



SOCIAL MEDIA USAGE AND SOCIAL SUPPORT AS DRIVERS OF QUALITY OF LIFE IN ELDERLY PEOPLE. EVIDENCE FROM PAKISTAN

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Abstract

People in old age face numerous problems to survive in society as they receive a lack of support from youth. They perform a variety of activities to enhance their life' quality and to sustain their position in society. A plethora of research has been conducted to explore the factors which contribute to the quality of life among old age in developed economies while the topic has been untouched in a country like Pakistan. The present study aims to examine the role of social media usage in the life of old age people with a mediating role of social support. Data were collected from 308 old age people (above 50 years) using a structured questionnaire. Hypotheses were tested in AMOS by applying structural equation modeling. The results indicate that social media usage significantly contributes to the social support and quality of life among the elderly. Social support partially mediates the relationship between social media usage and quality of life among old age. This study emphasizes the role of youth in the provision of social support the old people to enhance their quality of life. The government must initiate special programs to improve social support through social media usage for old people to integrate them into mainstream society.

Keywords

Social media usage; social support; quality of life; elderly; old age people; Pakistan



1. Introduction

Social support is important determinant of healthy aging and old age (Leist, 2013; Rosenfeld & Anderson, 2020). Social media, in the recent decade,

has gained enough attention as it has become a central player of communication in daily lives among people across the globe. Social media is now equally popular among elderly people. Empirical studies

demonstrate that the aged users get social support and connectivity with their friends and relatives through the use of social media. A large number of studies are now available conducted to examine the role of social media in the everyday life of the people and how does social media usage link with the quality of life (Haris *et al.*, 2014; Prieto *et al.*, 2014; Johnson *et al.*, 2013). For some academics, social media can negatively or not significantly influence the quality of life (Brusilovskiy *et al.*, 2016; Błachnio, Przepiorka & Pantic, 2016; Lu *et al.*, 2018). On the other hand, empirical evidence show that social media usage is linked with positive entertainment and social support outcomes (Vaterlaus *et al.*, 2015). It has been observed that research on social media usage has explored multiple positive outcomes over the years. Initially, academics have been given much attention to the role of social media usage in the lives of students and how it was linked with their academic performance (Lau, 2017; Giunchiglia *et al.*, 2018). Scholars have also accounted for the gender and social class variations in social media usage (Nayak, 2018). Scholars have also studied the factors of elderly-friendly social media platforms and designed mediums that can be easily used by old people (Chou, Lai, & Liu, 2013). Ali (2016) explored the reasons behind extensive social media usage among the youth and its impact on family relationships. The statistics on social media utilization among old adults is unavailable for Pakistan. Among US adults, the social media usage among people of age above sixty-five is 46% in 2019. However, global indicators show that India is home to the highest number of

Facebook users with 269 million (Statista Research Department, 2019).

Quality of life (QOL) is recognized as a multi-dimensional concept that demonstrates the overall personal wellbeing of individuals and pleasure of living in the context of value system and culture about goal, expectation and standard of livings (Lawton *et al.*, 1999). Though, researchers have identified several determinants of QOL including lifestyles, social environment, social interaction, healthcare, socio-economic factors, financial concerns and clinical status (Johnson *et al.*, 2013; Montoya-Murillo, Ibarretxe-Bilbao, Peña & Ojeda, 2020; Nur, Mallongi, Sridani & Devi, 2020). In this regard, social support is defined as the resources transacted through interactive connections or ties (Cohen & Hoberman, 1983).

Old adults, near to retirement posit many problems to live in society. It is common for this age group to experience loneliness and isolation, because of being empty nest, spending time on social media, and lack of social support (Haris *et al.*, 2014; Habibi *et al.*, 2020). Similarly, the scholars have found inclination toward social media usage and networking among older adults in order to avoid isolation and loneliness, and seek social support (Hunsaker & Hargittai, 2018; Wedgeworth *et al.*, 2017). However, very rare researches have been conducted, specifically none in the context of Pakistan, to analyze the part played by social media in raising quality of life and social support for these people (Campisi *et al.*, 2015). It was important to study the topic in Pakistani context because major segment of aged population is not using and lacks access to social media. Thus, we focused on educated people living in urban sector as

they are familiar with social media and are more concerned about their quality of life. The changing social environment has led to a decrease in social supporting the form of youth. To highlight the importance of social media usage and social support for target population, we developed our hypotheses around Social Cognitive Theory (SCT), which is widely acknowledged in the context of social interaction, achievement and goal in society (Bandura, 1997). The theory has been derived from social learning theory in perspective of information systems (Compeau & Higgins, 1995; Wagner, Hassanein & Head, 2010).

2. Literature Review

2.1 Social Media Usage and Quality of life

Growth in social networking platforms including Facebook, Instagram, Twitter, LinkedIn and Google has changed the sources of attaining information on health, social life and daily activities (Prieto *et al.*, 2014). The research on the purpose of social media usage indicated that individuals gain variety of information to improve their well-being using Internet and interpersonal connectivity. The older adults can use this medium to gain information on health and diseases (Vaterlaus *et al.*, 2015). More diverse social networks are working to improve psychological and physical health for all age groups which in turn can positively influence the overall quality of life (Konagaya *et al.*, 2009). In short, social media deemed a central factor which can contribute to the quality of elderly life in a variety of ways. Time spent on social media brings positive change in the quality of life (Hawi & Samaha, 2017). Studies have indicated that individuals can gain variety of information to improve their well-being

using Internet. For instance, basic health information obtained through Internet can empower, patients in physician-patient connection and facilitate the patient communication (Achat *et al.*, 1998). It is argued that social media can influence the health behaviors of young adults in different aspects (Vaterlaus *et al.*, 2015). Recently, more diverse and complex social networks have been identified to improve psychological and physical health's which in turn can positively influence the overall quality of life (Konagaya *et al.*, 2009; Johnson *et al.*, 2013). In short, social media deemed a central factor which can contribute to the quality of elderly life in variety of ways (Haris *et al.*, 2014). Suitable time spent on social media can bring very positive change in quality of life among people (Leung & Lee, 2005) as well as there is positive and significant relationship between social media usage and quality of life (Hawi & Samaha, 2017). Therefore,

H1. Social media positively contributes to the quality of adult life.

2.2 Social Media Usage and Social Support

As aforementioned that quality of life can be expressed in variety of dimensions and social media usage execute a crucial part in the enhancement of certain factors for improving life quality. For instance, social media in health communication can focus on the improvement of interaction with others, sharing and receiving health messages, facilitating and information everyone about health and life quality tips. Moreover, preciously, social media can enhance quality of life in different ways such as share more valuable information, increase availability for health information, peer social and demonstrative support, surveillance for public health and possibility to instigate health related policies

(Moorhead *et al.*, 2013). Social networks sites provide many opportunities to share information related to social support. Though, some information may not be useful for social support as indicated by Vitak *et al.*, (2011) that social network sites are not significantly related to social supports. But in fact, among old age, social media sites can be deemed important factor to move their life according to the society atmosphere. Notwithstanding, researches have discussed relationship between sites of social network and social supports and have scrutinized that, in general, social networking sites play a significant role in social supports (Park *et al.*, 2009; Chun & Lee, 2017). Empirical study showed that there is a significant positive relationship between different social interacting ties and different types of social supports (Lu & Hampton, 2017). One can use different communication channels to provide social supports. Most of the social ties support to exchange the information in order to promote social or moral support among people (Haythornthwaite, 2007). Social media usage increases the exposure and availability of health information and communication, and peer, social and demonstrative support (Moorhead *et al.*, 2013). Social network sites provide many opportunities to share information related to social support. Though, some studies have demonstrated contrasting presuppositions and findings in this regard. Such as Vitak and colleagues (2011) stated that social networking sites are not significantly related to social support. But others have confirmed it to be an important instrument of social support for the elderly (Chun & Lee, 2017) and exchange of moral support (Lu & Hampton, 2017).

H2. Social media positively contributes to the social support.

2.3 *Social Support and Quality of Life*

In general, social media is a good source to provide information of the resources and activities of social connection. Social media create awareness about life events and matters which can influence daily life of individuals. In short, social support is a good source to improve quality of life (Hampton *et al.*, 2014; Hampton *et al.*, 2015). It is doubtless that an individual can become aware of social support activities by using online information sources. However, the social support is closely aligned with a person ability to recognize the events for the better enhancement of the quality of life. Thus, it is essential to archive the necessities to enhance the quality of life. Once way to achieve this is adequate social support from society (Cohen & Wills, 1985; Wethington & Kessler, 1986). Social media can bring positive change among the life of old age, but mere media is not sufficient, they must be provided proper social support. In other words, social support improves the well-being of people and can positively enhance the health behaviors of people (De Choudhury & Kicman, 2017). Several studies have indicated positive relationship between social support and quality of life as well as life stratification among old age (Goulet, 2012; Hampton *et al.*, 2011; Oh, Ozkaya & LaRose, 2014). Social support is the key source of high quality of life (Hampton *et al.*, 2014, 2015). It is closely aligned with a person's ability to recognize the events for the better quality of life. However, mere social media is not enough for maintaining a good quality of life in old age (Goulet, 2012; Hampton *et al.*, 2011; Oh, Ozkaya & LaRose, 2014).

H3. Social support positively contributes to the quality of older adult life.

2.4 Mediating Role of Social Support

It is argued that social media, among the educated old age people is the key element for the improvement of quality of life. However, sometime, mere social media cannot support the overall quality of adult life until they received enough social support from society. As demonstrated in the current study, that there is significant positive relationship between social interpersonal communication, social support and various outcomes activities (Lu & Hampton, 2017). As posited by social support theory can influence the society (family and parents) well-being. Social support is the main element that significantly influences quality of life in term of well-being by gaining variety of information (Armstrong, Birnie-Lefcovitch & Ungar, 2005). A diverse network system can facilitate to gain various information which can enhance the support and in turn help people. Probability, social media can positive change among individuals towards positive outcomes among the society (Tolsdorf, 1976). This is posited that

social network, social supports and health behaviors are significantly related with each other (Berkman & Glass, 2000). Wedgeworth *et al.*, (2018) also believe that social support is a significant mediator between relational affectability and quality of life among adults. Especially, in collectivism cultures such as Pakistan, social media can indirectly influence the quality of life as many communities in the region socially support adults in term of health, empathy, food, interaction and status. Other researches have proved the intermediary role of social support in association with social media usage and health behavior (Berkman & Glass, 2000). Whereas, Wedgeworth and colleagues (2017) found that social support is a significant mediator between relational affectability and quality of life among adults. In collectivist cultures such as Pakistan, social media can indirectly influence the quality of life as many communities in the region socially support adults in term of health, food, social mobility and status.

H4. Social support mediates the relationship between social media usage and quality of adult life.

The research model is given in figure 1.

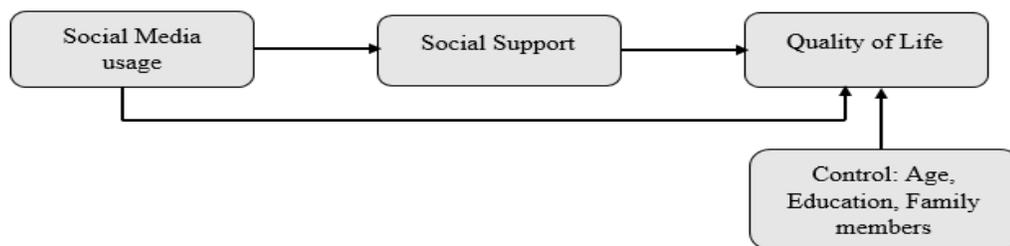


Figure 1: Research Model

3. Methodologies of Research

The nature of this research is quantitative where empirical evidence are gathered through a structured questionnaire. Considering the objectives of the study, we focused on older people having age above

50. In other words, we collected data from older adults of age above 50 years residing in urban areas and are educated (Luo et al., 2016). In Pakistan, majority of population live in rural sector and uneducated. Old age people living in rural areas are

unable to access social media. Hence, we focused on the old people living in the urban areas. A structure questionnaire was used to interview the respondents. We randomly distributed 700 questionnaires among the old people. Where the old people face problem in getting meaning, we helped them in knowing the concept. We have ensured them that their data and information are merely used for research purpose. The survey was carried on volunteer base. Out of total 700 questionnaires 341 were got back. There

were certain questionnaires that were not filled properly and some of them missed important information. So, the incomplete questionnaire was not included in the final analyses and only 308 questionnaires were used in the final analyses with having response rate 44%. Below is the Table 1 that explains the demographic characteristics of the respondents.

Table 1: Profile of the Respondents

Description	Frequency	Percentage
Gender		
1.Male	195	63.3
2.Female	113	36.7
Family members		
1. less than 3	57	18.5
2. 4-6	139	45.1
3. 7 to 10	76	24.7
4. 11 to 15	18	5.8
5. more than 15	18	5.8
Age		
1. 50 to 60 years	66	21.4
2. 61 to 70 Years	148	48.1
3. 71 and above years	94	30.5
Education		
1. Intermediate and below	37	12.0
2. Bachelor	102	33.1
3. Master	122	39.6
4. MS MPhil	28	9.1
5. PhD etc.	19	6.2
Profession		
1. Govt. Employees	165	53.6
2. Private Business	104	33.8
3. Others	39	12.7
Total	308	100

3.1 Measurement of Variables Social Media

In the knowledge based economy, there are several indicators of social media usage including mobile, internet and other electric devices etc. In order to avoid overlapping and biasness, we asked the respondents about the social media usage of which all the indicators are deemed to be included. We

used 10 items to measure to social media adopted from prior study of Hawi and Samaha (2017). However, the items were slightly modified in the relevant context to gain more valid insights. A sample item indicates “*Social Support:* Generally, social support covers both the perception of support and different types of assistance from both formal and casual connection (Siedlecki *et al.*, 2014). In

order to measure social support, we adopted 4 items from the prior study of Wedgeworth *et al.*, (2017). A sample item shows "Generally speaking, how satisfied have you been in the last month with help you get assistance from friends, neighbors, or relatives?" The five likert scales were utilized that representing highly dissatisfied 1 to highly satisfied 5.

Quality of Life: Quality of life can be measured in different dimensions However, in order to gain more comprehensive insights; we relied on 16 items used in the preceding study of Wedgeworth *et al.*, (2017). Five Likert scale were utilized that represents highly dissatisfied 1 to satisfied 5.

3.2 Control Variables

For the purpose to reduce spurious results, we controlled for age and education of the respondents as these factors have significant positive influence on quality of life and satisfaction (Hutto *et al.*, 2015). In this study, we controlled for gender, profession, age, education and family members (number to members living with the respondents in a single home) to test the mediating role of social support between social media usage and quality of life. Since, gender and profession are categorical variables, we created separate group for male and female. We compared the results of each group (male with female), no significant difference was concluded. The same analysis was performed for profession factor and also concluded the same outputs. For parsimonious reason, we dropped gender and profession as controlled variable because the variables have not significant role in our model. However, age was significantly related to quality of

life while education and family members are not significantly associated.

4. Data Analyses

4.1 Confirmatory Factor Analysis

Prior to test confirmatory factor analysis, we performed normality test using skewness and kurtosis in SPSS. The results have shown in Table 2 where all the items have acceptable values +/-2 which ensure data normality (George & Mallery, 2010). Moreover, mean and S.D. have also presented in Table 2.

In order to assess factor loadings, convergent validity, discriminant validity and composite reliability, Confirmatory Factor Analysis (CFA) using AMOS was performed (see Figure 2) where all the items of the respective constructs were entered. The results indicated a good model fits (see Figure 2) as χ^2/df was 1.987 as the value is recommended to be less than 3 (Hair *et al.*, 2010; Hu & Bentler, 1999). GFI was 0.87, AGFI was 0.84 NFI was 0.88, TLI was 0.93 as the values are recommended above 0.90 for a good model fit (Hair *et al.*, 2010; Hu & Bentler, 1999). RMR and RMSEA values are 0.011 and 0.057 respectively shows a good model fits (Hair *et al.*, 2010; Hu & Bentler, 1999). All the items were significantly loaded (see Table 3) on their particular factors ($p < 0.001$). Hence, model fits have achieved.

We assessed convergent validity (see Table 3) of the constructs and found all the values in the acceptable range (e.g. above 0.50). Similarly, discriminant validity also gave acceptable results (above 0.70) as recommended by Hair *et al.*, (2010) and Hu and Bentler, (1999). Finally, we calculated composite reliability (see Table 3) and ensured that all the

constructs have acceptable reliability values (above 0.70) (Nunnally & Bernstein, 1994). Hence, all the criteria of the model fits have achieved and thus we moved to test hypotheses in structural models.

Table 2: Descriptive Statistics

Items	Mean	SD	Skewness	Kurtosis
smu1	3.69	0.542	-0.298	-0.306
smu2	3.72	0.489	-0.661	-0.279
smu3	3.69	0.521	-0.486	-0.270
smu4	3.71	0.541	-0.450	0.023
smu5	3.69	0.523	-0.459	-0.325
smu6	3.70	0.499	-0.559	-0.504
smu7	3.69	0.518	-0.506	-0.366
smu8	3.72	0.509	-0.464	-0.246
ss1	3.62	0.511	-0.657	-0.842
ss2	3.61	0.514	-0.757	-0.781
ss3	3.63	0.515	-0.767	-0.556
ss4	3.68	0.515	-0.816	-0.072
qol1	3.73	0.460	-1.226	.032
qol2	3.67	0.484	-0.909	-0.737
qol3	3.68	0.480	-0.961	-0.627
qol4	3.72	0.465	-1.165	-0.133
qol5	3.67	0.486	-0.876	-0.805
qol6	3.71	0.468	-1.126	-0.235
qol7	3.70	0.474	-1.051	-0.422
qol8	3.73	0.457	-1.267	0.151
qol9	3.71	0.474	-1.228	0.189
qol10	3.73	0.460	-1.226	0.032
qol11	3.71	0.467	-1.146	-0.185
qol12	3.71	0.467	-1.146	-.185
qol13	3.73	0.457	-1.267	0.151
qol14	3.65	0.491	-0.794	-0.959
qol15	3.72	0.464	-1.185	-0.080
qol16	3.69	0.479	-0.979	-0.588
N				

4.2 Common Method Bias

We collected data through a single source (questionnaire), from a single respondent and on same time which may cause common method bias (Podsakoff & Organ, 1986). When a data have

common method bias, the statistical results become questionable. In order to test for this issue, we performed Harmon's One Factor test in SPSS. All the items of the related factors have been included in the particular test. The results indicated only three factors which have eigenvalue above 1 of which the

first factor explained only 36.169 % variance— method bias in the present study (Hair *et al.*, 2010). herby confirmed that there is no threat of common

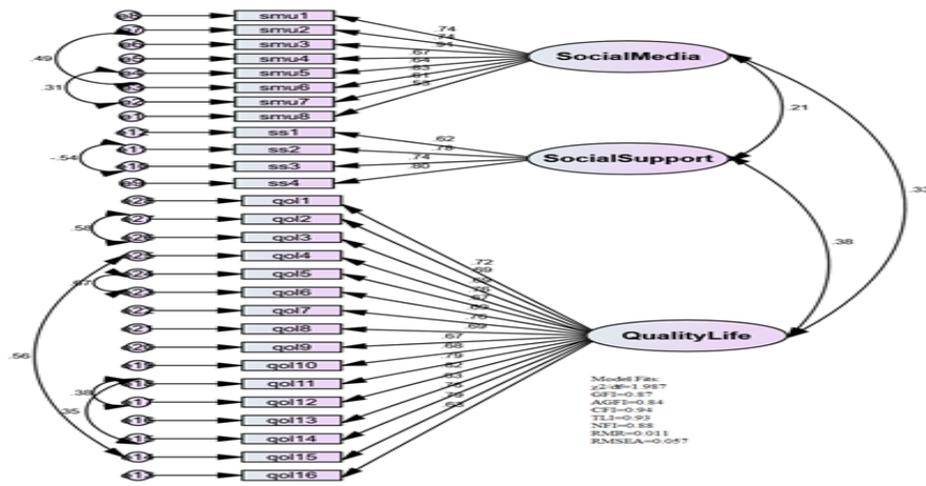


Figure 2: Measurement Model

Figure 2: Measurement Model

Table 3: Factor Loading, Validity and Reliability

Variables and items	Estimate	AVE	√AVE	C.R
Social Media Usage		0.51	0.71	0.89
smu8	0.528***			
smu7	0.606***			
smu6	0.825***			
smu5	0.637***			
smu4	0.667***			
smu3	0.911***			
smu2	0.736***			
smu1	0.736***			
Social Support		0.54	0.74	0.83
ss4	0.798***			
ss3	0.743***			
ss2	0.777***			
ss1	0.62***			
Quality of Life		0.52	0.72	0.94
qol16	0.635***			
qol15	0.794***			
qol14	0.763***			
qol13	0.633***			
qol12	0.815***			
qol11	0.791***			
qol10	0.679***			
qol9	0.666***			
qol8	0.691***			
qol7	0.764***			
qol6	0.688***			
qol5	0.669***			

qol4	0.761***
qol3	0.691***
qol2	0.693***
qol1	0.718***

Note: AVE=Average Variance Extracted, C.R= Composite Reliability. *** Significant (p < 0.001)

4.3 Correlation Coefficients

In order to test correlation among the study variables, we executed Pearson correlation in SPSS which is presented in Table 4. The results indicate that there is a significant positive correlation between social media and quality of life (r = 0.350,

p < 0.01) and a significant positive correlation between social support and quality of life (r = 0.407, p < 0.01).

Table 4: Correlation Coefficients

Factors	Age	Education	Family members	Social Media	Social Support	Quality Life
Age	1					
education	0.004	1				
Family members	0.044	-0.062	1			
Social Media	0.064	-0.120*	0.021	1		
Social Support	-0.004	0.003	-0.026	0.236**	1	
Quality Life	-0.080	-0.006	0.052	0.350**	0.407**	1

Note:*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

4.4 Structural Models

For each relationship, separate structural model was used in AMOS. For instance, first we checked the impact of social media usage on quality of life in structural model1. We checked the impact of social media on social support in structural model2 and then checked the impact of social support on quality of life in structural model3. Finally, we examined the mediating role of social support between social media and quality of life in structural model 4. These steps are recommended by Baron and Kenny (1996).

4.4.1 Structural Model 1

We checked the influence of social media usage on quality of life among old age. We found acceptable values for all the model fits criteria (see Figure 3) as

χ^2/df was 2.029 as the value is recommended to be less than 3 (Hair *et al.*, 2010; Hu & Bentler, 1999). GFI was 0.86, AGFI was 0.84 NFI was, TLI was 0.93 as the values are recommended above 0.90 for a good model fit (Hair *et al.*, 2010; Hu & Bentler, 1999). RMR and RMSEA values are 0.018 and 0.058 respectively shows a good model fits (Hair *et al.*, 2010; Hu & Bentler, 1999).

The results indicate (see Table 5) that social media has a significant influence on quality of life ($\beta = 0.377$, p < 0.05), and supported H1 of the study. However, only age of the respondent was significantly related to quality of life while education and family members were insignificant influenced on quality of life.

4.4.2 Structural Model 2

This model was checked to know about the influence of social media on social support. All the criteria for model fits were ensured (see Figure 4) as χ^2/df , GFI, AGFI, TLI, NFI, RMR and RMSEA gave acceptable values (Anwar, 2018; Hair *et al.*, 2010; Hu & Bentler, 1999).

The hypothesized results indicate (see Table 6) a significant influence of social media on social support ($\beta = 0.341$, $p < 0.05$) which supported H2 of the study. Moreover, all the three control factors; age, education and family members were insignificantly related to social support.

4.4.4 Structural Model 4

This model (see Figure 6) was tested to check if either social support partially or fully mediates the relationship between social media and quality of life. The model fits generated in this model provided acceptable values in term of χ^2/df , GFI, AGFI, TLI, NFI, RMR and RMSEA as recommended by (Anwar, 2018; Hair *et al.*, 2010; Hu & Bentler, 1999). Model fits have presented in Figure 5.

The results indicates (see Table 8) that the direct influence of social media on quality of life remained significant ($\beta = 0.265$, $p < 0.05$) and the indirect

4.4.3 Structural Model 3

In this model, the influence of social support on quality of life is checked. First the model fits have ensured (see Figure 5) as χ^2/df , GFI, AGFI, TLI, NFI, RMR and RMSEA gave acceptable values (Anwar, 2018; Hair *et al.*, 2010; Hu & Bentler, 1999). The results indicated (see Table 7) that social support has a significant influence on quality of life ($\beta = 0.275$, $p < 0.05$) and thus supported H3 of the research. Only age, being a control variable has significant influence on quality of life while education and family members were insignificantly related to quality of life.

influence is also significant ($\beta = 0.066$, $p < 0.05$). Based on the results, it can be argue that social support partially mediates the relationship between social media and quality of life. Hence, H6 of the study is partially supported. R square value shows that 23% change in quality of life can be explained by social support through social media. Additionally, only age as a control variable has significant influence on quality of life while education and family members are not significantly related to quality of life.

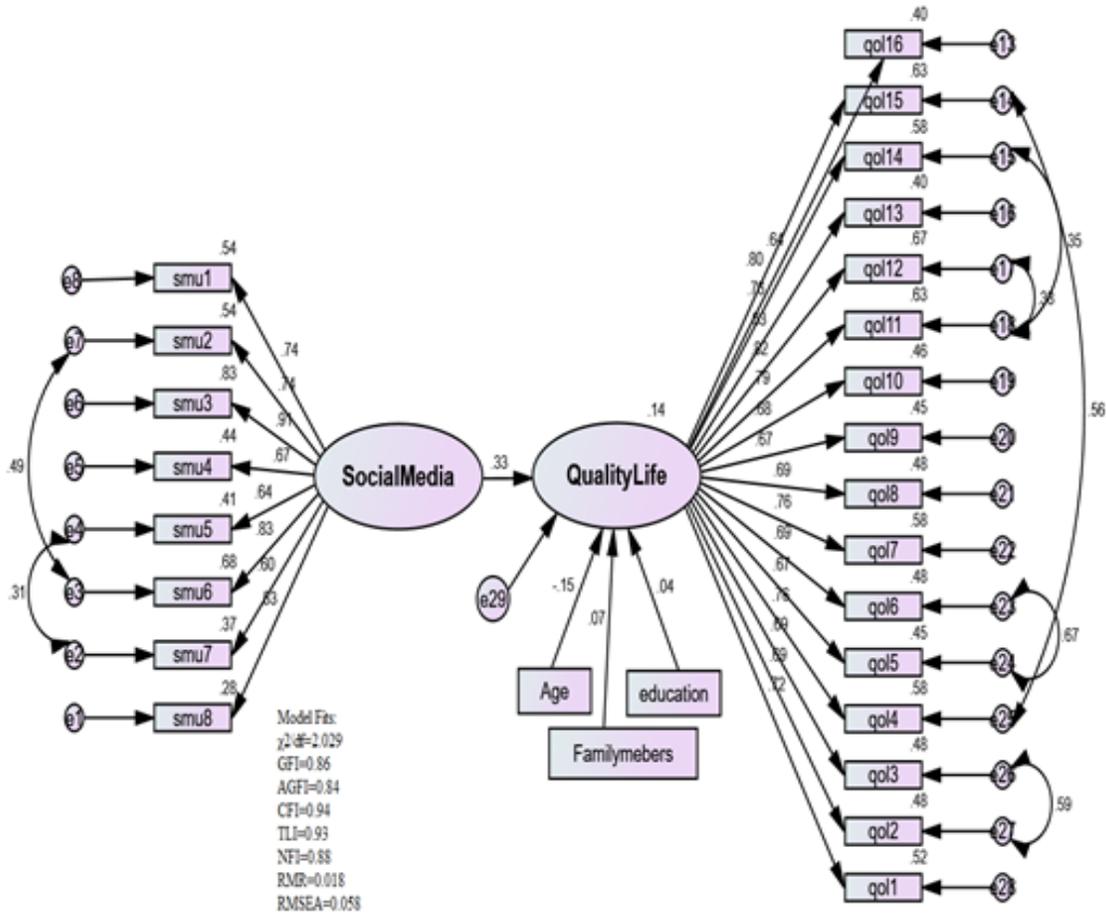


Figure 3: Structural Model

Figure 3: Structural Model

Table 5: Impact of Social Media on Quality of Life

		Estimate	S.E.	C.R.	P
Quality Life	<--- Social Media	0.377	0.079	4.743	0.000
Quality Life	<--- Age	-0.063	0.024	-2.649	0.008
Quality Life	<--- education	0.012	0.016	0.760	0.447
Quality Life	<--- Family members	0.021	0.016	1.271	0.204

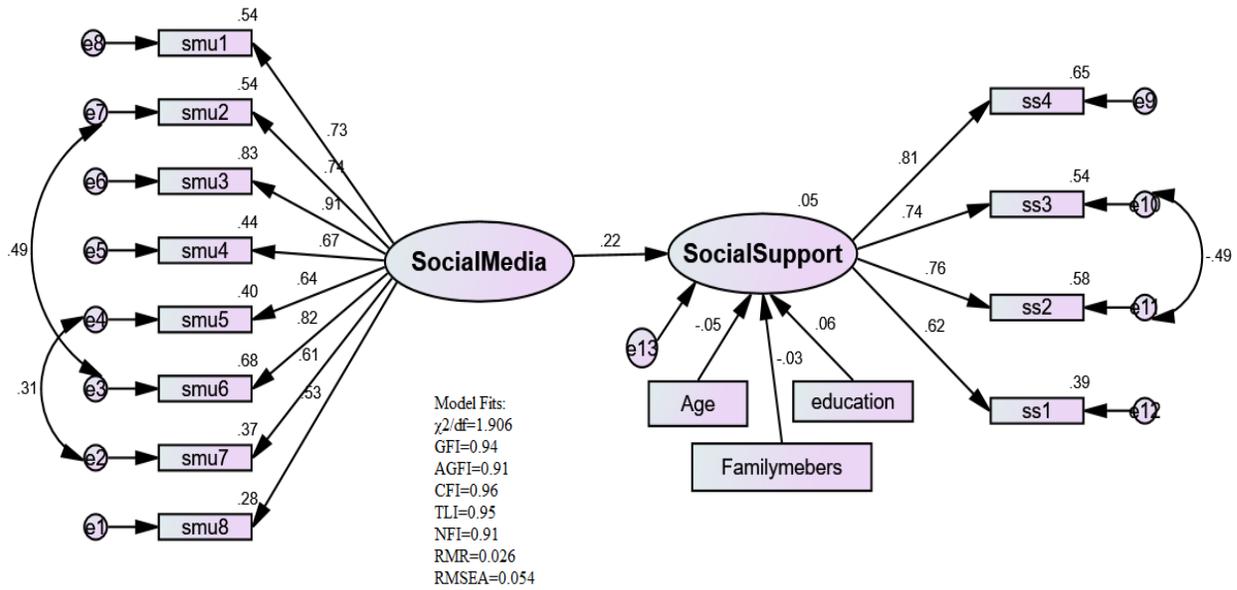


Figure 4: Structural Model 2

Table 6: Impact of Social Media on Social Support

			Estimate	S.E.	C.R.	P
Social Support	<---	Social Media	0.341	0.104	3.288	0.001
Social Support	<---	education	0.024	0.023	1.017	0.309
Social Support	<---	Age	-0.027	0.034	-0.781	0.435
Social Support	<---	Family members	-0.011	0.024	-0.446	0.656

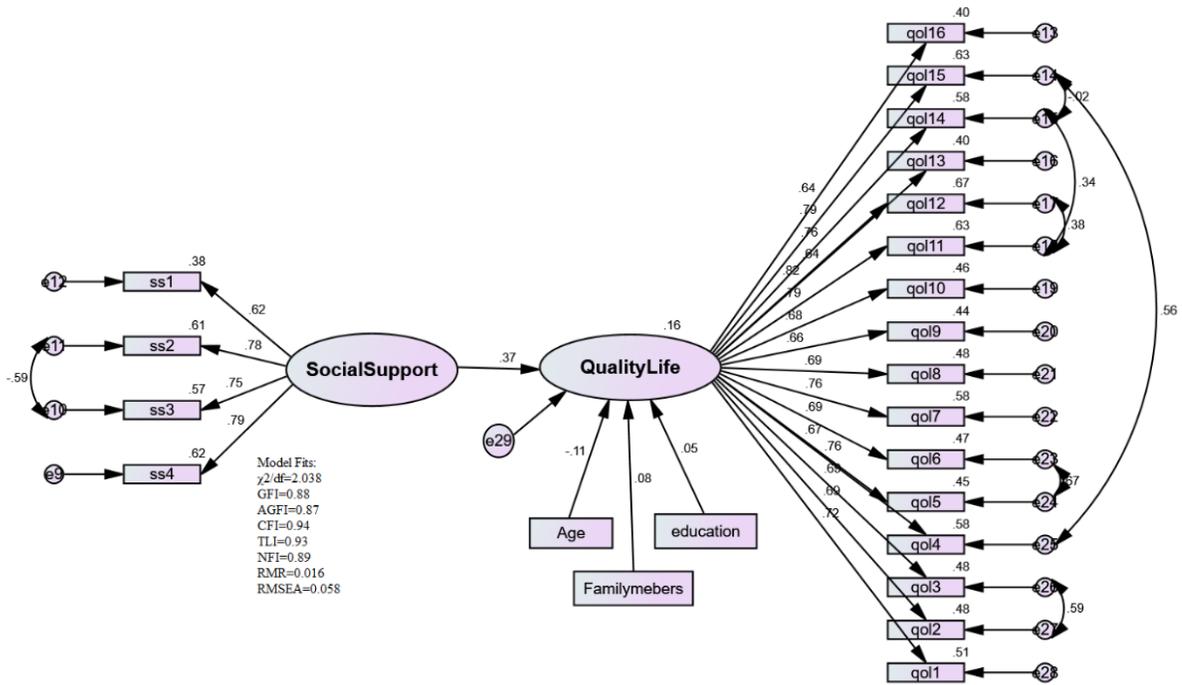


Figure 5: Structural Model 3

Table 7: Impact of Social Support on Quality of life

			Estimate	S.E.	C.R.	P
Quality Life	<---	Social Support	0.275	0.049	5.616	0.000
Quality Life	<---	Age	-0.046	0.023	-1.992	0.046
Quality Life	<---	education	0.015	0.016	0.933	0.351
Quality Life	<---	Family members	0.024	0.016	1.486	0.137

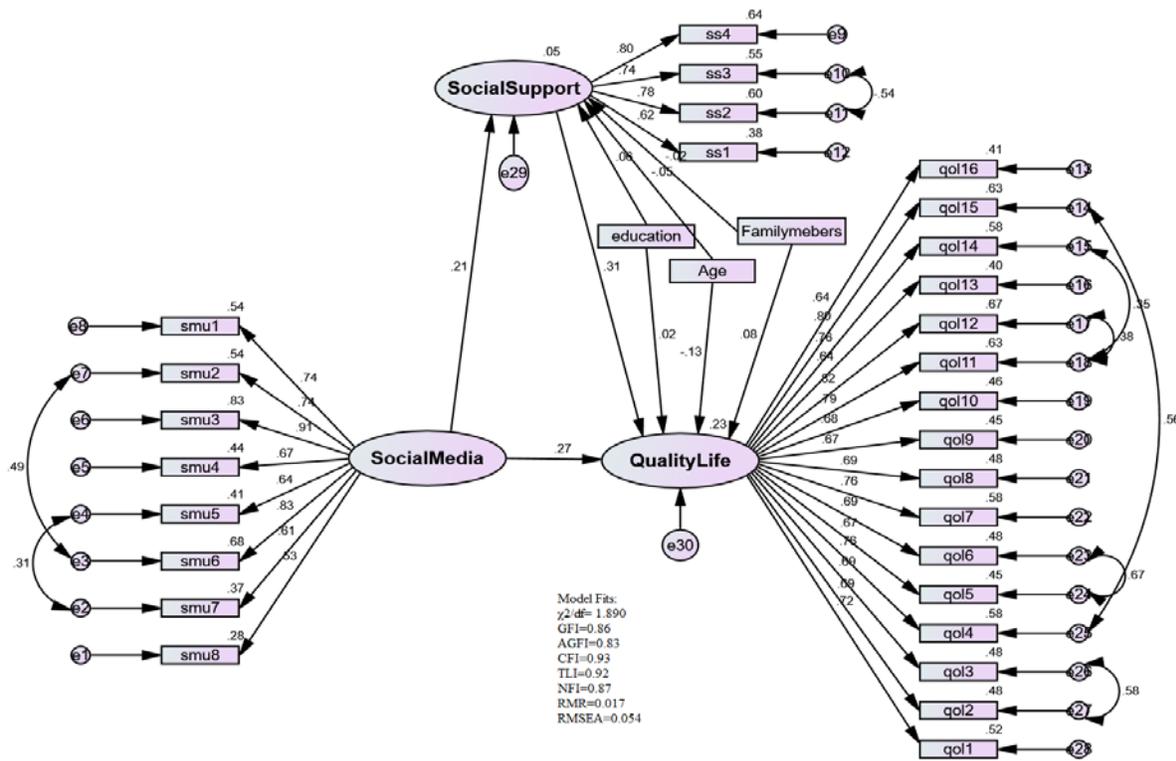


Figure 6: Structural Model 4

Table 8: Mediating Role of Social Support

Hypothesis	Direct effect	p	Indirect effect	p	Total Effect	p
H4. QOL <--- SMU (through SS)	0.265	0.001	0.066	0.003	0.332	0.001
SS <--- SMU	0.213	0.007	-	-	-	-
QOL <--- SS	0.312	0.001	-	-	-	-
QOL <--- Age	-0.134	0.006	-0.015	0.335	-0.149	0.004
QOL <--- Education	0.023	0.751	0.019	0.298	0.042	0.481
QOL <--- Family Members	0.078	0.137	-0.008	0.657	0.071	0.193
SS <--- Age	-0.048	0.393	-	-	-0.048	0.393
SS <--- Education	0.061	0.358	-	-	0.061	0.358
SS <--- Family Members	-0.025	0.705	-	-	-0.025	0.705

Note: SMU = Social Media Usage, SS=Social Support, QOL=Quality of life.

5. Discussion and Conclusion

This study, being a new attempt in an emerging economy scrutinizes the role of social media usage in quality of life among old age people with a mediator of social support. The contributions of prior studies in tenure of social media, social support and quality

of life cannot be undervalued. However, the present study assesses a new zone— mediating role of social support between social media and quality of life. Moreover, studies have often given minor attention to test the quality of old age people particularly in emerging economies such as Pakistan. Based on

empirical evidence from old age people, we argue that social media significantly contributes to the life quality of old age people. As claimed by Hawi and Samaha, (2017) that different kinds of social media usage including internet, mobile and apps etc. can interact them with their fellow and partners, which in turn help to enhance their lives quality. Similarly, Prieto *et al.*, (2014) also claimed that social media keep people aware of health information which are often useful for old age people to keep quality of life. In addition, our results favor several other studies such as Johnson *et al.*, (2013) who scrutinized that social media usage significantly related to quality of life.

By means of analyzing quality of living styles among old age, social media is vital in developing economies. Today, usage of social media is a valuable source for connecting people and organizations at the world level. The developing economies are more progressive towards this scenario as compared to the less developed economies. Among the different economies of the international system, USA is at the top in using the social media. In rural areas due to lack of proper resources, advanced technology, and educational facilities, people cannot get benefit from the social media connection. Social media usage has become as part of life among the old age which provide them as a source of entertainment, a sense of modernity also enable them active and busy apart from their other socio-economic issues of lives. However, in the contemporary world of modernization, through the process of globalization, by using social media on the part of old age people keep them more connecting, more social support, advancement and updated about

the important matters of lives. It has a positive impact on their lives also keep them effective and efficient in living a good quality life at the societal level.

We concluded that social media significantly positively related to social support. In the line with Hampton *et al.*, (2015) that depicted that social media create awareness among people which is useful for social support. In general, social support is concerned with empathy, cooperation and welfare etc. which can be promoted through social media. Chun and Lee, (2017) also pointed that social media channel can build feeling of social support among youth for old age people in society.

Our findings confirmed a significant positive influence of social support on quality of life. In the line with Lee *et al.*, (2016) who suggested that social supports can bring a positive change among lives. Moreover, it is also argued that social support is deemed a major source to provide information about social activities. Our findings support Goulet, (2012) who argues a significant relationship between social support and quality of life. It is noteworthy in Pakistan, that there is a collectivism culture approach and youth often care their elder which positive contributes to quality of old age people.

We found that social support partially mediates the relationship between social media and quality of life. Though, Wedgeworth *et al.*, (2017) claimed that social support fully intercedes the relationship between interpersonal feelings and quality of life, our findings confirmed that social support is not a full significant mediator between social media usage and quality of life in the old age population of Pakistan. Similarly, Lu & Hampton, (2017) scrutinized a

positive connection between social support, social networking, and quality of life. In fact, in the developing business sector Pakistan, social media attempts a vital role in old age quality of life and social support can partially mediate the relationship.

5.1 Implications for Practice

The current research demonstrates several implications to improve the life quality among old age through social media and social supports. Based on empirical evidence from an emerging economy, we articulate that social media can significantly contribute to the quality of life among older population. In this context, media channels are required to publish information about health, safety and exercise, so that old people can get useful information about life processing. Government can advise media channels to publish positive health behaviors and tips to sustain quality of life among old people. Moreover, sometime, they received minor attention from youth in old age; hence, they are required to probably access media in order to sustain their life. However, as claimed by De Choudhury and Kıcıman, (2017) that mere social media is not sufficient to improve quality of old age life, they must be provided enough social supports to live happy in the community. Hence, youth are encouraged to care their elders and facilitate them in term of health, social interaction and discussion. They will not be ignored in daily discussion and will be contacted on usual basis. Surprisingly, there is not special scheme or program for the improvement of old people life in Pakistan, Govt. literally need action to bring up with new policies to upsurge quality of old people. For improving social support, youth can

put steps forwards to work for their elders in community through a variety of ways. Moreover, the findings are not only important for old age people of Pakistan but other emerging economies as well as developed countries can also gain equal benefits from this research. To summarize, old people play a key role in community, hence their life and daily activities will be promoted through social support and media connections.

5.2 Limitations and Future Research

Despite having substantial contributions and implications for policy makers, government, youth and old age people, this research has a few limitations which can be addressed in future studies. For instance, particularly this study focused on an emerging economy Pakistan, it may be not be useful for representative to the entire world. We observed the mediating role of social support, though, some other mediators can be assessed between social media and quality of life to explore how life of old people can be enhanced. Moreover, we only used structured questionnaire for data collection, how in the emerging market Pakistan, interview provide better results in this perspective (Anwar, Khan and Khan, 2018). In addition, future researchers can conduct a comparative study amongst developed and developing thrifts for exploring more useful results.

5.3 Conclusion

Old people near to retirement face numerous problems to survive in society as they receive lack of support from youth. They perform a variety of activities to enhance their life quality and sustain their position in the society. However, often in societies, they are ignored and are not considered for

discussion. A plethora of research has been conducted to explore the factors contribute to the quality of life among old age especially in developing economies while emerging economies such as Pakistan has been untouched in this perspective. The present study examined the role of social media usage among the life of old age people with a mediating role of social support. Data were collected from 308 old age people (above 50 years) using a structured questionnaire. Hypotheses were tested in AMOS by applying structural equation modeling. The results indicate that social media significantly positively contributes to quality of life among old age as well as it significantly contributes to social support. Moreover, social support partially mediates the relationship between social media and quality of life. Our research suggests youth and the government to support old age people to enhance their lives.

References

- Achat, H., Kawachi, I., Levine, S., Berkey, C., Coakley, E., & Colditz, G. (1998). Social networks, stress and health-related quality of life. *Quality of life research*, 7(8), 735-750.
- Ali, R. (2016). Social media and youth in Pakistan: Implications on family relations. *Global Media Journal*.
- Anwar, M. (2018). Business model innovation and SMEs performance—does competitive advantage mediate?. *International Journal of Innovation Management*, 22(07), 1850057.
- Anwar, M., Khan, S. Z., & Khan, N. U. (2018). Intellectual Capital, Entrepreneurial Strategy and New Ventures Performance: Mediating Role of Competitive Advantage. *Business & Economic Review*, 10(1), 63-94.
- Armstrong, M. I., Birnie-Lefcovitch, S., & Ungar, M. T. (2005). Pathways between social support, family wellbeing, quality of parenting, and child resilience: What we know. *Journal of child and family studies*, 14(2), 269-281.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman
- Berkman, L. F., & Glass, T. (2000). Social integration, social networks, social support, and health. *Social epidemiology*, 1, 137-173.
- Błachnio, A., Przepiorka, A., & Pantic, I. (2016). Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study. *Computers in Human Behavior*, 55, 701-705.
- Brusilovskiy, E., Townley, G., Snethen, G., & Salzer, M. S. (2016). Social media use, community participation and psychological well-being among individuals with serious mental illnesses. *Computers in Human Behavior*, 65, 232-240.
- Campisi, J., Folan, D., Diehl, G., Kable, T., & Rademeyer, C. (2015). Social media users have different experiences, motivations, and quality of life. *Psychiatry Research*, 228(3), 774-780.
- Chou, W. H., Lai, Y. T., & Liu, K. H. (2013). User requirements of social media for the elderly: a case study in Taiwan. *Behaviour & Information Technology*, 32(9), 920-937.
- Chun, J. W., & Lee, M. J. (2017). When does individuals' willingness to speak out increase on social media? Perceived social support and

- perceived power/control. *Computers in Human Behavior*, 74, 120-129.
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress¹. *Journal of Applied Social Psychology*, 13, 99–125.
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 19(2), 189–211.
- De Choudhury, M., & Kiciman, E. (2017, May). The language of social support in social media and its effect on suicidal ideation risk. In *Eleventh International AAAI Conference on Web and Social Media*.
- George, D., & Mallery, P. (2010). SPSS for Windows step by step. A simple study guide and reference (10. Baski).
- Giunchiglia, F., Zeni, M., Gobbi, E., Bignotti, E., & Bison, I. (2018). Mobile social media usage and academic performance. *Computers in Human Behavior*, 82, 177-185.
- Goulet LS (2012) Friends in All the Right Places: Social Resources and Geography in the Age of Social Network Sites. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania
- Habibi, L., Farpour, H. R., Simab, A. R., Bejeshk, M. A., Rajizadeh, M. A., & Farpour, S. (2020). The Relationship between Social Media Usage and General Health in the Older People of Shiraz City in Iran. *Ageing International*, 1-12.
- Hair, J.F. Jr, Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis: A Global Perspective*, Prentice Hall and Pearson, Upper Saddle River, NJ
- Hampton KN, Goulet LS, Rainie L, et al. (2011) Social Networking Sites and Our Lives: How People’s Trust, Personal Relationships, and Civic and Political Involvement are Connected to Their Use of Social Networking Sites and Other Technologies. Washington, DC: Pew Research Center.
- Hampton KN, Rainie L, Lu W, et al. (2014) Social Media and the “Spiral of Silence.” Washington, DC: Pew Research Center.
- Hampton KN, Rainie L, Lu W, et al. (2015) Social Media and the Cost of Caring. Washington, DC: Pew Research Center.
- Haris, N., Majid, R. A., Abdullah, N., & Osman, R. (2014, September). The role of social media in supporting elderly quality daily life. In *User Science and Engineering (i-USER), 2014 3rd International Conference on* (pp. 253-257). IEEE.
- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576-586.
- Haythornthwaite, C. (2007). Social networks and online community. *The Oxford handbook of Internet psychology*, 121-137.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.

- Hunsaker, A., & Hargittai, E. (2018). A review of Internet use among older adults. *New Media & Society*, 1461444818787348.
- Hutto, C. J., Bell, C., Farmer, S., Fausset, C., Harley, L., Nguyen, J., & Fain, B. (2015, January). Social media gerontology: Understanding social media usage among older adults. In *Web intelligence* (Vol. 13, No. 1, pp. 69-87). IOS Press.
- Johnson, J. K., Louhivuori, J., Stewart, A. L., Tolvanen, A., Ross, L., & Era, P. (2013). Quality of life (QOL) of older adult community choral singers in Finland. *International psychogeriatrics*, 25(7), 1055-1064.
- Konagaya, Y., Watanabe, T., Ohta, T., & Takata, K. (2009). Relationship between quality of life (QOL) and cognitive function among community-dwelling elderly. *Nihon Ronen Igakkai zasshi. Japanese journal of geriatrics*, 46(2), 160-167.
- Lau, W. W. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in human behavior*, 68, 286-291.
- Lawton, M. P., Winter, L., Kleban, M. H., & Ruckdeschel, K. (1999). Affect and quality of life: Objective and subjective. *Journal of Aging and Health*, 11(2), 169-198.
- Lee, A. R., Wolf, R., Contento, I., Verdelli, H., & Green, P. H. R. (2016). Coeliac disease: the association between quality of life and social support network participation. *Journal of Human Nutrition and Dietetics*, 29(3), 383-390.
- Leist, A. K. (2013). Social media use of older adults: a mini-review. *Gerontology*, 59(4), 378-384.
- Leung, L., & Lee, P. S. (2005). Multiple determinants of life quality: The roles of Internet activities, use of new media, social support, and leisure activities. *Telematics and Informatics*, 22(3), 161-180.
- Lu, L., Xu, D. D., Liu, H. Z., Zhang, L., Ng, C. H., Ungvari, G. S., ... & Xiang, Y. T. (2018). Internet Addiction in Tibetan and Han Chinese middle school students: prevalence, demographics and quality of life. *Psychiatry Research*.
- Lu, W., & Hampton, K. N. (2017). Beyond the power of networks: Differentiating network structure from social media affordances for perceived social support. *new media & society*, 19(6), 861-879.
- Luo, H., Wong, G. H., Lum, T. Y., Luo, M., Gong, C. H., & Kendig, H. (2016). Health expectancies in adults aged 50 years or older in China. *Journal of aging and health*, 28(5), 758-774.
- Montoya-Murillo, G., Ibarretxe-Bilbao, N., Peña, J., & Ojeda, N. (2020). Effects of cognitive rehabilitation on cognition, apathy, quality of life, and subjective complaints in the elderly: a randomized controlled trial. *The American Journal of Geriatric Psychiatry*, 28(5), 518-529.
- Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: systematic

- review of the uses, benefits, and limitations of social media for health communication. *Journal of medical Internet research*, 15(4).
- Nayak, J. K. (2018). Relationship among smartphone usage, addiction, academic performance and the moderating role of gender: A study of higher education students in India. *Computers & Education*, 123, 164-173.
- Nunnally, J. C., & Bernstein, I. (1994). Psychometric theory 3rd ed. 1994 McGraw-Hill. *New York, NY*.
- Nur, R., Mallongi, A., Sridani, N. W., & Devi, R. (2020). Factors related to quality of life of elderly victims of natural disasters in Palu City. *Enfermería Clínica*, 30, 178-181.
- Oh, H. J., Ozkaya, E., & LaRose, R. (2014). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, 30, 69-78.
- Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior*, 12, 729-733.
- Podsakoff, P. M. & D. W. Organ (1986). Self-Reports in organizational research: Problems and prospects. *Journal of Management* 12, 531-544.
- Prieto, V. M., Matos, S., Alvarez, M., Cacheda, F., & Oliveira, J. L. (2014). Twitter: a good place to detect health conditions. *PLoS one*, 9(1), e86191.
- Rosenfeld, D., & Anderson, J. (2020). 'The own' and 'the wise' as social support for older people living with HIV in the United Kingdom. *Ageing & Society*, 40(1), 188-204.
- Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. *Social indicators research*, 117(2), 561-576.
- Statista Research Department. Digital 2019: Q4 Global Digital Statshot, page 28. DataReportal. Available from: <https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/> Accessed on: 14 February 2020
- Tolsdorf, C. C. (1976). Social networks, support, and coping: An exploratory study. *Family process*, 15(4), 407-417.
- Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). Getting healthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, 45, 151-157.
- Vitak, J., Ellison, N. B., & Steinfield, C. (2011). The ties that bond: Re-examining the relationship between Facebook use and bonding social capital. In *System sciences (HICSS), 2011 44th Hawaii international conference on* (pp. 1-10). IEEE.
- Wagner, N., Hassanein, K., & Head, M. (2010). Computer use by older adults: A multi-disciplinary review. *Computers in human behavior*, 26(5), 870-882.

Wedgeworth, M., LaRocca, M. A., Chaplin, W. F., & Scogin, F. (2017). The role of interpersonal sensitivity, social support, and quality of life in rural older adults. *Geriatric Nursing*, 38(1), 22-26.

stressful life events. *Journal of Health and Social behavior*, 78-89.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to

Appendix

Social Media Usage Measurement

1.	I often think about social media when I am not using it
2.	I often use social media for no particular reason
3.	Arguments have arisen with others because of my social media use
4.	I interrupt whatever else I am doing when I feel the need to access social media
5.	I feel connected to others when I use social media
6.	I lose track of how much I am using social media
7.	The thought of not being able to access social media makes me feel distressed
8.	I use social media daily and like it.

Social Support measurement

1.	Overall, how satisfied have you been in the last month with the help you have received from friends, neighbors, or family members?
2.	Overall, how satisfied have you been in the last month with the help you have received with transportation, household and yard work, and shopping?"
3.	In the past month, how satisfied have you been with the support received during difficult times, comforting from others, how others have listened, and interest and concern from others?
4.	Overall, how satisfied in the last month have you been with the suggestions, clarifications, and sharing of similar experiences you have received from others?"

Quality of life measurement

1.	Health
2.	Self-Regard
3.	Philosophy of life
4.	Standard of living
5.	Work
6.	Recreation
7.	Learning
8.	Creativity
9.	Helping
10.	Love Relationship
11.	Friendships
12.	Relationships with Children
13.	Relationships with Relatives
14.	Home
15.	Neighborhood
16.	Community