social media platform are inappropriate tools for schools to integration, given that children use such platforms for "*Sakawa"*. In view of this, such parents lack the knowledge of social media and their perceptions are directed by the manner the youth use social media communication. This became clearly after the study established a correlation between parents' education level and social media communication acceptance. It was revealed the level of parents' level is positively correlated with SMC acceptance (the lower the level of a parent education, the less likely the parent will accept SMC and the higher a parent education, the higher likely the parent will accept SMC).

Finally, the study presented the barriers that hinder the integration of social media into the communication structures in the Sagnerigu District schools. The barriers included lack of financial resources to sustain SMC, the lack of technology-oriented skills in respect of most parents, negative perceptions of most parents and some teachers, and lack of stable internet connection. Most of these barriers, including lack of skills, negative perception, and lack of technology facilitating resources are connected to the education level of the parents. Since most the parents are not well educated, they do not have the skills require to effectively use

social media platforms. According to Knopf and Swick (2007) teachers have a responsibility to identify the different communication preference of parents to enhance PTC. Therefore, though most teachers and few parents recognize SMC integration as an important intervention, most of the parents cannot them. This poses a big challenge to schools to use social media and ICT to communicate with all parents (Molnár, 2013). However, even with those teachers and parents who use social media platforms, they use these platforms for other forms of communication such as connecting with family and friends, but not for PTC.

6. Conclusions

The study was designed to examine the perceptions of parents and teachers on PTC and integrating social media to enhance PTC. The study was also to examine the influence of parents' educational level on social media acceptance. The study revealed that both parents and teachers have a positive attitude to PTC which is centered on children's development. The study showed that teachers and parents require intensification of PTC. Furthermore, the study revealed that negative perception of parents about SMC, lack of education, lack of technology facilitating condition limit the integration of SMC into the communication structures. The study recommends that for any organization to integrate social media into their communication, it should satisfy the three conditions, expertise, material requirement, and positive psychological appeal. The study prefers to refer to these three requirements as the social media integration triangle (SMIT), in that, without one of the requirements the integration of social media will be unsuccessful. For instance, organization that has successful material requirement and employers and partners with expertise to use social media without readiness and positive perception about social media communication, the integration of social media communication is mostly likely to be hindered. Therefore, all the three requirements must be met before social media can be successfully integrated.

References

Adams, K., Kimberly S, A., & Christenson, S. L. (200 C.E.). Trust and the family–school relationship examination of parent–teacher differences in elementary and secondary grades. *Journal of School Psychology*, *38*(5), 477–497. Retrieved from https://www.sciencedirect.com/science/article/pii/S0022440500000480

Amry, A. B. (2014). The impact of WhatApp mobile social learning on the achievement and attitudes of female students compared with face to face learning in the classroom.

European Scientific Journal, *10*(22), 116–136. Retrieved from http://eujournal.org/index.php/esj/article/view/3909

Ansu-Kyeremeh, K. (2001). The African e-Journals Project has digitized full text of articles of eleven social science and humanities journals . This item is from the digital archive maintained by Michigan State University Library . Find more at : SOCIAL DYNAMICS AND INFANT FEEDING. *African E-Journals Project*, *4*(Special Issue), 105–116.

Retrieved from http://pdfproc.lib.msu.edu/?file=/DMC/African Journals/pdfs/Utafiti/s4NS/aejps004NS008.pdf

Ayensu, E. A. (2003). *ommunication and Culture in Ghana: Technology's Influence and Progress in a New Digital Age* (Georgetown University). Retrieved from http://home.ubalt.edu/ub78l45/My Library/storage/Z2GV4UUR/ElaineAyensu.pdf

Barhoumi, C. (2020). The Effectiveness of WhatsApp Mobile Learning Activities Guided by Activty Theory on Students' Knowldege Management. *Contemporary Educational Technology*, *6*(3), 221–238. https://doi.org/10.30935/cedtech/6151

Beycioglu, K., Ozer, N., & Şahin, S. (2013). Parental Trust and Parent–School Relationships in Turkey. *Journal of School Public Relations*, *34*(3), 306–329. https://doi.org/10.3138/jspr.34.3.306

Bordalba, M. M., & Bochaca, J. G. (2019). Digital media for family-school communication? Parents' and teachers' beliefs. *Computers and Education*, *132*(January 2019), 44–62. https://doi.org/10.1016/j.compedu.2019.01.006

Bronfenbrenner, U. (1979). *The ecology of human development*. Retrieved from https://books.google.com/books?hl=en&lr=&id=OCmbzWka6xUC&oi=fnd&pg=PA3&dq=Bronfenbrenner,+U.,+(1979).+The+Ecology+of+Human+Development:+Experiments+by+Nature+and+Design.+Harvard+University+Press,+Cambridge,+MA&ots=yySVQ2QLfc&sig=ITcGgMW2IOFpAbZPLNn17ufzWZs

Buami, E. K. (2013). Internet Using Habit Among Junior High School Students of Nima, Accra-Ghana. *International Journal of ICT and Management*, *1*(3), 133–138. Retrieved from http://www.ijictm.org/admin/html/mail/attach/2013-12-27-03-58-01.pdf

Charles, B.-A., & Issifu, Y. (2015). Teachers ' ICT usage in second-cycle institutions in Ghana : A qualitative study Charles Buabeng- Andoh , Pentecost University College,

Ghana. *International Journal of Education and Development Using Information and Communication Technology*, *11*(2), 104–112.

Collins Tidwell, L., & Walther, J. B. (2002). Computer-Mediated Communication Effects on Disclosure, Impressions, and Interpersonal Evaluations Getting to Know One Another a Bit at a Time. *Human Communication Research*, *28*(3), 317–348. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2958.2002.tb00811.x

Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results (Massachusetts institution of Technology). https://doi.org/oclc/56932490

De Quan, Z., & W. Rod Dolmage. (2006). Four Chinese Teachers' Perceptions Of Parent Involvement In Their Children's Education. *EAF Journal*, *17*(2), 95. Retrieved from http://search.proquest.com/openview/f6a8e508ee6bca63bd1de4e8da0b9f1b/1?pq-origsite=gscholar&cbl=26436

Eccles, J. S., & Rena D, H. (1996). Family involvement in children's and adolescents' schooling. *Family-School Links: How Do They Affect Educational Outcomes*, 3–34. Retrieved from https://books.google.com/books?hl=en&lr=&id=4WHfAQAAQBAJ&oi=fnd&pg=PA3&dq=Eccles,+J.,+%26+Harold,+R.+(1996).+Family+involvement+in+children's+and+adolescent's+schooling.+In+A.+Booth+%26+J.+Dunn+(Eds.),+Family-school+links:+How+do+they+affect+educational+outcomes%3F+(pp.+3-34).+Mahwah,+NJ:+Lawrence+Erlbaum.&ots=79DsJc-DK4&sig=_Tc9nzSPIIb8tKxbipdV99i8Fyw

Echols, L., & Graham, S. (2013). Birds of a different feather: How do cross-ethnic friends flock together? *Merrill-Palmer Quarterly*, *59*(4), 461–488. https://doi.org/10.1353/mpq.2013.0020

Ekici, A. (2013). Temporal dynamics of trust in ongoing inter-organizational relationships. *Industrial Marketing Management*, *42*(6), 932–949. https://doi.org/10.1016/j.indmarman.2013.03.008

Enochsson, A. B. (2011). Who benefits from synchronous online communicationi: A comparison of face-to-face and synchronous online interviews with children. *Procedia - Social and Behavioural Sciences*, *28*, 15–22. https://doi.org/10.1016/j.sbspro.2011.11.004

Epstein, J. L. (2011). *COMMUNITY Preparing Educators and Improving Schools* (Vol. 25).

Ertmer, P. A. (1999). Addressing first- and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, *47*(4), 47–61. https://doi.org/10.1007/BF02299597

Fishbein, M., & Ajzen, I. (1977). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Retrieved from https://philarchive.org/archive/FISBAI

Foster, W., Osiakwan, E., & Bernstein, A. (2004). Global Diffusion of the Internet IV: The Internet in Ghana. *Communications of the Association for Information Systems*, *13*(January 2004). https://doi.org/10.17705/1cais.01338

Fred, L., & Jonathan P., D. (2012). *International Management: Culture, Strategy, and Behaviour* (8th ed.; G. Brent, D. Paul, H. S. Laura, & B. Jane, Eds.). Retrieved from http://repositorio.unan.edu.ni/2986/1/5624.pdf

Froiland, J. M., & Davison, M. L. (2014). Parental expectations and school relationships as contributors to adolescents' positive outcomes. *Social Psychology of Education*, *17*(1), 1–17. https://doi.org/10.1007/s11218-013-9237-3

Fygenson, P. &, Anderson, P. A. P., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behaviour. *MIS Quarterly*, *30*(1), 115–143. Retrieved from http://ssrn.com/abstract=2380168

Garbacz, S. A., McIntyre, L. L., & Santiago, R. T. (2016). Family involvement and parent-teacher relationships for students with autism spectrum disorders. *School Psychology Quarterly*, *31*(4), 478–490. https://doi.org/10.1037/spq0000157

Goodall, J. S. (2016). Technology and school–home communication. *International Journal of Pedagogies and Learning*, *11*(2), 118–131. https://doi.org/10.1080/22040552.2016.1227252

Graham-Clay, S. (2005). Communicating with Parents: Strategies for Teachers. *School Community Journal*, *15*(1995), 117. Retrieved from http://ubc.summon.serialssolutions.com/link/0/eLvHCXMwY2BQsEhMMzZNSkk1SE0xSAE2yC0tDCySUy3MTJJMU5LNU5JQ1uUgleZuogxybq4hzh66sFIxPiUnJx5U5QKTIqjxIsbAmwha-J1XAt4glgIAojUb_g

Grant, L. (2011). "I'm a completely different person at home": Using digital technologies to connect learning between home and school. *Journal of Computer Assisted Learning*, *27*(4), 292–302. https://doi.org/10.1111/j.1365-2729.2011.00433.x

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). American Educational Research Association Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, *11*(3), 255–274. Retrieved from http://www.jstor.org/stable/1163620

Guo, Y. (2010). Meetings Without Dialogue: A Study of ESL Parent-Teacher Interactions at Secondary School Parents' Nights. *School Community Journal*, *20*(1), 121–140. Retrieved from http://search.proquest.com.ezaccess.library.uitm.edu.my/docview/613424354?accountid=42518

Heath, D., Maghrabi, R., & Carr, N. (2015). Implications of information and communication technologies (ICT) for school-home communication. *Journal of Information Technology Education: Research*, *14*(2015), 363–395. https://doi.org/10.28945/2285

Hendricks, D. (2013, May 8). The Complete History of Social Media: Then And Now - Small Business Trends. Retrieved May 29, 2020, from Samll Business Trends website: https://smallbiztrends.com/2013/05/the-complete-history-of-social-media-infographic.html

Hidayanto, A. N., Junus, K., Limupa, A., Junus, K. M., Fitriah, N., & Budi, A. (2015). Investigating knowledge sharing behaviour on virtual community members: integration of technological, individual and contextual factors. *Article in International Journal of Business Information Systems*, *19*(2), 180–204. https://doi.org/10.1504/IJBIS.2015.069430

Hoover-Dempsey, K. V., Walker, J. M. T., Jones, K. P., & Reed, R. P. (2002). Teachers involving parents (TIP): Results of an in-service teacher education program for enhancing parental involvement. *Teaching and Teacher Education*, *18*(7), 843–867. https://doi.org/10.1016/S0742-051X(02)00047-1

Hoover-Dempsey, K. V, & Sandler Howard M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record.* Retrieved from https://psycnet.apa.org/record/1996-02761-005

Houri, A. K., Thayer, A. J., & Cook, C. R. (2019). Targeting Parent Trust to Enhance Engagement in a School-Home Communication System: A Double-Blind Experiment of a Parental Wise Feedback Intervention. *School Psychology*, *34*(4), 421–432. https://doi.org/10.1037/spq0000318

Jan, M., Sidd, J., Mike, K., Annie, S., Yousy, A., Nadine, B., … Tanelle, T. (2012, September 12). Cultural Resistance: The arts of protest | New Tactics in Human Rights. Retrieved June 2, 2020, from https://www.newtactics.org/conversation/cultural-resistance-arts-protest

Janssen, M., Bakker, J. T. A., Bosman, A. M. T., Rosenberg, K., & Leseman, P. P. M. (2012). Differential trust between parents and teachers of children from low-income and immigrant backgrounds. *Educational Studies*, *38*(4), 383–396. https://doi.org/10.1080/03055698.2011.643103

Joyce L., E. (1987). Toward a theory of family-school connections. *Social Intervention: Potential and Constraints*, 121–136.

Keenan, L. D., Slater, D., & Matthan, J. (2018). Social media: Insights for medical education from instructor perceptions and usage. *Mededpublish.Org*. Retrieved from https://www.mededpublish.org/manuscripts/1420

Kikas, E., Poikonen, P. L., Kontoniemi, M., Lyyra, A. L., Lerkkanen, M. K., & Niilo, A. (2011). Mutual trust between Kindergarten Teachers and Mothers and its associations with family characteristics in Estonia and Finland. *Scandinavian Journal of Educational Research*, *55*(1), 23–37. https://doi.org/10.1080/00313831.2011.539852

King, K., & Wong, Y. (2015). Implementing Parent Engagement Policy in an Increasingly Culturally Diverse Community of New Immigrants: How New is "New"? *Canadian Journal of Education*, *38*(3), 1–30. Retrieved from www.cje-rce.cawww.cje-rce.cawww.cje-rce.ca

Knopf, H. T., & Swick, K. J. (2007). How parents feel about their child's teacher/school: Implications for early childhood professionals. *Early Childhood Education Journal*, *34*(4), 291–296. https://doi.org/10.1007/s10643-006-0119-6

Kraft, M. A., & Rogers, T. (2013). Teacher-to-Parent Communication: Experimental Evidence from a Low-Cost Communication Policy. *Society for Research on Educational Effectiveness*, 9.

L Davern. (2004). School-to-home notebooks: What parents have to say. *Teaching Exceptional Children*, *36*(5), 22–27. Retrieved from https://journals.sagepub.com/doi/pdf/10.1177/004005990403600503

Lawson, H., & Briar-Lawson, K. (1997). *Connecting the Dots: Progress toward the Integration of School Reform, School-Linked Services, Parent Involvement and Community Schools.*

Lawson, M. A. (2003). School-family relations in context: Parent and teacher perceptions of parent involvement. *Urban Education*, *38*(1), 77-133+147. https://doi.org/10.1177/0042085902238687

Lemmer, E. M. (2012). Who's doing the talking? teacher and parent experiences of parent-teacher conferences. *South African Journal of Education*, *32*(1), 83–96. https://doi.org/10.15700/saje.v32n1a460

Lerkkanen, M., Kikas, E., Pakarinen, E., Poikonen, P., & Nurmi, J. (2013). Author ' s personal copy Early Childhood Research Quarterly. *Early Childhood Research Quarterly*, *28*, 153–165. https://doi.org/http://dx.doi.org/10.1016/j.ecresq.2012.04.005

Linek, W. M., Rasinski, T. V, & Harkins, D. M. (1997). Teacher perception of parent involvement in literacy education. *Reading Horizons*, *38*(2), 90–107.

Logan, A. L., & Cruz, M. D. (2014). Gendered Taskscapes: Food, Farming, and Craft Production in Banda, Ghana in the Eighteenth to Twenty-first Centuries. *African Archaeological Review*, *31*(2), 203–231. https://doi.org/10.1007/s10437-014-9155-6

Manca, S., & Ranieri, M. (2016). Facebook and the others. Potentials and obstacles of Social Media for teaching in higher education. *Computers & Education*, *95*, 216–230. https://doi.org/10.1016/j.compedu.2016.01.012

Mansson, D. H. (2014). Trust as a Mediator Between Affection and Relational Maintenance in the Grandparent-Grandchild Relationship. *Southern Communication Journal*, *79*(3), 180–200. https://doi.org/10.1080/1041794X.2014.894555

Martin, S. (2006). Opportunities for Parent Partnership and Advocacy in Early Years Services in Ireland. *New Zealand Research in Early Childhood Education Journal*, *9*, 15–31. Retrieved from https://search.informit.com.au/documentSummary;dn=792770748680005;res=IELFSC

Molnár, Gy. (2013). Challenges and Opportunities in Virtual and Electronic Learning Environments, In: Szakál, Anikó (szerk.) Intelligent Systems and Informatics (SISY), 2013 IEEE 11th International Symposium on : IEEE Hungary Section pp. 397-401. Paper: 6662610, 5 p.

Molin, M., Sorbring, E., & Löfgren-Mårtenson, L. (2015). Teachers' and parents' views on the Internet and social media usage by pupils with intellectual disabilities. *Journal of Intellectual Disabilities : JOID*, *19*(1), 22–33. https://doi.org/10.1177/1744629514563558

Montgomery, G. H., & Kirsch, I. (1997). *Classical conditioning and the placebo effect*.

Murray, E., McFarland-Piazza, L., & Harrison, L. J. (2015). Changing patterns of parent–teacher communication and parent involvement from preschool to school. *Early Child Development and Care*, *185*(7), 1031–1052. https://doi.org/10.1080/03004430.2014.975223

Olmstead, C. (2013). Using Technology to Increase Parent Involvement in Schools. *TechTrends*, *57*(6), 28–37. https://doi.org/10.1007/s11528-013-0699-0

Oscar E., C., & Nathan H., L. (2011). Improving Teacher Training Using Empirical Methods: Evaluation of a Teacher Training Seminar on Heterogeneity in the Classroom. *Electronic Journal of Science Education*, *14*(1), 15–35.

Ozmen, F., Akuzum, C., Zincirli, M., & Selcuk, G. (2016). İlköğretim Okullarında Öğretmen-Veli Iletişiminde Karşılaşılan Engeller. *Egitim Arastirmalari - Eurasian Journal of Educational Research*, *2016*(66), 27–46. https://doi.org/10.14689/ejer.2016.66.2

Palts, K., & Kalmus, V. (2015). Digital channels in teacher-parent communication: The case of Estonia. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, *11*(3), 65–81.

Phellas, C. N., Bloch, A., & Seale, C. (2011). Structured methods: interviews, questionnaires and observation. *Researching Society and Culture*, *3*, 181–205. Retrieved from https://books.google.com/books?hl=en&lr=&id=uhBCvNlypL4C&oi=fnd&pg=PA181&dq=interviews+and+questionnaires+advantages&ots=bE_R1WjW3E&sig=YeWSDyF_J-2pEuNCLHfigtUiimQ

Povey, J., Campbell, A. K., Willis, L. D., Haynes, M., Western, M., Bennett, S., … Pedde, C. (2016). Engaging parents in schools and building parent-school partnerships: The role of school and parent organisation leadership. *International Journal of Educational Research*, *79*, 128–141. https://doi.org/10.1016/j.ijer.2016.07.005

Quarshie, H., & Ami-Narh, J. (2012). The Growth and Usage of Internet in Ghana. *Journal of Emerging Trends in …*, *3*(9), 1302–1308. Retrieved from http://henryquarshie.com/sites/default/files/Research/THE GROWTH AND USAGE OF INTERNET IN GHANA.pdf

Ramirez, A. Y. (2002). How parents are portrayed among educators. *The School Community. Journal*, *12*(2), 51–61. Retrieved from https://psycnet.apa.org/record/2003-07788-003

Raper, L. L. (2015). *Perceptions of Acceptable Behaviour with Social Networking among Teachers, Parents, and Students in a Northeast Tennessee Middle School: An Exploratory Study*. Retrieved from https://dc.etsu.edu/etd/

Schwartz, S. (2017, April 4). Digital Communication Tools Target ESSA Parent-Engagement Mandate - Education Week. Retrieved May 29, 2020, from https://www.edweek.org/ew/articles/2017/04/05/digital-communication-tools-target-essa-parent-engagement-mandat.html

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749–752. Retrieved from www.allresearchjournal.com

Sheridan, S., & Kim, E. (2015). *Foundational aspects of family-school partnership research* (Vol. 1). Retrieved from https://books.google.com/books?hl=en&lr=&id=RIB9CAAAQBAJ&oi=fnd&pg=PP6&dq=Kim,+E.+M.,+%26+Sheridan,+S.+M.+(2015).+Foundational+aspects+of+familyschool+connections:+Definitions,+conceptual+frameworks,+and+research+needs.+In+S.+M.+Sheridan+%26+K.+M.+Kim+(Eds.),+Foundational+aspects+of+family-school+partnership+research+(pp.+1 14).+C&ots=CzRm4mNoIK&sig=8ugcSckVmmpST4lqLYk7H67oNj8

Slater, D., & Kwami, J. (2005). Embeddedness and escape: Internet and mobile use as poverty reduction strategies in Ghana. *Working Paper*, (June), 1–16.

Stern, P. C., Dietz, T., Abel, T. D., Guagnano, G., & Kalof, L. (1999). A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism Recommended

Citation. *Human Ecology Review*, 81–97. Retrieved from https://cedar.wwu.edu/hcop_facpubs

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, *6*(2), 144–176. https://doi.org/10.1287/isre.6.2.144

Thompson, B. (2009). Parent–teacher e-mail strategies at the elementary and secondary levels. *Qualitative Research Reports in Communication, 10*(1), 17–25. https://doi.org/10.1080/17459430902756203

Wasserman, E., & Zwebner, Y. (2017). Communication between Teachers and Parents using the WhatsApp Application. *International Journal of Learning, Teaching and Educational Research, 16*(12), 1–12. https://doi.org/10.26803/ijlter.16.12.1

Westergård, E., & Galloway, D. (2004). Parental disillusionment with school: Prevalence and relationship with demographic variables, and phase, size and location of school. *Scandinavian Journal of Educational Research*, *48*(2), 189–204. https://doi.org/10.1080/0031383042000198521

Wiley, S. (2016, December 13). Technology Generation Gap: Generational Workforce Differences In Firms. Retrieved May 29, 2020, from https://www.firmofthefuture.com/content/understanding-todays-workforce-generational-differences-and-the-technologies-they-use/

Willis, L. D., & Exley, B. (2018). Using an online social media space to engage parents in student learning in the early-years: Enablers and impediments. *Digital Education Review*, (33), 87–104. https://doi.org/10.1344/der.2018.33.87-104

About Author

Yushawu Abubakari received his Professional teacher's diploma in 2011 at the University of Cape Coast and proceeded to University of Winneba where he earned his bachelor's degree in Education. He proceeded to Khazar University, Baku, where he obtained his master's degree in Educational management. He taught Leadership and Organizational Behaviors and Teaching and Learning in Higher Education at Khazar University after successfully completing his master's study. He is currently a doctoral student at the University of Wroclaw, Poland. His research interest includes ICT in Education and society, Precarious youth studies, and Sociology of Education.