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# *Factors Motivating Older Population for Social Media Adoption*

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## **Abstract**

Social media has become essential part of almost everyone's life nowadays. Everyone is attracted to social media these days with bearing all its positive and contrary negative effects. The present research study aims to investigate the factors that motivate the older population to adopt Internet and social media. Previous studies have shown significant relation between age and social media usage. Cross sectional research with multistage cluster sampling design was employed to investigate the relationship of attitudinal, normative and control beliefs on older population to adopt social media. It is hypothesized that attitudinal, normative and control beliefs have significant positive relationship in adoption of social media by older population. Data collection was carried out through randomly selected population of 150 people with age of more than 50 years. The findings of the study revealed that attitudinal belief, dimensions utility outcomes and relative advantage were significantly positively correlated with the adoption of social media by the older population. In normative beliefs, dimensions primary and secondary influences were significantly correlated but the older population negatively correlated secondary influence with the

adoption of social media. The hypothesis regarding control belief was positively correlated with the adoption of social media. The results of the study partially support hypothesis about attitudinal beliefs. The findings have significant implications for social scientist, senior citizens and social media industry and policy makers.

*Keywords: Social media adoption, attitudinal beliefs, Control belief, Social media use, older population, social media addiction.*

## **Introduction**

Technology, now a days has become an essential part of everyday life of many people. It has become even more incorporated into different aspects of society. It is involved in different types of activities in daily life of people by improving communication, mutual interactions and professional abilities. Studies have shown that uses of Internet and social media by the older people is more for socialization and being connected with friends. Social media use by older population is instrumental for e-banking and for similar purposes and comparatively less used for information purposes (Sims, Reed, & Carr, 2017; Szabo, Allen, Stephens, & Alpass, 2018). Many studies have described the positive effects of Internet and social media on the mental health of older people (Myhre, Mehl, & Glisky, 2017; Sims et al., 2017).

Age has been found as a huge influencing factor regarding the adoption and use of new technologies Feist & McDougall (2013). Generally, social media are considered more favored by youth than the older population. This may be due to technological factors because older population is less technology savvy as compared to younger generation. It is important that older people also use new ways of communication like email, social media so that inter-generational communication

is reduced. Technology use needs skills, inclination, and motivation by the users. Moreover, one's social circle also influences the adoption of innovations.

Previous studies indicate that social media are directed to widening gap between the young and older population's media usage (Hayes, van Stolk-Cooke, & Muench, 2015; Lenhart, Purcell, Smith, & Zickuhr, 2010; Mo, Zhou, Kosinski, & Stillwell, 2018). Social media usage by the younger population is increasing but the use of email is decreasing, contrarily older population is using more emails than social interaction sites Madden (2010). Although older population of Pakistan have started using social media but less in number as compared to younger generation. Due to this reason comfort level during communication between older and younger population is weakening Harwood (2000).

To bridge this gap, it is necessary to understand the adoption of new communication technologies especially social media by older people. Various researches have been conducted across the world on the adoption of social media across the world to know its uses. But in Pakistan, these studies focused only on youth and children Saleem, Ali, & Hanan (2014). Therefore, the researchers wanted to investigate what factors motivate the older population towards the adoption of social media and otherwise.

The present study explore the factors that contribute to the motivation of older population in Pakistan to adopt the social media usage. The study examine the relationship of attitudinal, normative and control beliefs with the motivation of older population to use social media in their lives.

### **Older Population and Technology**

Researchers to know why some people accept a certain technology have extensively studied technology acceptance issues and others do not. Over the last two decades, many theories

and models have been applied and shown to be successful in explaining user acceptance new technologies. Among these are Diffusion of Innovation (DOI), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA), Decomposed Theory of Planned Behavior (DTPB), Technology Acceptance Model (TAM) and Model of Adoption of Technology in Households (MATH). Nikou & Economides (2017).

In efforts to examine the predictors regarding the adoption of new technologies in older people, Charness & Boot (2009) found that attitudes and abilities as dominant predictors. This research also concluded that low pattern of use of technology by older population as compared to younger generation will decrease with the passage of time provided developers design their websites by keeping in mind the normative age related changes.

### **Older Population and Social Media**

Understanding social media adoption is a big question. Websites like Facebook and Twitter have only recently become popular. Further, they are much more popular among younger people as compared to older people. Lehtinen, Näsänen, and Sarvas (2009) conducted a qualitative study to explore the understanding of older people about social media. Findings showed that older population perceived the Internet as inhospitable for sociality and social media usage for publicity and interfacial relationships. They also found that privacy of information and perception of their limited computer skills were significant factors for not to use social media. To overcome the negative perceptions and attitudes, this study suggested the face-to-face communication for how to use the social media and simple privacy management options.

To analyze the factors that motivated the older people to adopt or not to adopt the social media, Maier, Laumer, and Eckhardt (2011) conducted a research by applying the Model of Adoption of Technology in Households (MATH). Results revealed that fear of technology was

main factor for not to use social media among older population. Berkowsky, Sharit, and Czaja (2018) found that older peoples with superior self-assessed IT skills reported a greater willingness to adopt a new technology.

Prieto and Leahy (2012) conducted a research to examine the predictors which influence the older population to use social media. For this, an online survey was conducted in Irish in which total number of participants was 48. Results revealed that older people used social media to improve communication with family and friends and gathering knowledge about computers and Internet.

Researchers also pointed out that digital divide is very significant in the case of adoption of social media among older population. Socio economic and disability factors also influenced the older people regarding use of social media. Braun (2013) investigated the factors that encourage or discourage the Internet using older population from the use of social media. Researcher used Technology Acceptance Model and took a sample of 124 Internet users having aged 60-90. Results showed perceived usefulness, trust in social media and limit of Internet consumption were effective predictors of purpose to consume social media. Moreover, comfort for using Internet and social burdens were not significant predictors. In order to examine the demographic factors of older population who use social media, Choudrie, Vyas, Voros, and Tsitsianis (2013) conducted a study and found that age, gender, education, frequency to use along with period of using Internet were all main factors regarding the use of social media. They also found that technology facilitated circumstances like usability of Internet equipment for consuming Internet at any time and reliable speedy Internet connection had considerable favorable effects on adoption of social media.

## Material and Methods

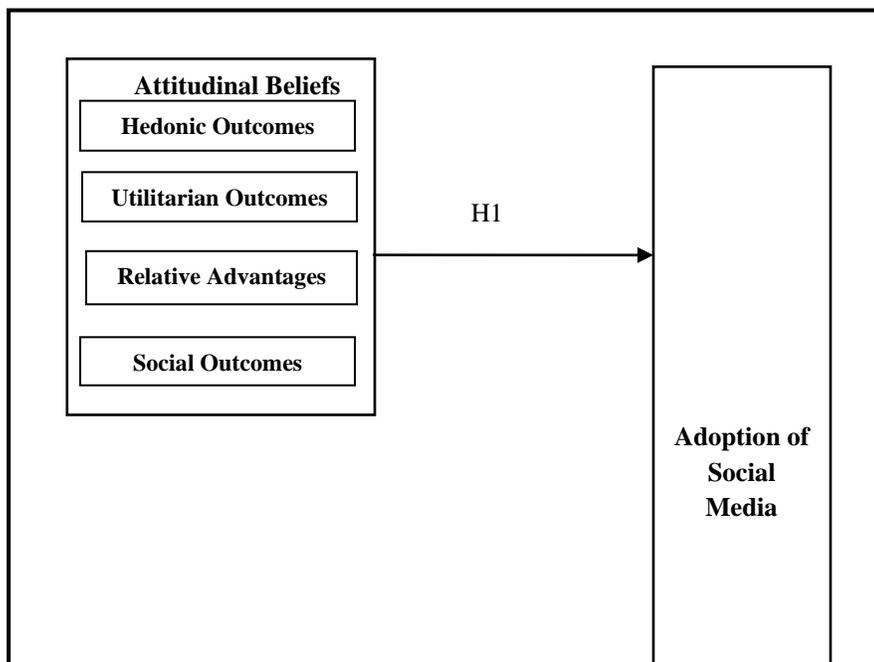
This section presents the development of conceptual framework, hypotheses development and diagrammatic representation, sampling of respondents and methodology used for data collection. Consistent with Model of Adoption of Technology in Households (MATH), Diffusion of Innovation (DOI) and Decomposed Theory of Planned Behavior (DTPB), seven dimensions have been selected that were classified into three constructs: normative beliefs, control belief and attitudinal beliefs. Attitudinal beliefs construct includes hedonic, utilitarian and social outcomes along with relative advantage. The normative beliefs include family, friends and co-workers as primary influence and TV, Radio & newspapers as secondary influence. In the control belief construct, supposed access to use included in the group. This research work employs one dependent variable “adoption of social media” to validate the model by testing its relationship with independent variables.

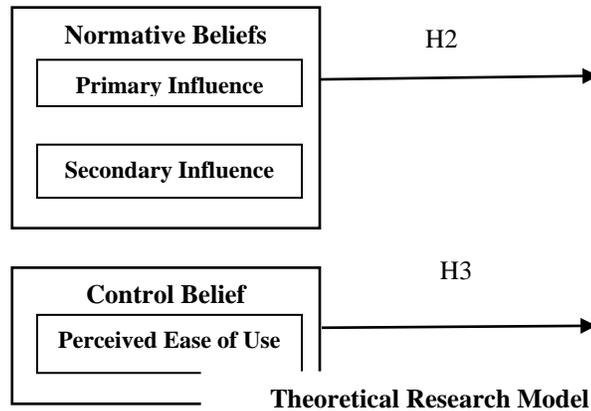
**H1:** Attitudinal beliefs have significant positive relationship in adoption of social media.

**H2:** Normative beliefs have significant positive relationship in adoption of social media.

**H3:** Control belief has significant positive relationship in adoption of social media.

**Table 1: Diagrammatic Representation**





## Materials and Method

For the present study, older population was defined as “Older people are those individuals aged 50 years and older who, by virtue of their unique position in and experience of historical time, did not experience the Internet during their formative adult life” (Hill, Beynon-Davies, & Williams, 2008). Studies on the use of internet and social media among older population varied in their categorization of starting age of older people as the target population. Czaja et al., (2012) used 51, Silver, (2014) 60 and Quan-Haase, Mo, & Wellman, (2017) used 65 years of age for older adults for inclusion in the population.

Survey population of the study was the older people using of social media in the different cities of Pakistan. Keeping in view the nature of study and that of the population, multistage cluster sampling technique was used. Many cross sectional studies have been conducted to analyze in first phase, the researcher randomly selected one sector of the city amongst the four major sectors of the city. In the second stage, researchers randomly selected one sub sector for sampling frame from the voters list and a sample size of 150 was chosen. Seven Point Likert-type scale was used for the quantification of opinions and beliefs. The questionnaire was also translated into national language Urdu for less educated respondents. Many studies multivariate cross sectional studies have been

conducted to analyze the factors contributing the use of internet and social media among older populations (Friemel, 2016; Gell, Rosenberg, Demiris, LaCroix, & Patel, 2013; König, Seifert, & Doh, 2018).

## Results

This research examines the adoption of social media among older population of Pakistan. After collecting data, detailed descriptive and inferential analyses were run. Result in terms of data analysis, interpretation and findings are given below.

**Table 2 Descriptive Statistics and Reliability Coefficients for Study Variables**

Scales	$\alpha$	$K$	$M$	$SD$	Range	Potential	Actual
<b>Attitudinal Beliefs</b>							
Hedonic Outcomes	.86	2	7.59	3.64	2-14	2-14	2-14
Utilitarian Outcomes	.79	2	8.60	3.16	2-14	2-14	2-14
Relative Advantage	.72	3	16.45	3.73	3-21	3-21	3-21
Social Outcomes	.75	3	10.25	4.28	3-21	3-21	3-21
<b>Normative Beliefs</b>							
Primary Influence	.83	3	13.88	4.76	3-21	3-21	3-21
Secondary Influence	.91	3	8.17	4.47	3-21	3-21	3-21
<b>Control Beliefs</b>							
Perceived Ease of Use	.79	3	16.62	3.38	3-21	3-21	3-21

Note:  $\alpha$ = reliability coefficient,  $k$ = no. of items in scale and subscale

Above self-explanatory table shows that all scales have good Cronbach's alpha

reliability. Further, it also shows the mean, standard deviation and minimum & maximum values of each scale.

**Table 3 Description of Demographic Variables of the participants**

Variables	$f$	%
Gender		

Male	124	82.7
Female	26	17.3
Age		
50-55	106	70.7
56-60	33	22.0
61-65	8	5.3
Above	3	2.0
Education		
Under Matric	10	6.7
Matric	22	14.7
Intermediate	31	20.7
Graduate	51	34.0
Masters	32	21.3
Above	4	2.7
Employment Status		
Employed	92	61.3
Pensioner	11	7.3
Business	26	17.3
Other	21	14.0
Social Media Account		
Facebook	105	70.0
Twitter	8	5.3
Youtube	22	14.7
Skype	50	33.3
Other	22	14.7
Use of Social Media		
Monthly	12	8.0
Weekly	31	20.7
Daily less than 2 hours	94	62.7
Daily more than 2 hours	13	8.7

Descriptive statistics as shown in table 2 indicates that out of 150 participants, 82.7 male and remaining were female participants. Results also show that mostly user of social media fall in the age category 50-55 years. In the case of education and employment status majority (58%) of the participants had graduation and above qualification and remaining were undergraduate, of these majority 61.3% were employed and remaining were business people and pensioners. Facebook was emerged as mostly used social media site followed by skype which they may be

using to connect their far-away families and friends. In terms of time consumed on the use of social media, about 62.7% respondents used social media daily less than 2 hours.

It was hypothesized that attitudinal beliefs, normative beliefs and control belief have positive affiliation with the adoption of social media. The results are presented in table 3.

### Hypothesis Testing

It is hypothesized that attitudinal beliefs have significant positive relationship in adoption of social media. Results revealed that dimensions utilitarian outcomes, relative advantage have statistically significant positive relationship in adoption of social media. It also reveals that older people do not use social media for entertainment and to make new friends on social media as dimensions hedonic and social outcomes were not found significantly correlated.

**Table 4 Spearman's Rank Correlation Coefficient between Variables**

Variables	Attitudinal Beliefs					Normal Beliefs		Control Belief
	Adoption of Social Media	Hedonic Outcomes	Utilitarian Outcomes	Relative Advantage	Social Outcomes	Primary Influence	Secondary Influence	Perceived Ease of Use
Adoption of Social Media	-	.083	.373**	.565**	-.009	.237**	-.169*	.373**

Note: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Normative beliefs have significant positive relationship in adoption of social media was hypothesized. Results indicate that both dimensions have statistically significant relationship in adoption of social media but in case of secondary influence, negative correlation was found.

It was hypothesized that control belief has significant positive relationship in adoption of social media. Results reveal that dimension perceived ease of use is statistically significant positive relationship in adoption of social media.

## **Discussion and Conclusion**

New media applications and gadgets are coming with a disruptive speed. We are talking of X, Y and Z generations because of technology adoption in their lives. However, this research focused solely on social media adoption by the older population. It is imperative that we examine status of social media fame and female population of our society and investigate what factors are influencing them to use and not to use the social media. We are witnessing and literature reports a widening gap between the younger and older generations because of social media usage.

Results indicated that hypothesis about attitudinal beliefs were partially supported. In attitudinal beliefs, four dimensions hedonic outcomes, utilitarian outcomes, relative advantage and social outcomes were included. It was found that utilitarian outcomes and relative advantage were positively correlated with the adoption of social media. These findings were also supported by Thackeray, Crookston, & West, (2013); Prieto & Leahy, (2012) in which relative advantage was found significant predictor of adopting social media. Hedonic and social outcomes relating to entertainment and increased popularity were not explored as motivational cause to utilize social media in these papers. However, in another research Sledgianowski & Kulviwat, (2009); Glass & Li, (2010) found that hedonic outcomes and social outcomes have significant influence on adoption of social media. This may be because older people in Pakistan mostly used social media to remain in contact with their family members only.

Results of this research also revealed that primary influence was main motivational factor in adoption of social media as supported by other research studies Sajjad, Saif, & Humayoun, (2009); Vyas (2013). The negative correlation between secondary influence and adoption of social media was found in this study as this was also supported by the findings of Vyas (2013).

Perceived ease of use was found positively correlated with the adoption of social media among older people. Maier et al. (2011) also found that fear of technology was main barrier in adoption of social media. The present study also indicates that females of elderly age are lower in number who uses social media. In a nutshell, attitudinal, normative and control beliefs have significant positive correlation in adoption of social media among older population.

This is first of its kind a study conducted on social media adoption in Pakistan. The findings can be generalized on the older population of Asian Countries. The findings are useful for social media companies and developer in taking care of fears of privacy, ease of use, font and color of websites so that older people can also use social media website with comfort and confidence. Moreover, user help and simply understandable guidelines may be useful in helping our senior citizens in adoption of social media in their daily life.

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