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## Abstract

The study investigated the awareness and utilization of social media tools in tracking Social Intervention Projects (SIPs) among women in rural households in Rivers State. A multi-stage random sampling procedure was used to select a sample size of 450 women from the study area. Data were collected using a questionnaire validated by the researchers, while descriptive and inferential statistical tools were used to analyze data. The result from the study showed that the majority of the respondents were within the age range of 31-40 years (mean age = 39 years), 47.4% had no-formal education, 88.8% were married, 58.2% of them have a household size of 4-6 persons, 33.2% and 32.1% are traders and farmers, respectively. Social media tools utilized are instant messages (98.0%) and WhatsApp (97.4%). SIPs provided were FADAMA (mean = 3.17), Skill Acquisition Training (mean = 2.83), among others. Tools used to access information for SIPs were Facebook (mean = 2.63), WhatsApp (mean = 3.03) and Instant Messages (mean = 2.99). The result showed that there was awareness in the use of WhatsApp (mean = 3.38) and Instant messages (mean = 3.81 in tracking SIPs among women. The study recommends that efforts should be made by non-governmental organizations, rural-based organizations and agencies to train rural women on the use of social media tools.

## Introduction

Since independence, successive governments in Nigeria have prioritized rural community development (Bappi et al., 2017). Nigeria's rural areas have the largest population density, accounting for at least 75% of the country's population. This vast majority of Nigeria's population, regardless of their political, ethnic, economic, or social status, aspires collectively to progress. In Nigeria's fundamental development goals, rural poverty and unemployment are being addressed. Grassroots communities are being integrated into national socio-economic and political growth through effective participation in their own affairs. Udo (2014) noted that increased incomes for rural people through agriculture and non-agricultural businesses, enhancing people's quality of life by providing essential services such as food, safe drinking water, energy, health care, and education, have been pursued. Different Nigerian administrations have created a range of programs and approaches for addressing poverty, rural development, and food security. These programs involve the formation of additional state and local government development centers, as



well as citizen engagement in the planning and implementation of social intervention projects targeted at developing the new development centers and therefore lowering rural-urban migration (Bappi et al., 2017). All the above programs are targeted through social intervention projects.

The term social intervention projects refer to all aspects of social programs that attempt to increase access to social goods and services (Pam, 2013). Social intervention projects are initiatives done by the government, social service agencies, and volunteers with the objective of changing and improving people's, groups', and communities' social conditions, establishing social bonds, and increasing internalization of social control (Devereux & Sabates-Wheeler, 2004). influence on a process or condition is defined as intervention. Interventions are techniques for change in social work that attempt to prevent or eliminate risk factors, activate and/or mobilize protective variables, reduce or eliminate harm, and/or improve over and above harm elimination (Standing, 2007). As a result, social work intervention encompasses a diverse range of activities, projects, and programs (Sundell & Olsson, 2017). While treatments can be straightforward or complex, even the most straightforward interventions may have multiple components that contribute to their efficacy (Sundell & Olsson, 2017).

Social intervention is necessary for a secure and acceptable way of life to exist. Its primary purpose is to alleviate poverty and to safeguard individuals against dangers and shocks such as unanticipated economic swings (Abebrese, 2011). Public funds and contributions are frequently used to sponsor social intervention projects. The adoption of social interventions appears to be a big concern, most commonly in countries where the majority of people live in poverty. Especially during financial crises, increases in food prices, natural disasters, social intervention schemes are more necessary to safeguard citizens from adverse consequences (Abebrese, 2011). Social intervention projects have gained significance in recent years due to the fact that they predate the Millennium Development Goals (MDGs) (Arjan de Haan, 2011; Ellis et al., 2009). As a result, governments at all levels in Nigeria (federal, state, and local), solely and/ or acting in conjunction with the international

social protection organizations such as the United Nations Children's Fund (UNICEF) and the United Kingdom's Department for International Development (DFID), make necessary adjustments to vulnerabilities and risks faced by children. Numerous governments around the world are focusing their attention on these types of social intervention programs in order to alleviate poverty and vulnerability. According to Holmes et al. (2011), social intervention is rapidly garnering government attention and donor funding worldwide in pursuit of poverty and vulnerability reduction. This is to suggest that governments' social intervention projects have a grass-root interest to break the cycle of intergenerational poverty. The International Labour Organization (ILO, 2014) has it that it is related to a variety of organizations, standards, policies, and programs aimed at protecting employees and their families against occurrences that jeopardize their fundamental living standards. Apart from being a subject of human rights, social intervention is an investment in people that benefits society. Social intervention programs are vital for social and economic growth, as well as poverty alleviation and inequality reduction.

Social intervention initiatives have a plethora of benefits, including improving access to nutrition, health, and education, minimizing poverty transmission through generations, and encouraging political stability and economic progress (Adato & Hoddinott, 2008). In the short term, social intervention efforts assist affected families in obtaining aid and avoiding poverty. In the long run, social protection programs primary and transformative roles address some of the root causes of intergenerational poverty. Thus, it is critical to strike a balance between short and long-term social protection tactics when constructing a comprehensive social protection package.

In realization of the above benefits, successive governments in Nigeria have embarked on several social intervention projects in various parts of the country over the years. These projects are embedded in programs such as the National Poverty Eradication Program (NAPEP), Subsidy Empowerment Reinvestment and Program (SURE-P), Trader Moni, the Government's Enterprise and Empowerment Program (GEEP), School Feeding Home-grown (HGSF), Conditional Cash Transfer (CCT) project, N-Power, and YESSO.



The projects are expected to target the most vulnerable groups in society. One of such groups includes women. This is in view of the critical role of women play in the household. To create awareness and access to the availability of the various social intervention projects, social media tools are expected to play a critical role. They include all aspects of information and communication technology (ICT) facilities. Information and Communication Technology (ICT) has a tremendous influence on economic sectors, political sectors, and the social sectors of countries numerous to count (IEAG, 2014). Social media has aided crucially to the economy's operation, though markets-customers linking and information sharing facilitation. With the development of mobile network coverage, new avenues for information exchange become accessible that contribute to equal and sustained economic progress for both emerging and developed countries (Avis, 2016). Olaniran (2014) claims that the rise of social media technology has altered the way information is shared. Social media are web-based, mobile technologies that enable individuals to share information they find interesting with others through social networking

According to Osatuyi (2013), social networks have developed into advantageous platforms for individuals, governments, and organizations to communicate with any targeted audience. A study by Ma and Chan (2014) explains how social media platforms, particularly Facebook (FB) and Twitter, have increased in popularity as a means to spread information in the multi- millions in the form of voice notes, words, images, and countless articles. As opined by Osatuyi (2013), social media is rapidly surpassing broadcast medium and print medium of information sharing. Ma and Chan (2014), reaffirm consumers' preference for sharing news stories via social media. As a result, citizen journalism emerges. The most severe problem, however, is the lack of legitimacy, dependability, and professionalism evidenced by the source, mode from which these news stories spring up for transmission on social media.

In recent times, there has been an increasing ability in rural communities in developing nations to access information through social media platforms, especially among women due to the numerous and significant roles they play in households. When it comes to addressing women's social development and inclusion, social media

usage presents both opportunities and limits. They facilitate communication, collaboration, and the exchange of information between youngsters with their people (Ugwu, 2019). Speaking on African mobile-phone expansion of services, McKinsey (2013) emphasized the character of the young and the middle class in embracing and expanding technology coverage in rural domains. According to the study of Shirky, (2011), social media has altered the environment of global information exchange and citizens-government relationships. Apart from its utility as a tool for social networking (SNW), social media enables individuals to share content and opinions with a global audience for the first time, bypassing traditional media and other forms of information transmission. YouTube, Facebook, WhatsApp, Instagram, and Twitter have all made it possible for activists globally to re-show transmitted events to interested audiences, like during the Arab Spring movement (Pew Research Center, 2012).

Social media can play roles to bring attention and coordinate action on popular causes, mostly with women (Aragon, 2015). Simultaneously, it can increase emphases on utilizing ICT's pervasiveness to draw attention to and address global women's objectives of reducing poverty.

Increased use of social media has direct influence on an increase in public engagement by giving Novel Avenue for informing citizens, re-directing their ideas, and organizing their acts (Avis, 2016). Social media pervasiveness created chances for the rapid and inexpensive dissemination of information. It can be used at any time and for information creation, receipt, seeking, and idea impartation, including requiring governments to provide transparency while they ensure fulfillment of commitments (Swedish International Development Cooperation Agency [SIDA], 2009). The debate changed from how to expand access to social media and toward how to use it to promote communication and understanding amongst people and across generations. A special emphasis has been placed on the role of social media to facilitate development effects across interconnected domains.

Despite the above benefits of social media use in information dissemination, its use among rural women in various parts of Nigeria appears not to be adequately utilized. This situation has become more critical in view of the various intervention projects that could enhance their welfare and



that of their households. In view of the above background, the study is conducted to describe the socio-economic characteristics of women in rural households, ascertain social intervention projects available to women in rural households, identify the social media tools in tracking social intervention projects available to women in rural households, determine the awareness of social media tools in tracking social intervention project among women in rural households, and ascertains the frequency of utilization of social media tools in tracking social intervention projects among women in rural households in the study area. The study tested the hypotheses that there is no significant relationship between socioeconomic characteristics of women in rural households and their awareness of social media tools in tracking social intervention projects, and there is no significant relationship between socioeconomic characteristics of women in rural households and their utilization of social media tools in tracking social intervention projects.

## Methodology

This study was conducted in Rivers State, Nigeria. Rivers State is located in the southern part of Nigeria. Rivers States lies between longitude 6.8 E and latitude 4.7 N. It is bordered in the east by Akwa-Ibom State, in the west by Delta State, in the north by Abia and Imo States, and Bayelsa State in the south (Mckenna, 2009). The state has a population of about 5,198,716 according to the 2018 National Population Commission report (NPC, 2018), occupying a land area of 11,077km<sup>2</sup> (4,276.9sq.m). The State is a major producer of cassava, cocoyam, maize, yam, vegetables, bananas, plantains, palm oil, and boasts of a thriving fishing industry. Also, the state experiences a total annual rainfall of 4,700mm in the coastal areas and 1,700mm within the upland areas, which is adequate for substantial production of crops. The inland/upland areas of the state consist of tropical rainforest, while the coastal region has numerous mangrove swamps with fluvial sediments deposited by the distributaries of the River Niger, New Calabar River, Bonny, and Andoni Rivers.

According to the Rivers State Agricultural Development Program (ADP) (2022), Rivers State is divided into 3 agricultural zones (Rumuodumaya, Eleme, and Degema). population of the study is composed of all the women in the study area. A four-stage random sampling procedure was used to select a sample size of 456 respondents. Stage one involved a random selection of two agricultural zones from the existing three agricultural zones in the study area, while in stage two, three local government areas were selected from each of the selected zones, giving a total of six local government areas. Stage three involved the random selection of two (2) communities from each of the selected six local government areas. This resulted in a total of twelve communities that were used for the study. In the fourth stage, 38 women were randomly selected from each of the twelve selected communities, giving a total of 456 sample sizes for the study. The main instrument used for data collection was a questionnaire, structured and validated by the researchers.

It was designed into sections A and B. Section A sought for responses on the socio-economic characteristics of the respondents. Section B was further divided into four parts. Part I contains item clusters on social intervention projects available to women; Part II contains item clusters on the available social media tools for tracking social intervention projects; Part III contains item indicators of awareness of social media tools in tracking social intervention projects; while Part IV contains item indicators on frequency of utilization of social media tools in tracking social intervention projects. While checklist design was adopted for items in Section A, 'Yes and No' were the responses on item-clusters in Section B, Part I and II; Part III adopted "Aware" and "Not Aware" and treated as dummy variables. Items in Part IV were measured using a 3-point scale such as Always (A) = 3, Very Often (VO) = 2, and Seldomly (S) = 1. The values of the scale (3, 2, and 1) were summed up to obtain 6. The mean value of the sum was 2.00, which was used as the criterion mean score for accepting or rejecting any item variable.

Data analysis for objectives one to five was done using descriptive statistics such as frequency, percentage, and mean. The inferential statistical tool such as Ordinary Least Squares (OLS) was used to test Hypotheses I and II. The four functional forms (linear, exponential, Doublelog and semi-log) were tried, and the form with the best fit was used in the discussion based on the number of significant variables, F-value,



and R2 (co-efficient of multiple determinations) meeting a prior expectation.

## **Model Specification**

The independent variables are the socioeconomic characteristics of women in rural households in Rivers State while the dependent variable is awareness and utilization of social media by women in rural households in Rivers State. The equation is stated in the linear, exponential, double log and semi-log forms. The variables comprise education, age, marital status, occupation, household size, and income range.

The implicit form of the linear regression model is as follows:

 $Y = f(X_1, X_2, X_3... X_n) + e$ Where:

Y = (dependent variable) = Awareness and utilization of social media in tracking social intervention projects.

 $X_1 - X_6 =$  (Independent variables)

 $X_1 = Age of the respondents (in years)$ 

X2 = Marital status (Single = 1, Married = 2, Separated = 3, Divorced = 4, Widow = 5)

X<sub>3</sub> = Highest Educational Qualification (no formal education = 1, Primary education= 2, Secondary education= 3, Tertiary education= 4)

 $X_4$  = Household size (Actual figure)

 $X_5$  = Employment status (Unemployed = 1, Employed = 2)

X<sub>6</sub> = Occupation of the respondents (Civil Servant = 1, Trader = 2, Artisan=3, Farmer =4)

 $X_7$  = Monthly Income of the respondents (in Naira) e = error term

The four functional forms are:

Linear function

 $Z = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + a_6X_6 + e$ 

Exponential function

 $Log \ Z = a_0 + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 X_5 + a_6 X_6 + e$ 

Double log function

 $Log Z = a_0 + a_1 log X_1 + a_2 log X_2 + a_3 log X_3 + a_4 log X_4 + a_5 log X_5 + a_6 log X_6 + e$ 

Semi-log function

 $Z = a_0 + a_1 \log X_1 + a_2 \log X_2 + a_3 \log X_3 + a_4 \log X_4 + a_5 \log X_5 + a_6 \log X_6 + e$ 

Where, ao represents the intercept at to ao represents the estimated coefficients.

The criteria used in selecting the functional equation best fit for regression, is equation with the highest  $R^2$  value, highest number of significant variables, and conformity to the a *priori* expectations.

### Results and Discussions

# Socio-Economic Characteristics of Women in Rural Households in Rivers State

The results on socioeconomic characteristics of women in rural households in the study area were presented in Table 1. It was found that the mean age of women covered in the study is 39 years. This age range falls within the most productive, risk-taking, and active years for women in terms of search for opportunities of highest return and support for their families. Also, the result showed that the majority (88.8%) of the women covered in the study are married. This implies that the majority of women in the study area tend to shoulder time-consuming marriage responsibilities such as childbearing, domestic chores, and family care, which may impair their predisposition to use social media tools. Also, the majority of the women covered had no formal level of education (47.4%), while (44.9%) had just primary education. This is indicative that the literacy level is low. This may likely impair how they use social media tools to access available social intervention projects. The result further indicated that the majority (58.2%) of women covered in the study have a household size of 4-6 persons. This household size is moderate enough to be less cumbersome to maintain if given available interventions.

On employment status, it was found that the majority of the women covered in the study are unemployed (73.5%). This finding corroborates Ugwu (2019) that rural women have low access to formal employment and their major source of income is farming. This is because they bear a



**Table 1**Percentage Distribution of Women in Rural Households According to Their Socio-Economic Characteristics in the Study Area

Items	Frequency	Percent (%)
Age		
21-30 years	18	9.1
31-40 years	95	48.5
41-50 years	74	37.8
51-60 years	8	4.1
Above 60 years	1	0.5
Marital Status		
Single	9	4.6
Married	174	88.8
Separated	-	-
Divorced	1	0.5
Widowed	12	6.1
<b>Educational Level</b>		
No Formal Education	93	47.4
Primary Education	88	44.9
Secondary Education	15	7.7
Tertiary Education	-	-
Household Size		
1-3 persons	14	7.1
4-6 persons	114	58.2
7-9 persons	59	30.1
Above 9 persons	9	4.6
Employment Status		
Unemployed	144	73.5
Employed	52	26.5
Occupation		
Civil Servant	1	0.5
Trader	65	33.2
Artisan	17	8.7
Farmer	112	57.6
Other Occupation	1	0.5
Monthly Income		
N10,000 and below	24	12.2
N11,000-N30,000	86	43.9
N31,000-N50,000	43	21.9
N51,000-N70,000	36	18.4
N71,000-N90,000	7	3.6

disproportionate share of household work, which includes childbearing activities, domestic chores, and livestock rearing. These activities make women more sedentary. On the basis of occupation, the result showed that majority of women in the study area are engaged in farming (57.6%). The finding is in line with the view of Suleiman et al. (2014) that a lot of women in the rural areas are farmers and traders (engaging in petty trading). It is further corroborated by a previous finding by United Nations Women (UNW) (2014) that 63.4% of rural women in Africa work in the agricultural sector and have low incomes. The result shows that the majority (43.9%) of the women in the study area earn between 11,000 and 30,000 naira monthly. The implication is that the majority of the women's monthly income was below poverty level at \$1.90 (naira equivalent) a day, as stipulated by the international poverty line stated by the World Bank.

#### Social Intervention Projects Provided to Women in Rural Household in Rivers State

From results in Table 2, the N-power program, which attracted a mean-value (mean =3.90) is found to be one of the social intervention projects provided for women households in the study area. This finding is consistent with (Odey & Sambe, 2019), who concluded that the N-power scheme has had a significant impact on rural women. The N-power Agro program is designed to provide services to farmers and support the development of efficient farming techniques, and many women in the study area are keying in to it. Also, the result showed that FADAMA (mean = 3.17) is one of the intervention projects in the study area. The FADAMA project has benefited women by reducing rural poverty and increasing food availability through the transfer of financial and technical resources to beneficiaries. Furthermore, it was revealed in the study that Home Grown School Feeding (mean=2.95) is among the intervention projects in the study area.

Home Grown School Feeding is an innovative technique that connects school feeding programs with smallholder farmers in order to deliver safe, diverse, nutritious, and most importantly, locally grown food to schools. As a result, community women are empowered as cooks, and smallholder farmers constitute a food supply link, which helps encourage economic growth in rural areas. According to Ugwu (2019), women farmers take



Table 2Social Intervention Projects Provided to Women in Rural Household in River State

Items	Yes	No	Mean	Remark
N-Power Program	195 (99.5)	1 (0.5)	3.90	Accept
Home Grown School Feeding Program (HGSF)	169 (86.3)	27 (13.7)	2.95	Accept
Skill Acquisition Training	165 (84.2)	31 (15.8)	2.83	Accept
FADAMA	161 (82.1)	35 (17.9)	3.17	Accept
E-Wallet	178 (90.9)	18 (9.2)	2.92	Accept
Micro Credit for Investment	3 (1.5)	193 (98.5)	1.98	
Child Maternal Health Care Services	10 (5.1)	186 (94.9)	1.88	
Women in Agriculure Program	20 (10.2)	176 (89.8)	2.14	Reject
Sure-P	15 (7.7)	181 (92.3)	2.03	Reject
Conditional Cash Transfer (CCT)	8 (4.0)	153 (96.0)	1.86	Reject
Governmetn Enterprise and empowerment Program (GEEP)	7(3.5)	189 (96.5)	1.70	Reject
MarketMoni	15 (7.6)	181 (92.4)	1.43	Reject
Family economic Advancement Program	15 (7.6)	181 (92.4)	1.43	Reject
YOUWIN	2 (1.0)	194 (99.0)	1.32	Reject

Source: Field Data 2024

critical roles in producing food and, as such, act as a driving force in the home-grown school program in the study area. Skill acquisition training (mean=2.83) is indicated as among the intervention projects in the study area involving women. This finding agrees with Ugwu (2019) that the majority of rural women have acquired skills through such programs, which they utilize to support their families. The above projects do not preclude the existence of several other intervention projects identified in the study that were not significant enough to be included as major intervention projects in the discussion.

The finding corroborates previous findings that several social intervention programs are accessible to rural women, including the N-power program; the FADAMA project; homegrown school nutrition; skill acquisition training; microcredit for investment schemes; the family support program; and Sure-P (Suleiman et al., 2014; Ogakason & Faruk, 2014; Onwuemele et al., 2014; Ugwu, 2019).

# Social Media Tools Used in Tracking Social Intervention Projects Among Women in Rural Households in the Study Area

Results in Table 3 presented the social media tools used in tracking social intervention projects among women in the study area. It was found that the majority of the women (98.0%) in the study area indicated the use of instant messages. This might be attributed to the fact that instant messages are cost effective, less cumbersome to adapt to, and easy to access information. Also, the majority (97.4%) of the women covered in the study favored the use of WhatsApp. However, this does not mean that other social media tools are not used to track social intervention projects by women in the study area, but their use did not attract significant value to be included as key findings.

## Awareness of Social Media Tools in Tracking Social Intervention Project Among Women in Rural Households

Entries on Table 4 presented the awareness of the various social media tools in the Tracking Social Intervention Project among women in the study area. As indicated on the result, Facebook,



WhatsApp, and instant messages attracted Mean = 2.63, Mean = 3.03, and Mean = 2.99 in the awareness rating scale among women covered in the study. It is obvious that in the adoption process, knowledge (awareness) precedes usage. The high level of awareness of the three social

media messaging as shown in the result demonstrates their popularity and ease of use irrespective of the network and appliance in use. According to the result, the majority of respondents preferred instant messages, which attracted the highest awareness rating

**Table 3**Respondents Rating of Social Media Tools in Social Intervention Project Tracking to Women in Rural Households in the Study Area

Items	Yes	No	Mean	Remark
Instant Messages	4 (2.0)	192 (98.0)	3.81	Accept
Whats App	5 (2.5)	191 (97.4)	3.38	Accept
Twitter	153 (77.5)	44(22.5)	1.64	Reject
Instagram	189 (96.4)	7(3.6)	1.11	Reject
Facebook	116 (59.2)	80 (40.9)	2.20	Reject
Email	170 (86.7)	26 (13.3)	1.36	Reject
Linked In	193 (8.5)	3 (1.5)	1.04	Reject
Flicker	196 (100)	-	1.01	Reject
YouTube	193 (98.5)	3 (1.5)	1.06	Reject
Google+	170 (86.7)	26 (13.3)	1.39	Reject
Snapchat	186 (94.9)	10 (5.1)	1.15	Reject
Messenger	154 (78.6)	42 (21.4)	1.63	Reject
Skype	195 (99.5)	1 (0.5)	1.01	Reject
Chat on	196 (100)	-	1.00	Reject
Wikis	196 (100)	-	1.00	Reject
Orkut	196 (100)	-	1.01	Reject
Palmchat	196 (100)	-	1.10	Reject
Pinterest	193 (98.4)	3 (1.5)	1.06	Reject
Operamini	183 (93.4)	13 (6.6)	1.24	Reject
Myspace	194 (99.0)	2 (1.0)	1.03	Reject
Telegram	191 (97.4)	5 (2.6)	1.06	Reject
Vimeo	195 (99.5)	1 (0.5)	1.01	Reject
Blogger	151 (77.0)	45 (23.0)	1.67	Reject
Quota	191 (97.4)	5 (2.6)	1.09	Reject
Reddit	196 (100)	-	1.01	Reject
Doggy	196 (100)	-	1.00	Reject
Flipboard	196 (100)	-	1.00	Reject
Wordpress	196 (100)	-	1.00	Reject
Yahoo Mesenger	176 (8.9)	20 (10.2)	1.33	Reject
Friendster	196 (100)	-	1.00	Reject
2go	196 (100)	-	1.01	Reject

Source: Field Data 2024



(Mean = 3.03) in tracking social intervention. This result is in conformity with the common view, which regards instant message platforms as 'over the top' applications. This is because it allows communication regardless of the network and the mobile device being used, which makes it easy to have access to

social intervention projects via instant messages. Furthermore, WhatsApp attracted a Mean = 2.99 in the awareness rating as a social media tool in tracking social intervention projects in the study area. The finding corroborates previous finding by Suleiman et al. (2018) that WhatsApp is a

**Table 4**Respondents Rating of Awareness of Social Media Tools in Tracking Social Intervention Project Among Women in Rural Households in the Study Area

Items	Yes	No	Mean	Remark
Facebook	123 (62.7)	73 (37.3)	2.63	Aware
WhatsApp	187 (97.4)	9 (4.6)	3.03	Aware
Instant Messages	191 (98.0)	9 (4.6)	3.03	Aware
Email	27 (13.8)	169 (86.2)	1.99	Not Aware
Twitter	46 (23.5)	150 (76.5)	2.08	Not Aware
Instagram	5 (2.5)	191 (97.5)	1.95	Not Aware
LinkedIn	1 (0.5)	195 (99.5)	1.96	Not Aware
Flicker	3 (1.5)	193 (98.5)	1.97	Not Aware
YouTube	3 (1.5)	193 (98.5)	1.97	Not Aware
Google+	34 (17.4)	162 (82.6)	2.11	Not Aware
Snapchat	1 (0.5)	195 (99.5)	1.93	Not Aware
Messenger	97 (49.5)	99 (50.5)	2.42	Not Aware
Skype	1 (0.5)	195 (99.5)	1.91	Not Aware
Chat on	1 (0.5)	195 (99.5)	1.88	Not Aware
Wikis	1 (0.5)	195 (99.5)	1.86	Not Aware
Orkut	2 (1.0)	194 (98.9)	1.84	Not Aware
Palmchat	1 (0.5)	195 (99.5)	1.87	Not Aware
Pinterest	10 (5.1)	186 (94.9)	1.91	Not Aware
Operamini	16 (8.2)	169 (92.3)	1.92	Not Aware
Myspace	1 (0.5)	195 (99.5)	1.85	Not Aware
Telegram	1 (0.5)	194 (99.0)	1.83	Not Aware
Vimeo	2 (1.0)	194 (99.0)	1.89	Not Aware
Blogger	86 (43.9)	110 (56.1)	2.38	Not Aware
Quota	8 (4.1)	188 (95.9)	1.93	Not Aware
Reddit	-	196 (100.3)	1.85	Not Aware
Doggy	-	196 (100.0)	1.81	Not Aware
Flipboard	-	196 (100.0)	1.81	Not Aware
Wordpress	-	196 (100.0)	1.78	Not Aware
Yahoo Messenger	52 (26.6)	144 (73.4)	2.01	Not Aware
Friendstar	1 (0.5)	195 (99.5)	1.81	Not Aware
2go	2 (1.0)	194 (99.0)	1.82	Not Aware

Source: From field, data 2021

Figures in parenthesis are percentages Decision in parenthesis are percentage



populous mobile instant-messaging-network, with over 1.2 billion monthly active users. Facebook also attracted an awareness Mean rating = 2.63. Facebook sites are one of the most effective communication tools for tracking intervention projects. However, other social media tools recorded a low percentage in the awareness rating to be included as major social media tools but this does not preclude their awareness among the women covered in the study. Considering the variety and number of social media tools listed for investigation, it indicated that women in the study area have low knowledge of them. The finding corroborates Saravanan and Bhattacharjee's (2016) finding that rural women's lack of awareness of social media tools has been cited as a major cause for their limited use of social media platforms.

## Frequency of Utilization of Social Media Tools in Project Tracking Among Women in Rural Households in Rivers State

The result on the frequency of utilization of social media tools in tracking social intervention projects among women in the study area was presented on Table 5. The social media platforms mainly used by the women in rural households for project tracking were WhatsApp and Instant messages. In the frequency scale rating, WhatsApp attracted the highest rating (mean = 2.68) of utilization. This might be so because WhatsApp is a relatively closed medium, which makes users much more connected, and the information being shared is through texts, pictures, and videos, making it a dynamic information exchange platform (Devesh & Mahesh, 2018). This is followed by Instant messages (mean = 2.26).

People use the social media platform for different purposes as they desire. This is in line with the uses and gratifications theory. Folarin (1998), cited in Nwafor et al. (2013), maintained that, this theory is hinged on the fact that audience members have definite desires that make them accept media messages, which may be due to the satisfactions obtained from the very message. A high usage of WhatsApp and Instant messaging in project tracking to the exclusion of other social media platforms indicate the choice of the majority of the women in rural households as they desire. Besides, WhatsApp and instant messages are less cumbersome to operate, easily accessible and does not place much demand on technicalities. Those attributes make the trio

usable even among less educated folks. There is a low percentage frequency of utilization of various other social media tools investigated in tracking SIPs among women in the study area.

# Relationship Between Socio-Economic Characteristics of Women in Rural Households and Their Awareness of Social Media Tools in Tracking Social Intervention Projects

To test the level of relationship between socioeconomic characteristics of women in rural households and their awareness of social media tools in tracking social intervention projects, it was tested using the Ordinary Least Square (OLS) regression model, and the result is presented in Table 6. The result indicates that the semi-log regression result was chosen as the lead equation based on its high R2 value, high number of significant values, which conforms to a priori expectation. The result from the semi-log regression equation showed that marital status was negative, though significant at the 10% level of significance. This implies that married respondents are less aware of social media tools because of their engagement in time-consuming marriage tasks such as domestic chores, child rearing, and caring for entire families. This impairs their ability to communicate using available modes of communication. Additionally, their attitudes about media literacy may be frequently influenced by their children.

Furthermore, it was revealed that employment attracted a negative coefficient value but was statistically significant at the 10% level. This finding may be explained given the fact that employed women may be preoccupied with activities related to their jobs and may feel less concerned about knowledge of different social media tools or intervention projects. Also, monthly income attracted a negative coefficient value but was statistically significant at 1% level. This implies that with a decreasing income, awareness of social media tools in tracking social intervention projects among women in rural households in the study area increases. This result may find explanation in the fact that women with declining income, seek more information on the best ways and means to key into social intervention projects that can improve their income and welfare. Therefore, the hypothesis that there is no significant relationship between the socioeconomic characteristics of



women in rural households and their awareness of social media tools for tracking social intervention projects is rejected with respect to the significant variables of marital status,

employment, and income but accepted with respect to the non-significant variables of age, educational level, household size, and occupation.

**Table 5**Frequency of Utilization of Social Media Tools in Tracking Social Intervention Among Women in Rural Households in the Study Area

Items	Very Often	Often	Rarely	Mean	Remark
Instant Messages	58 (29.6)	130 (66.3)	8 (4.1)	2.26	Frequent
WhatsApp	138 (70.4)	53 (27.0)	5 (2.6)	2.68	Frequent
Email	89 (45.4)	6 (3.1)	101 (1.5)	1.94	Less Frequent
Twitter	22 (11.2)	12 (6.1)	162 (82.5)	1.29	Less Frequent
Instagram	-	1 (0.5)	195 (99.5)	1.01	Less Frequent
Facebook	30 (15.3)	30 (15.3)	136 (69.4)	1.46	Less Frequent
LinkedIn	-	4 (2.0)	192 (98.0	1.02	Less Frequent
Flicker	2 (1.0)	1 (0.5)	193 (98.5)	1.03	Less Frequent
YouTube	3 (1.5)	_	193 (98.5)	1.03	Less Frequent
Google+	14 (4.10	7 (3.6)	175 (89.3)	1.18	Less Frequent
Snapchat	2 (1.0)	1 (0.5)	193 (98.5)	1.03	Less Frequent
Messenger	21 (10.7)	6 (3.1)	169 (86.2)	1.24	Less Frequent
Skype	1 (0.5)	1 (0.5)	194 (99.0)	1.02	Less Frequent
Chat on	-	1 (0.5)	195 (99.5)	1.01	Less Frequent
Wikis	-	-	196 (100)	1.00	Less Frequent
Orkut	1 (0.5)	-	195 (99.5)	1.01	Less Frequent
Palmchat	-	1 (0.5)	195 (99.5)	1.01	Less Frequent
Pinterest	3 (1.5)	1 (0.5)	192 (98.0	1.04	Less Frequent
Operamini	10 (5.1)	1 (0.5)	185 (94.4)	1.11	Less Frequent
Myspace	1 (0.5)	4 (2.0)	191 (97.5)	1.03	Less Frequent
Telegram	1 (0.5)	-	195 (99.5)	1.01	Less Frequent
Vimeo	1 (0.5)	-	195 (99.5)	1.01	Less Frequent
Blogger	21 (10.7)	16 (8.2)	159 (81.1)	1.30	Less Frequent
Quota	1 (0.5)	1 (0.5)	194 (66.0)	1.02	Less Frequent
Reddit	1 (0.5)	-	195 (99.5)	1.01	Less Frequent
Doggx	-	1 (0.5)	195 (99.5)	1.01	Less Frequent
Flipboard	1 (0.5)	-	195 (99.5)	1.01	Less Frequent
Wordpress	-	-	196 (100)	1.00	Less Frequent
Yahoo Messenger	38 (19.4)	22 (11.2)	136 (69.4)	1.50	Less Frequent
Friendstar	-	-	196 (100)	1.00	Less Frequent
2go	1 (0.5)	-	195 (99.5)	1.01	Less Frequent

Source: From field data,2021

Figures in parenthesis are pecentages

Decision Rule: ≥2.00 frequent, < 2.00 less Frequent



**Table 6**Relationship Between Socioeconomic Characteristics of Women in Rural Households and Awareness of Social Media Tools in Social Intervention Projects Tracking

Variables	Linear	Exponential	Double-log	Semi-log
	Function	Function	Function	Function
Constant	113.894***	4.734***	4.707***	12.996***
	(23.68)	(101.4)	(34.84)	(8.12)
Age (X1)	0.097	9.616E-4	0.027	2.601
	(1.385)	(1.418)	(0.985)	(0.938)
Marital Status (X2)	1.233**	0.0119*	0.049***	5.019***
	(2.061)	(2.046)	(2.956)	(2.939)
Education Level (X <sub>3</sub> )	-0.067	-7.937E-4	0.00087	0.0925
	(-0.083)	(-0.101)	(0.0364)	(0.038)
Household size (X4)	-0.117	-9.361E-4	0.00119	0.0086
	(-0.48)	(-0.403)	(0.097)	(0.0068)
Employment (X <sub>5</sub> )	-6.618***	-0.065**	0.102***	-10.440***
	(-4.369)	(-4.398)	(-4.309)	(-4.265)
Occupational(X6)	0.122	7.612E-4	-0.00117	-0.027
	(0.226)	(0.145)	(-0.084)	(-0.019)
Monthly Income (X7)	-0.000063** (-2.201)	-5.729E- 07** (-2.052)	-0.0129* (-1.665)	-1.4757* (-1.848)
$\mathbb{R}^2$	0.353	0.344	0.355	0.362
F-ratio	14.672	14.113	14.759	15.258

Source: Field survey, 2024

Figure in parenthesis are t-values, \*1%, \*\*5%, \*\*\*10% significant Levels

# Relationship Between Socio-Economic Characteristics of Women in Rural Households and Utilization of Social Media Tools in Social Intervention Projects Tracking

To test the level of relationship between socioeconomic characteristics of women in rural households and their utilization of social media tools in tracking social intervention projects: Ordinary Least Square (OLS) regression was used. From the result in Table 7, double-log regression results were chosen as the lead equation due to its high R<sup>2</sup> value, high number of significant values, which conform to the a priori expectation. From the result, the variable of marital status (t=-2.787)of the women in the study area indicated a negative but significant relationship with the utilization of social media tools in tracking social intervention projects in the study area at 10% level of significance. This implies that married women in the study area are less disposed to the utilization of social media tools in tracking social intervention projects. This might be so because the foregoing result on Table 6 has already indicated that married women are less aware of social media tools in tracking social intervention projects. Also, the result in Table 7 indicated that household size  $(X_4)$  attracted a coefficient of -0.070 with a t-value of -3.196.

The result was negative, though significant at the 10% level. This implies that the smaller the household size, the more women are disposed to utilization of social media tools in tracking social intervention projects in the study area. In other words, in households with fewer members, women in such households have the likelihood of utilizing social media tools in tracking social intervention project projects. This is because such women will have more time to themselves and be absolved from domestic chores that may occupy their time, unlike their counterparts in large households. In such situations, they spend more



**Table 7**Relationship Between Socioeconomic Characteristics of Women in Rural Households and Utilization of Social Media Tools in Social Intervention Projects Tracking

Variables	Linear	Exponential	Double-log	Semi-log
	Function	Function	Function	Function
Constant	35.698***	3.573***	3.496***	35.201***
	(10.02)	(42.41)	(14.50)	(3.455)
Age (X1)	-0.038	-0.00073	-0.015	-0.920
	(-0.731)	(-0.594)	(-0318)	(-0.453)
Marital Status (X2)	-0.854*	-0.019*	-0.082***	-3.629***
	(1.927)	(-1.852)	(-2.787)	(-2.903)
Education Level (X <sub>3</sub> )	0.287	0.0072	0.015	0.539
	(0.478)	(0.508)	(0.357)	(0.301)
Household size (X4)	-431***	-0.011***	-0.070***	-2.804***
	(-2.430)	(-2.622)	(-3.196)	(-3.017)
Employment (X5)	2.739**	0.062**	0.119***	5.327***
	(2.442)	(2.334)	(2.824)	(2.973)
Occupational(X6)	0.643	0.012	0.045	2.051*
	(1.612)	(1.432)	(1.797)	(1.941)
Monthly Income (X7)	4.027E-05*	1.073E-06**	0.027*	0.940
	(1.892)	(2.132)	(1.947)	(1.608)
R <sup>2</sup>	0.156	0.169	0.198	0.187
F-ratio	4.963	5.442	6.637	6.188

Source: Field Survey, 2021

Figure in parenthesis are t-values, \*1%, \*\*5%, \*\*\*10% significant Levels

time on social media usage. Also, employment  $(X_5)$  attracted a coefficient of 0.119 and t-value of 2.824. The result was positive at 10% level of significance. This implies that the more women in the study area are employed, the more they use social media tools in tracking social intervention projects. This may arise as they have contact with and learn the use of social media tools from colleagues in their places of engagement. Furthermore, the result indicated that monthly income  $(X_7)$  attracted a coefficient of 0.027 and a t-value of 1.947.

The result was positive at the 1% level of significance. This implies that as the women's income increases, there is a likelihood for them to utilize social media tools in tracking social intervention projects in the study area. This is because increasing income offers them the ability to purchase service data and credit for continuous use on their phones and similar social media appliances. Therefore, the hypothesis, which states that there is no significant relationship between socioeconomic characteristics of women

in the study area and their utilization of social media tools in social intervention project tracking, is rejected with respect to the significant variables of marital status, household size, employment, and monthly income but accepted with respect to the non-significant variables of age, educational level, and occupation.

#### Conclusions

Based on the study, it is established that only a few of the social intervention projects were available to women in rural households and there was a high response on the use of WhatsApp, Instant messaging, and Facebook. The other categories like Myspace, Yahoo Messenger, Pinterest, Friendster, Blogger, Reddit, etc. are less popular among the women for project tracking. Also, there is a low level of awareness and frequency of utilization of various categories of social media tools in tracking social intervention projects among women in the study area. There



is a significant relationship between marital status, employment, and income of women and their awareness of social media tools in tracking social intervention projects. Furthermore, there is a significant relationship between marital status, household size, employment, and monthly income of women in the study area and their utilization of social media tools in tracking social intervention projects.

#### Recommendations

on the findings, the following recommendations are made (a) Social intervention projects should be targeted more on women at their productive age of 39 years, which is the most active and productive age for women in the study area to achieve the highest return.; (b)Based on the no-formal education status of many rural women, they are educated enough to operate mobile devices to access social media information, but due to household and domestic chores, they have little time to access social media. Based on this, it's imperative that the Ministry of Women Affairs creates liaison offices that bring news closer to the women in their rural communities.; (c) Staff of rural intervention agencies should be trained and taught on how to conduct effective and successful campaigns in rural communities towards improving awareness and utilization of intervention projects by women.; (d) An awareness campaign be encouraged and mounted by local government councils for women on the advantages of the different social media platforms and what they stand to gain by regularly making use of them.; (e) It is recommended that WhatsApp and Instant messages should be used as opposed to other social media options, as WhatsApp are more user friendly, especially if the organizers of the intervention programs need the participation of the vast majority of rural women.; and (f) Network providers, communication agencies, and social media staff should conduct regular training for rural women on the use of various social media tools and appliances.

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