



## **Social Media as a Tool for Improving the Attitude and Intention of Married Civil Servants' Towards Adopting In-Vitro Fertilization Messages in Lagos State**

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### ***Abstract***

*Infertility affects 48 million couples and 186 million individuals globally, caused by numerous factors in both genders. The study investigated social media as a tool for improving the attitude and intention of married civil servants' towards adopting in-vitro fertilization messages in Lagos State. The investigation was hinged upon the tenets of both theory of planned behavior and uses of gratification theories. The study found that 14.1% of participants access IVF messages from Facebook compared to YouTube (8%) and Instagram (9.7%). Also, the research revealed a significant difference in the attitude and intention of married civil servants towards adopting IVF messages by demographic factors. Conclusively, the study recommends that in-vitro fertilization messages should be intensified on these selected platforms such that these messages are created in various dialect to aid understanding of its users who are in need of these services.*

**Keywords:** *Social Media, In-Vitro Fertilization, Married Civil Servants, Attitude, Intention*

## Introduction

Infertility affects 48 million couples and 186 million individuals in their reproductive age globally and its adverse effect on families and communities can deter men and women when socially pressured to prove their fertility at an early age due to the high value placed on childbearing (World Health Organization, 2020). With the prevalence of infertility cases globally, its impact on the mental health of families can lead to vices such as patronage of baby factories and kidnapping in society.

In Africa, bearing children is considered a cultural obligation and failure to produce them is considered a shortcoming for which married couples are often stigmatized (Olarinoye & Ajiboye, 2019). In Nigeria, a man's wealth and power are measured by the number of children (especially sons he has) and a woman's worth depending on the number of children (especially sons) she birthed. This shows the economic and social benefits of having children serve both social and psychological needs (Akande, Ajuwon, & Dipeolu, 2019). In a situation where the couple is unable to produce children within one year of marriage, families, friends, colleagues, and neighbors

become worried and the woman's fertility may be questioned.

Infertility can be caused by abnormal shape and movement of sperm, absence and low level of sperm in the male reproductive system, while ovarian abnormalities, blocked fallopian tubes and problems with the uterus are the problems associated with infertility in the female reproductive system. Also, environmental and lifestyle choices such as smoking, excessive alcohol and obesity are contributing factors causing infertility (World Health Organization, 2020).

In a cross sectional study conducted by Afshani, Abdoli, Hashempour, Baghbeheshti, and Zolfaghari (2014) revealed a significant relationship between the attitude of infertile couples spousal attitude and their applied knowledge of assisted reproductive technology obtained from families. The Iranian researchers further assert that the positive attitude of infertile couples was influenced by their families' knowledge of assisted reproductive technology (Afshani, Abdoli, Hashempour, Baghbeheshti, & Zolfaghari, 2016). The question that stem out of curiosity is where did these family members obtain their knowledge of assisted reproductive

technology which could influence the attitude of infertile couples towards the procedure? Did they obtain it from social media, fertility centers or hospitals? The findings of Sormunen, Karlgren, Aanesen, Fossum& Westerbotn (2020) that 97% of their respondents were females who affirmed that they part took in discussions of infertility through Facebook between one and three years while 39% of the participants revealed that they contributed to the discussion more than once a day. The researchers further disclosed that half of the participants devoted one to three hours to the forum and published between one to five contents per week. In the same vein, the researchers established that the forum offered participants information, solidarity, and the opportunity to send and receive support. This empirical evidence suggests that social media plays a significant role in the lives of persons battling infertility. Their emotional and psychological health are protected through the available forum on social media to discuss the subject of infertility, where people are uncomfortable discussing in some parts of the world.

In the bid to curb the adverse effect of infertility among married civil servants in Lagos State, the preference of assisted reproductive technology such as in-vitro fertilization can be introduced to persons within this category; however, their attitude and intention of accepting or rejecting the option of in-vitro fertilization are subject to their knowledge of the procedure which differs by gender, level of education, religion, ethnicity, age and family setting. Hence, the study sought to investigate the social media platforms married civil servants in Lagos State use in accessing in-vitro fertilization messages, probe the link between social media usage and the intention of married civil servants to adopt in-vitro fertilization messages. Also, the study sought to interrogate the relationship between social media usage and the attitude of married civil servants towards in-vitro fertilization messages, find out the attitude of married civil servants in Lagos state towards in-vitro fertilization by demographic factors and examine the intention of married civil servants in Lagos state in adopting in-vitro fertilization by demographic factors.

## **REVIEW OF LITERATURE**

### **Attitude towards In-Vitro fertilization messages on social media**

Nagórska, Bartosiewicz, Obrzut, Dorota Kolarz (2019) investigated the experiential differences on infertility among Polish couples. Their findings showed that women were receptive in discussing their infertility challenges with

others, whereas most of the men from the study affirmed they preferred to discuss their infertility challenges with their partners than going out of their comfort zone. In contrast to the men who often feel helpless, women express sadness over their inability to conceive whenever they are in the company of close friends and relations. The researchers also found that Polish men had greater faith in treatment for reproductive ailments than women and they were also more likely to accept their childlessness as fate than women. They suggested that gender differences should be considered when diagnosing and recommending treatment for couples dealing with infertility issues. They also recommended psychological and sociological support for such couples. From a methodological perspective, the choice of a focus group discussion would enrich the study to aid the researchers in understanding the perspective of men who are not willing to share their infertility challenges with specialists in reproduction.

Anifandis et al. (2018) conducted a study where 60% of respondents are satisfied with surrogacy as a childbearing option. Their primary reason for venturing into the option is altruism, reinforcing their self-esteem as young mothers. This study addresses the risk in surrogacy considering the embryo from the pre-implementation to the gestational and neonatal period as it further calls for larger management and study of in-vitro fertilization as a form of assisted reproductive technology compared to surrogacy. However, the study adopted a conceptual review to measure the self-esteem of young mothers, which could be conducted using a focus group discussion in its methodology to elicit information from the participants, thereby studying their body language and attitude towards assisted reproductive technology.

A longitudinal study carried out by Tieu (2009) on the objectification of surrogate mothers found that surrogacy destroys the natural, intuitive and intimate mother-to-child relationship due to the altruistic perspective and objectification of the surrogate mothers. However, the study failed to explore the communication angle, which fills a knowledge gap yet to be filled.

Bello, Akinajo, and Oladapo (2014) found that 38% of female patrons of fertility centers in Ibadan, southwest Nigeria are receptive to surrogacy as a remedy for their infertility issues and prefer strangers as their surrogate rather than a relation known to them. Their investigation aimed to address the acceptability of assisted reproductive technologies offered to female patrons of fertility services offered by University College Hospital in Ibadan, South West

Nigeria. The study addressed the problem of surrogacy not forming a public discourse in Nigeria as the findings further revealed that studies had not documented the prevalence of surrogacy in Nigeria, although the authors assert that surrogacy forms part of the assisted reproductive technique offered to infertile couples in the country. In light of those mentioned above, the gap shows that research has not identified surrogacy as a prevalent method of assisted reproductive technology in Nigeria.

Similarly, Golombok, Cook, Bish and Murra (1995) in their experimental studies, addressed the issue of parenting quality of families with children conceived from assisted reproductive technologies their findings proved that the quality of parenting in families with child of assisted reproductive technologies is superior to that of families with children conceived naturally. The findings were discussed in line of their implications for understanding the role of genetic ties in family functioning and child development.

Wiltshire, Brayboy, Phillips, Matthews, Yan and McCarthy-Keith (2019) conducted a cross-sectional survey on the knowledge of infertility and treatment beliefs among African-American women in Atlanta, Georgia. Their findings suggest that African American women in urban clinic settings seem to have limited knowledge about infertility. The study further asserts that the poor knowledge of basic infertility issues can adversely affect women's fertility choices and childbearing. The gap identified from the study reveal that there is no communication perspective to the study (Ashley , et al., 2019).

The concept of attitude has been widely used in all works of life which the health industry is not an exemption. "Attitude" is an English word borrowed from French. The French had also adapted it from "attitudine" an Italian word which is also an adaptation of the Latin words "aptitudinis" and "aptitude". Attitude is a state of preparedness to offer a characteristic response to a stimulus. It is also described as a position assumed for a specific purpose, a mental position about a fact or state,nd a feeling or pattern of thought that determines someone's behavior ( Merriam-Webster, 2020).

Regarding the research variable, what comes to mind is, does culture play any significant role in shaping their attitude? What is the role of religion in shaping the attitude of these persons in accepting this treatment? What is the role of social media messages in forming attitudinal change of persons offered this option? All these questions are arrows that point to the attitudinal change of persons offered this option which differs from one person to another. In

reviewing available literature, there is no universal definition of the term attitude as it has been inconsistently defined and measured with various indicators as it remains relative to persons.

In the submission of Allport (1937), attitude is a mental condition of preparedness which is attained through experience; it exerts a direct and vibrant influence on people's reactions to situations with which they interface. The views of psychological scholars on the concept of attitude assert that it is obtained via cognitive learning involvements. This means that attitude is a product of progressive information integration (Nop & Kathleen, 2013). Sequel to the research subject, the experiences of persons offered the option of in-vitro fertilization have a way of forming their attitudinal change in adopting social media messages targeted at assisted reproductive technology (ART), which in-vitro fertilization (IVF) is a form of it.

### **Intention of adopting In-vitro fertilization messages on social media**

As the construct of attitude has been used inconsistently in various works of life, the term intention is used inconsistently. The mind then begins to absorb the shared knowledge and behavioral pattern of various persons who share similar views on any topical issue. Merriam Webster Dictionary regards intention as a concept considered as the product of attention directed to an object of knowledge as well as a determination to act in a certain way (Merriam-Webster, 2020).

Relating the research construct to the subject matter, the concept of intention is relative to persons categorized with the option of assisted reproductive technology due to their exposure to health messages on the subject matter, available medium of communication in accessing these messages, societal influence such as peer pressure, religious leaders, friends and family which enable them to see reasons why they should adopt the option of in-vitro fertilization as a treatment modality for infertility, family planning, and childlessness. Some Psychological scholars have argued that intentions are largely based on the disposition to carry out an action or series of actions (affective attitudes) and less on beliefs about the potential outcomes of the actions (cognitive attitudes) are also associated with improved prediction of behavior (Paschal & Thomas, 2016).

## **THEORETICAL PERSPECTIVE**

The theoretical review section of the research subject discusses the tenets and applications of the relevant theories which the study is anchored upon. The uses and gratification theories that focus on the gain in which media audience obtain from the media usage were selected due to their assertions. They are relevant to the study and are discussed below.

### **Theory of Planned Behavior (TPB)**

Ajzen and Fishbein put forward this theory in 1980, which was phrased as theory of reasoned action (TRA) which emanated from the attitudinal research of the expectancy-value models (University Of Twente, 2020). The theory of reasoned action was borne out of voluntary behavior after attempting to evaluate the divergence between behavior and attitude which was discovered that the behavior was not intentional; rather, it was under control thereby birthing the theory of planned behavior, which predicted considered behavior. It is important to note that behavior could be spontaneous or deliberate.

The theory's core assumption is that only the same attitudes toward the behavior in question can be expected to predict it. Aside measuring attitudes towards certain behaviors, it is important to also evaluate human biased actions. To predict individual intentions, it is important to understand the person's beliefs and attitudes. It is also important to note that perceived behavioral control influences human intentions. Perceived behavioral control in this regard is people's view of their ability to carry out given behaviors. In principle, an increase in the favorability of the attitude and the subjective practices leads to greater perceived control and individual intention to carry out the behavior under consideration. Intention is the best predictor of behavior. Intention refers to the mental representation of an individual's willingness to carry out a specific action or task. Intention is seen as the direct precursor to behavior. There are three determinants of intention. These are subjective norms, attitude towards certain behaviors and perceived behavioral control (University Of Twente, 2020).

In relating the tenets of the theory to the study, intention is a mental visualization of an individual's preparedness to accept a solution to their identified problem. Considering the option of assisted reproductive technology which comprises of in-vitro fertilization, offered married couples on a fertility journey to parenthood, intention has a way of shaping their attitude to the

technology as it brings them assistance, especially the woman who is being psychologically bashed for not having children within the society's time frame of nine months to one year after marriage. The attitude towards behavior reflects the value the people place on the adoption of the promoted behavior. Therefore, the health communicator's perception would determine the audience's disposition to adopt the messages promoted on IVF.

### **Relevance of the model to the study**

The tenets of theory of planned behavior (TPB) recognize intention as an indicator to behavior. This study employs the theory of planned behavior to explain the intention of adopting messages on in-vitro fertilization among married civil servants in Lagos State. This study seeks to measure knowledge and attitude through a survey. It also seeks to evaluate the intention of adopting in-vitro fertilization messages on social media. This would be used to identify the participants' actual behavior after conducting the survey.

The affirmations of Ajzen and Klobas (2013) theory of planned behavior survey can also guide the adoption of policies that could either encourage or discourage couples from having more children because fertility research is usually conducted through large-scale surveys. Also, they are usually included in surveys that include various issues (p. 224). In light of the above, this study prepared a structured questionnaire to identify Lagos State married civil servants' attitude and intention towards in-vitro fertilization, and misconceptions establish the perceived behavior impeding the adoption of in-vitro fertilization messages.

### **Uses and Gratification Theory**

The theory was the product of the intellectual effort of Elihu Katz, Jay Blumler, and Michael Gurevitch in the 1970s. The development of the theory is a reaction to the media-centered approach of traditional media research which inherently portrayed the media audience as passive. The founders of the uses and gratification theory pushed the audience to the center of media research describing them (the audience) as active users of the mass media. Uses and gratification theory focuses on how media audience use the media to satisfy their needs. In addition to explaining how the audience use the media to satisfy their individual and collective needs, the theory also seeks to uncover the



benefits and disadvantages of media use by individuals (Littlejohn & Foss, 2009).

In the perception of the uses and gratifications paradigm, media consumers are influential in producing and consuming media messages. This influence hinges on the powers of the audience to choose, perceive, interpret, retain and recall media messages according to individual and collective needs, beliefs, knowledge, attitudes and desires of the audience (Babatunde, 1998). Agenda setting theory has shifted attention from the production and dissemination of media messages by media organizations to the reception and consumption of same by the active audience. It has also shifted attention away from media effects and redirected same to patterns of consumption as well as the reasons for consumptions and contexts under which media consumption takes place.

### **Relevance of the theory to the study**

In relating the tenets of this theory to the research subject, persons or couples offered the option of in-vitro fertilization (IVF) who selectively use social media messages to broaden their knowledge of in-vitro fertilization gets gratification such as how IVF is used as a method of family planning, treatment modality for infertility, cost of funding in-vitro fertilization, other people whom have gone through the process, the difference between the in-vitro fertilization and other assisted reproductive technology and ultimately have a change in attitude on the subject matter which could either be positive or negative. Uses and gratification theory is considered relevant to the study as the gratification which the audience receive from their selected social media platform is messages on in-vitro fertilization which in turn broaden their knowledge and ultimately shape their attitude towards the subject matter.

## **METHODOLOGY**

### **Study Design**

The study used survey research design to examine the attitude and intention of married civil servants to adopt in-vitro fertilization messages on social media in Lagos State. The study population was selected using both simple random and purposive sampling techniques in selecting the participants. Facebook, Instagram and YouTube were the selected social media platforms used in study. The rationale for selecting these platforms was that they combined both visual and audio-visual contents in disseminating messages on in-vitro fertilization

and these platforms are Facebook, Instagram and YouTube. Compared to the traditional media, these social media platforms were selected due to the prompt feedback mechanism such as direct message channel, comment section, interconnected platform link and mobile applications. Five hundred copies (500) of the questionnaire were distributed, while four hundred and seventy five copies (475) were retrieved from participants and validated for further studies; resulting in 95 percent response rate.

## RESULTS

**Table 1.1 Demographic Characteristics of Respondents**

Variable		Frequency (n)	Percentage (%)
<b>Gender</b>	Male	221	46.5
	Female	254	53.5
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Age</b>	25-34	150	31.6
	35-44	176	37.1
	45-54	149	31.4
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Highest Education</b>	OND/HND	97	20.4
	BSc	283	59.6
	MSc	93	19.6
	PhD	2	.4
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Tribe</b>	Fulani	34	7.2
	Hausa	20	4.2
	Igbo	85	17.9
	Yoruba	336	70.7
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Religion</b>	Christianity	257	54.1
	Islam	218	45.9
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Level in Service</b>	8-10	156	32.8
	11-13	220	46.3
	14-16	99	20.8
	<b>Total</b>	<b>475</b>	<b>100.0</b>

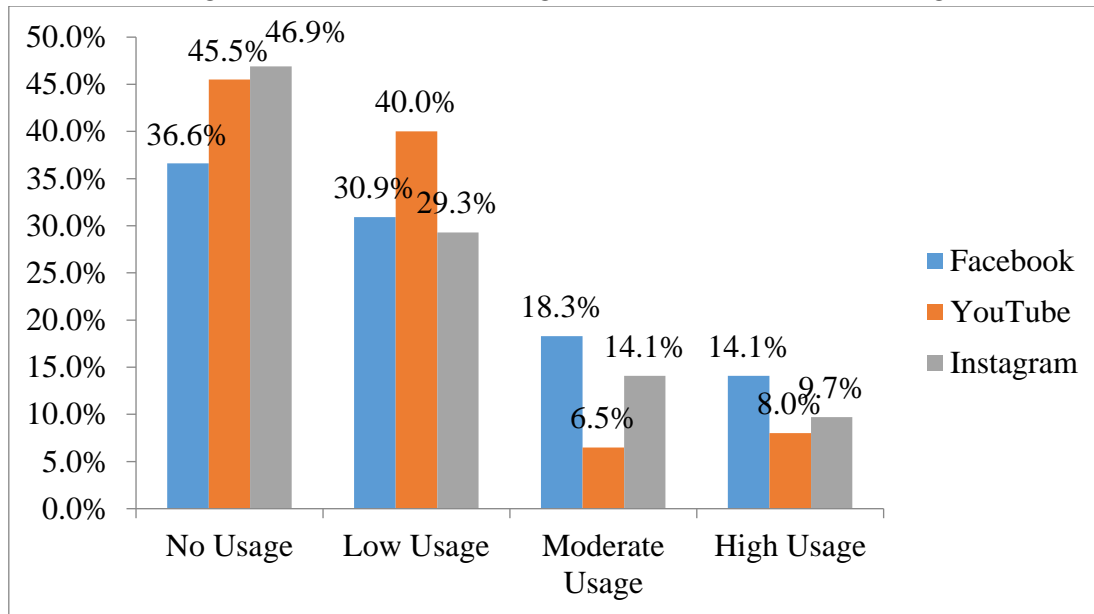
<b>Family Setting</b>	Monogamy	392	82.5
	Polygamy	83	17.5
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Years of Marriage</b>	1-3	166	34.9
	4-6	166	34.9
	7-10	143	30.1
	<b>Total</b>	<b>475</b>	<b>100.0</b>
<b>Number of Children</b>	0	185	38.9
	1-2	196	41.3
	3-4	84	17.7
	5-6	8	1.7
	7-10	2	.4
	<b>Total</b>	<b>475</b>	<b>100.0</b>

**Source:** Field Survey 2021

Table 1.1 shows that there were more female (53.5%) participants in this study than males (46.5%). More respondents were between the ages of 35 to 44 (37.1%), younger participants had 31.6 % representation; while older ones had 31.4% representation. Majority of the participants had advanced level of education. 59.6% had Bachelor of Science degree, 19.6% had Master of Science degree; while those with doctoral degrees (0.4%) were the least represented in the study. The study was dominated by participants of *Yoruba* (70.7%) ethnic group. This seem to be the case because the study was among civil servants in Lagos State which is traditionally known as one of the *Yoruba* speaking states in the South-West geographic area of Nigeria. The *Igbos* had 17.9% representation in the study; while the tribe with the least representation was the *Hausa* ethnic group (4.2%).

Many of the participants were between levels 11 to 13 (46.3%), while those who were between levels 14 to 16 (20.8%) were the least represented in the study. Majority of the respondents were monogamists (82.5%), while 17.5% were polygamists. Many of the respondents (34.9%) were married between 1 to 3 and 4 to 6 years (34.9%); while 30.1% had been married for 7 to 10 years. Many of the participants had between 1 to 2 children (41.3%), followed by those with 3 to 4 children (17.7%). 38.9% of the participants had no children; while few had between 7 to 10 children (0.4%).

**Research Question One:** What are the social media platforms married civil servants in Lagos state use in accessing in-vitro fertilization messages?

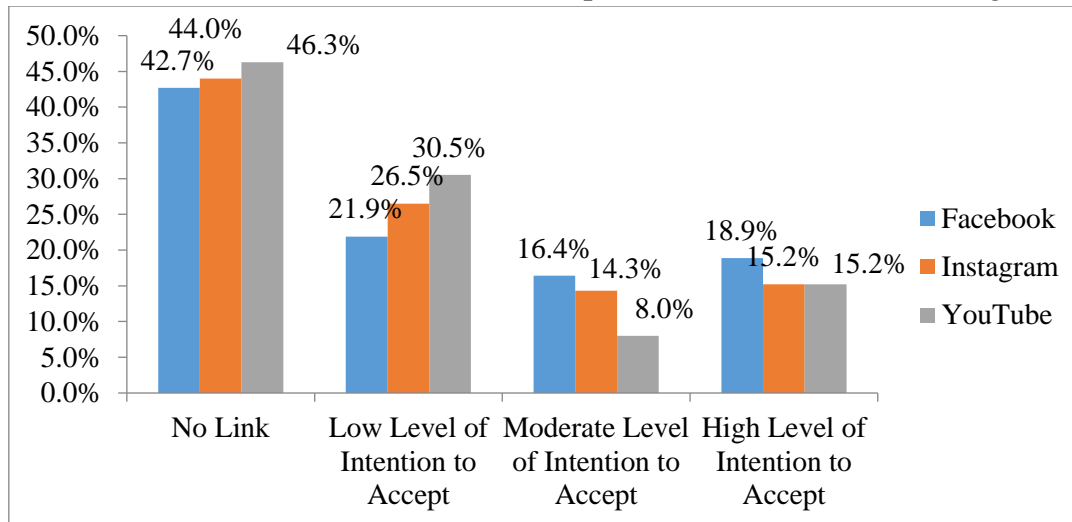


**Source:** Field Survey 2021

**Fig.1.1 Social Media Platforms Married Civil Servants in Lagos State use in Accessing In-Vitro Fertilization Messages**

Fig.1.1 shows that few participants from the general standpoint accessed in-vitro fertilization messages highly from social media (*Facebook* = 14.1%, *YouTube* = 8%, *Instagram* = 9.7%). In addition, this was also the case for respondents who accessed in-vitro fertilization messages moderately from social media (*Facebook* = 18.3%, *YouTube* = 6.5%, *Instagram* = 14.1%). More participants however had low access to in-vitro fertilization messages on the social media (*Facebook* = 30%, *YouTube* = 40%, *Instagram* = 29.3%). Lastly, the most proportion of respondents did not access in-vitro fertilization messages from social media (*Facebook* = 36.6%, *YouTube* = 45.5%, *Instagram* = 46.9%). This analysis highlight that generally, *Facebook*, *YouTube* and *Instagram* were used similarly in accessing in-vitro fertilization messages by married civil servants in Lagos State. However, more married civil servants moderately and highly accessed in-vitro fertilization messages from *Facebook* than *YouTube* and *Instagram*; while more of them had low access to in-vitro fertilization messages from *YouTube* than *Facebook* and *Instagram*.

**Research Question Two:** What is the link between social media usage and intention of married civil servants to accept in-vitro fertilization messages?



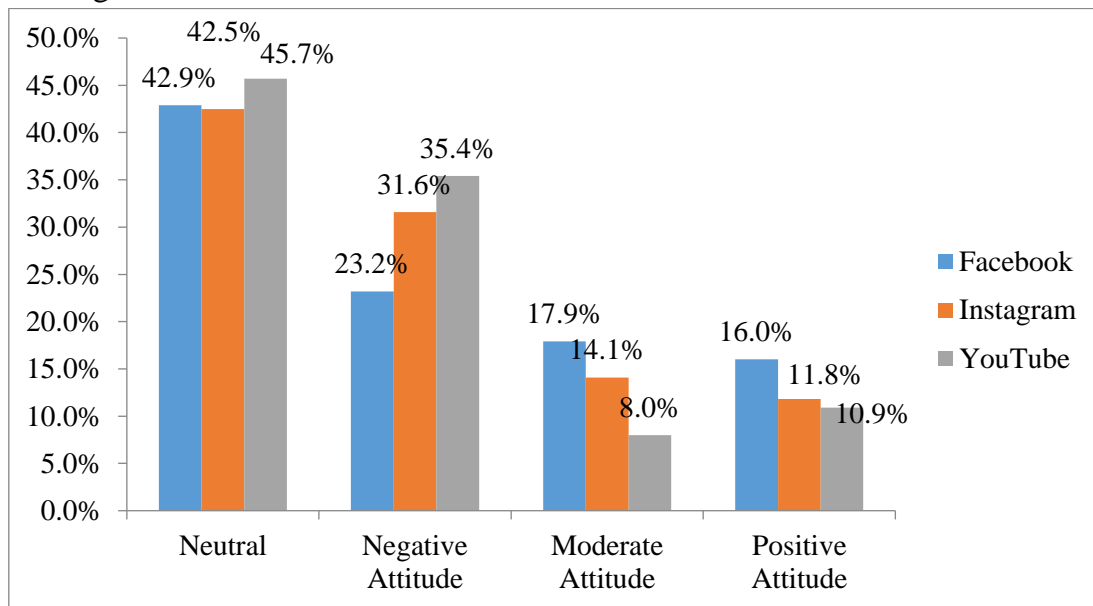
**Source:** Field Survey 2021

**Fig. 1.2 Link between Social Media Usage and Intention to Accept In-Vitro Fertilization Messages**

Fig.1.2 depicts that few participants established that there was a link between social media usage and high level of intention to accept in-vitro fertilization messages (*Facebook* = 18.9%, *YouTube* = 15.2%, *Instagram* = 15.2%). This was also the case with participants who revealed that there was a link between social media usage and moderate level of intention to accept in-vitro fertilization messages (*Facebook* = 16.4%, *YouTube* = 8.0%, *Instagram* = 14.3%). However, more respondents affirmed that there was a link between social media usage and low level of intention to accept in-vitro fertilization messages (*Facebook* = 21.9%, *YouTube* = 30.5%, *Instagram* = 26.5%); while larger proportion of participants disclosed that there was no link between social media usage and intention to accept in-vitro fertilization messages (*Facebook* = 42.7%, *YouTube* = 46.3%, *Instagram* = 44%). This analysis shows that generally, usage of *Facebook*, *YouTube* and *Instagram* by married civil servants in Lagos State were disclosed revealed there is a linked to acceptance of in-vitro fertilization messages in similar patterns across the selected social media platforms. However, some civil servants in Lagos State opined there was a weak link (low level of intention to accept); while more affirmed there was no link

between social media usage and intention to accept in-vitro fertilization messages.

**Research Question Three:** What is the relationship between social media usage and the attitude of married civil servants towards in-vitro fertilization messages?



**Source:** Field Survey 2021

**Fig. 1.3 Relationship between Social Media Usage and Attitude towards In-Vitro Fertilization Messages**

Fig.1.3 shows that few participants affirmed that there was a relationship between social media usage and positive attitude towards in-vitro fertilization messages (*Facebook* = 16%, *YouTube* = 10.9%, *Instagram* = 11.8%). This was also the case with respondents who disclosed that there was a relationship between social media usage and moderate attitude towards in-vitro fertilization messages (*Facebook* = 17.9%, *YouTube* = 8.0%, *Instagram* = 14.1%). However, more respondents opined that there was a relationship between social media usage and negative attitude towards in-vitro fertilization messages (*Facebook* = 23.2%, *YouTube* = 35.4%, *Instagram* = 31.6%). This implies that few married civil servants in Lagos State affirmed that social media usage was linked to positive attitude towards in-vitro fertilization messages. In addition, few civil servants assert that usage of social media was connected with having a moderate

attitude towards in-vitro fertilization messages. However, more civil servants revealed that there was a relationship between social media usage and having a negative attitude towards in-vitro fertilization messages.

**Research Question Four:** What is the attitude of married civil servants in Lagos State towards in-vitro fertilization?

**Table 1.2 Attitude of Civil Servants towards In-Vitro Fertilization**

<i>Items</i>	SA F (%)	A F (%)	D F (%)	SD F (%)	U F (%)	$\bar{x}$	SD
<b>IVF offers hope to infertile couples</b>	253 (53.3)	123 (25.9)	41 (8.6)	6 (1.3)	52 (10.9)	4.09	1.28
<b>The procedure is expensive</b>	245 (51.6)	114 (24)	46 (9.7)	9 (1.9)	61 (12.8)	4.00	1.36
<b>Women with previous fertility treatment will have a positive disposition towards IVF.</b>	93 (19.6)	196 (41.3)	68 (14.3)	21 (4.4)	97 (20.4)	3.35	1.39
<b>Men with previous fertility treatment will have a positive approach towards IVF.</b>	92 (19.4)	173 (36.4)	88 (18.5)	25 (5.3)	97 (20.4)	3.29	1.39
<b>Married couples with children will consent to the option of IVF.</b>	35 (7.4)	98 (20.6)	130 (27.4)	94 (19.8)	118 (24.8)	2.66	1.26
<b>Average Overall Mean</b>						<b>3.48</b>	<b>1.34</b>

**Source:** Field Survey 2021 **KEY:** SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, NS= Not Sure\*\*\***Decision Rule** if mean is  $\leq 1.79$ =Undecided; 1.80 to 2.59 = Strongly Disagree; 2.60 to 3.39 =Disagree; 3.40 to 4.19= Agree; 4.20 to 5= Strongly Agree

Table 1.2 depicts that married civil servants in Lagos State from the general standpoint agreed they were attitudinally disposed to in-vitro fertilization ( $\bar{x}$ = 3.48). Married civil servants in Lagos State were specifically attitudinally disposed to in-vitro fertilization because they agreed that IVF offered hope to infertile couples ( $\bar{x}$ = 4.09). They were however attitudinally indisposed to in-vitro fertilization because they disagreed that: women with previous fertility

treatment would have a positive disposition towards IVF ( $\bar{x}$ = 3.35), men with previous fertility treatment would have a positive approach towards IVF ( $\bar{x}$ = 3.29) and that married couples with children would consent to the option of IVF ( $\bar{x}$ = 2.66).

This shows that although married civil servants in Lagos State from the general perspective were attitudinally disposed to in-vitro fertilization. They were only specifically attitudinally disposed to in-vitro fertilization because they perceived that IVF offered hope to infertile couples. They were however attitudinally indisposed to in-vitro fertilization because they felt that women with previous fertility treatment would not have a positive disposition towards IVF, men with previous fertility treatment would not have a positive approach towards IVF and that married couples with children would not consent to the option of IVF.

**Research Question Five:** What is the intention of married civil servants in Lagos State in adopting in-vitro fertilization messages on social media?

**Table 1.3 Intention of Adopting In-Vitro Fertilization messages on Social Media among Civil Servants**

<i>IVF messages on Social Media will make me to:</i>	$\bar{x}$	SD
<b>Opt for the option if the need arises</b>	3.40	3.49
<b>Use only my husband's sperm for the procedure</b>	3.38	3.64
<b>I will use donor zygote for in-vitro fertilization</b>	1.27	2.61
<b>Accept donor oocyte for the procedure</b>	1.25	2.55
<b>Use donor sperm for my procedure</b>	1.25	2.51
<b>Average Overall Mean</b>	<b>2.11</b>	<b>2.96</b>

**Source:** Field Survey 2021 \*\*\* **Decision Rule:** if mean is 0 to 1.66 = No Intention to Adopt; 1.67 to 3.33 = Very Low Intention to Adopt, 3.34 to 5 = Low Intention to Adopt, 5.1 to 6.76=Moderate Intention to Adopt, 6.77 to 8.43=High Intention to Adopt, 8.44 to 10 = Very High Intention to Adopt

Table 1.3 indicates that married civil servants in Lagos State generally had very low intention to adopt in-vitro fertilization messages from the social media ( $\bar{x}$ = 2.11). They particularly had low intention to adopt in-vitro fertilization messages on social media in terms of: opting for the IVF option if the need arose ( $\bar{x}$ = 3.40) and would use only their husband's sperm for the procedure ( $\bar{x}$ = 3.38).



In addition, married civil servants in Lagos State had no intention to adopt in-vitro fertilization messages from the social media in terms of: using donor zygote for in-vitro fertilization ( $\bar{x}= 1.27$ ), accepting donor oocyte for the procedure ( $\bar{x}= 1.25$ ) and using donor sperm for their procedure ( $\bar{x}= 1.25$ ).

This analysis shows that married civil servants in Lagos State generally had very low intention to adopt in-vitro fertilization messages from the social media. They particularly had low intention to adopt in-vitro fertilization messages on social media in terms of: opting for the IVF option if the need arose and would use only their husband's sperm for the procedure. However, married civil servants in Lagos State had no intention to adopt in-vitro fertilization messages from the social media in terms of: using donor zygote for in-vitro fertilization, accepting donor oocyte for the procedure and using donor sperm for their procedure.

## **DISCUSSION OF FINDINGS**

Married civil servants in Lagos State from the general perspective were attitudinally disposed to in-vitro fertilization. They were however only attitudinally disposed to in-vitro fertilization because they revealed that IVF offered hope to infertile couples. Similarly, Anifandis, et al., (2018) reported that 60 percent of participants were satisfied with the option of surrogacy as a child bearing option. Folasade, Opeyemi, and Oladapo (2014) also found that many of the female patrons of fertility centers in Ibadan, South West Nigeria were receptive to surrogacy as remedy for their infertility issues. This study also corroborates the study conducted by Nagórska, Bartosiewicz, Obrzut, Dorota Kolarz (2019) where it was found that women were receptive to discussing their infertility challenges with others in the course of treatment. Conversely, this study also found that married civil servants in Lagos State were attitudinally indisposed to in-vitro fertilization because they affirmed that women with previous fertility treatment would not have a positive disposition towards IVF, men with previous fertility treatment would not have a positive approach towards IVF and that married couples with children would not consent to the option of IVF.

Furthermore, the test of hypothesis showed that there was no significant difference in the attitude of married civil servants towards in-vitro fertilization by gender ( $t(444.90)= -0.198, p>0.05$ ), which implies that the attitudinal disposition of married male and female civil servants in Lagos State was similar.

This study contradicts that conducted by Nagórska, Bartosiewicz, Obrzut, Dorota Kolarz (2019) where it was found that there were differences in the way men and women were receptive to discussing their infertility challenges with others. In this study, women were open to discussing their infertility challenges with others while men were open to discussing it with their partners. On the other hand, this study showed that there was no significant difference in intention of adopting in-vitro fertilization messages on social media by gender ( $t(473) = -1.547, p > 0.05$ ), therefore the intention of adopting in-vitro fertilization messages on social media among male and female married civil servants in Lagos State was similar.

Furthermore, social media usage by married civil servants in accessing IVF messages was found to significantly influence their attitude towards IVF messages ( $\beta = 0.436, t = 10.529, p < 0.05$ ). This implies that increased usage of social media for accessing IVF messages by married civil servants in Lagos State will improve their attitude towards IVF messages. The model also indicated that usage of social media for accessing IVF messages predicted 19 percent variation in married civil servants' attitude towards IVF messages ( $R^2 = 0.190$ ). The implication is that social media could be used as a medium to improve married civil servants' attitude towards IVF messages.

This study reports that there was a significant difference in the attitude of married civil servants towards in-vitro fertilization by tribe ( $F(3, 471) = 19.539, p < 0.05$ ). Further analysis revealed that married civil servants who were *Fulani* had lesser attitudinal disposition towards in-vitro fertilization than those whose tribes were *Hausa* (MD = -7.34,  $p < 0.05$ ), *Yoruba* (MD = -7.21,  $p < 0.05$ ) and *Igbo* (MD = -6.78,  $p < 0.05$ ). Furthermore, married civil servants who were *Hausa* had similar attitudinal disposition towards in-vitro fertilization compared with those whose tribe were *Igbo* and *Yoruba* ( $p > 0.05$ ). This implies that married civil servants whose tribe were *Hausa*, *Igbo* and *Yoruba* had better attitudinal disposition towards in-vitro fertilization than those from the *Fulani* ethnic extraction.

## CONCLUSION AND RECOMMENDATIONS

In-vitro fertilization as an option for treatment of infertility is a topical issue which this study delved into from the perspective of highlighting the role that social media usage play in relation to civil servants' attitude and intention of adopting in-vitro fertilization messages on the selected social media platforms.

These civil servants had access to in-vitro fertilization messages from *Facebook*, *YouTube* and *Instagram* however, Facebook was the most used platforms in accessing in-vitro fertilization messages. Their usage of *Facebook*, *YouTube* and *Instagram* was found to be linked to acceptance of in-vitro fertilization messages. Furthermore, married civil servants disclosed that there was a relationship between social media usage and having a negative attitude towards in-vitro fertilization messages. Although the study found that they were attitudinally disposed to in-vitro fertilization; they also had very low intention to adopt in-vitro fertilization messages from social media.

Social media usage for accessing IVF messages was found to have significantly influence their intention to adopt IVF messages and their attitude towards IVF messages. There was no significant difference in the attitude of married civil servants towards in-vitro fertilization by gender, religion, level in service, number of children, years of marriage and family setting. There was however a significant difference in the attitude of married civil servants towards in-vitro fertilization by age, tribe and educational status. Furthermore, there was no significant difference in intention of adopting in-vitro fertilization messages on social media by gender, age, religion, educational status and family setting. On the other hand, there was a significant difference in intention of adopting in-vitro fertilization messages on social media by tribe, level of service, number of children and years of marriage.

Conclusively, this study has demonstrated that social media is an important tool for improving the attitude and intention of married civil in adopting in-vitro fertilization messages when the need arises. The study further recommends that in-vitro fertilization messages should be intensified on these selected platforms where these messages are created in various dialect to aid understanding of its users who are in need of these services.

Also, married civil servants in Lagos State are enjoined to intensify their usage of these social media platforms that they may have vast knowledge of in-vitro fertilization in terms of the financial implication, forms of in-vitro fertilization which include but not limited to donor sperm and eggs and basic facts about infertility. In addition, presenters and producers of health programs should make use of the findings of this study to design appropriate and relevant programs on IVF such that these contents demystify the myths surrounding the technique.

## REFERENCES

- Afshani, A. S., Abdoli, A. M., Hashempour, M., Baghbeheshti, M., & Zolfaghari, M. (2016). The attitudes of infertile couples towards assisted reproductive techniques in Yazd, Iran: A cross sectional study in 2014. *International Journal of Reproductive BioMed*, 14(12), 761-768.
- Akande, S. O., Ajuwon, A. J., & Dipeolu, I. O. (2019). Attitude and Willingness of Infertile Persons Towards The uptake of Assisted Reproductive Technologies In Ibadan, Nigeria. *Annals of Ibadan Postgraduate Medicine*, Vol.17, 51-58.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. In G. W. Allport. New York: Holt Rinehart & Winston.
- Ashley , W., Lynae, M., Kiwita , P., Roland , M., Fengxia , Y., & Desiree , M.-K. (2019). Infertility knowledge and treatment beliefs among African American women in an urban community. *Contraception and Reproductive Medicine*, 4-16.
- Babatunde, F. (1998). *Theories Of Mass Communication*. Ibadan: Stirling-Horden Publishers (Nig) Ltd.
- Fox, S., & Duggan, M. (2013, Februray). *Health Online*.
- IMS Institute for Healthcare Informatics. (2014). *Engaging Patients Through Social Media Is healthcare ready for empowered and digitally demanding patients?* Waterview Boulevard: IMS Institute for Healthcare Informatics. Retrieved February 2021, from <https://www.west-info.eu/patients-use-social-media-for-healthcare-information-study-finds/ims-institute-report-2/>
- Littlejohn, S. A., & Foss, K. A. (2009). *Encyclopedia of Communication Theory*. California: SAGE Publications, Inc.
- Merriam-Webster. (2020, May Monday). *Attitude*. Retrieved from Merriam-Webster, Incorporated: <https://www.merriam-webster.com/dictionary/attitude>
- Merriam-Webster. (2020, May Monday). *Intention*. Retrieved from Merriam-Webster, Incorporated: <https://www.merriam-webster.com/dictionary/intention>
- Nop, T. R., & Kathleen, T. C. (2013). A Concept Analysis of Attitude toward Getting Vaccinated against Human Papillomavirus. *NursingResearch and Practice*, 1-5.
- Olarinoye , A., & Ajiboye , P. (2019). Psychosocial characteristics of infertile women in a Nigerian Tertiary Hospital. *Tropical Journal of Obstetrics and Gynaecology*, 252-257.
- Paschal, S., & Thomas, L. W. (2016). The Intention-Behavior Gap. *Social-Personality Psychology Compass*, 503-518.
- Pentescu, A., Cetina, L., & Orzan, G. (2015). Social Media's Impact on Healthcare Services . *Procedia Economics and Finance*, 646 – 651.
- Sormunen, T., Karlgren, K., Aanesen, A., Fossum, B., & Westerbotn, M. (2020). The role of social media for persons affected by infertility. *BMC Women's Health*, 1-8.
- University Of Twente. (2020, May Sunday). *University Of Twente*. Retrieved from University Of Twente, High Tech Human Touch: <https://www.utwente.nl/en/bms/communication-theories/>
- World, H. O. (2020, November Tuesday). *World Health Organization*. World Health Organization. Retrieved from World Health Organization: <https://www.who.int/news-room/fact-sheets/detail/infertility>