

## Mediating Role of Class Participation between Social Media Usage and Self-Compassion of the Pre-Service Special Needs Teachers in Pakistan

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### Abstract

The study aims to find out the importance of social media for the self-compassion of special needs education (SNE) students to improve their online class participation in particular with a focus on the Pakistani perspective of special educators. The quantitative approach was applied through the application of a random sampling technique. A self-developed questionnaire was used to collect data from pre-service special need education students (n=387) from two public and two private universities in Pakistan. Quantitative data were analyzed through descriptive and inferential data analysis techniques. The reliability ( $\alpha = .891$ ) of the instrument was found satisfactory. The results revealed a substantial and significant positive correlation among all the three factors i.e. social media, online class participation, and self-compassion. Social media was found a significant predictor of self-compassion. Whereas, online class participation found a significant mediator between self-compassion and the use of social media. Future studies can be conducted to develop the social media model to facilitate the SNE students' learning process.

**Keywords:** Pre-service Special Need Education students, social media, classroom participation, self-compassion

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## Introduction

Social media has become very popular among all ages over the last decade (Gabbidon, 2019). Weatherspoon, Weatherspoon, and Ristau, (2015) reported that one-quarter of the world uses social media daily. It is used for different activities by different people e.g. social interaction, business activities, banks, private and government organizations as well as in the field of education (Song, 2017; Shoup, 2019). Social media provides a platform to exchange information across the distance with low investment. It enables the individuals to gain support for learning in a supportive environment. By utilizing ongoing feedback, the skills for empowerment can be enhanced (Terra, 2020). Today, the use of ICT has largely affected the educational system world widely due to easy accessibility by the students, wherever they are. As a consequence, phenomena of usage technological in the classroom has changed. Easy access to digital resources can lead to online discussions and discourses which negates the traditional paradigm (Marlowe, 2018).

Empirical researches have been conducted on the way students use social media technology acceptance among pre-service education teachers (Caro, et al, 2002; Kontopoulou, 2019; Marlowe, 2018; Terra, 2020; Weatherspoon, Weatherspoon, and Ristau, 2015). In addition, the usage of social media by pre-service teachers will lend support to the successful integration of technology into the teaching and learning process. Pre-service special need education teachers for the adoption of technology will positively influence their performance when they get into service. In the area of special need education, the use of social media technology is extensively befitting according to the educational needs of the students e.g. comfortably handling the students of the autism spectrum by utilizing social media. Social media can lead special need education students to normal life e.g. searching for a job and uploading a resume make the usage of social media a necessity for special need education students (Ogbonnaya, 2019; Scheeler, Budin&Markelz, 2016).

Additionally, the importance of exploring how does social media help special needs education students have been highlighted in researches (Creighton et al., 2013; Greenhow and Burton, 2011; Kumar, Choi and Greene, 2017; Schwier, 2010; Vivian, 2012; Yoo and Kim, 2013; Vaughan et al., 2011). However, little research has been conducted to find out the importance of social media for the compassion of special needs education students and prospective special needs educators to see their online class participation of special need education students. This research focuses to explore particularly the importance of social media (SM) for the self-compassion (SC) of special needs education students to

improve their online class participation (OP) in the Pakistani perspective of special need education students. In Pakistan, there has been little study on the impact of online class participation in moderating the relationship between social media usage and self-compassion among pre-service special education teachers. As a result, this study will add to the existing literature particularly within the context of Pakistan.

### **Review of Literature**

Social media can be defined as “a group of internet-based applications that build on the ideological and technical foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (Kaplan & Haenlein, 2010, p. 61; Gabbidon, 2020). In the 21<sup>st</sup> century, the use of social media has been increased rapidly. It is widely used for different purposes e.g. interaction, find a job, get a discount, for attract clients in business, etc (Warner & LaFontaine, 2014). Whereas, social media has become the chain of business in finding products and uncover answers to questions (Schaefer, 2014; Karimi & Naghibi, 2015). It has also become famous in the educational system of teaching and learning process (Powers & Green, 2016; McCann & Barlow, 2015; Lovecchio, 2013).

The use of social media has been remained mandatory for the learning of students with disabilities (Bausch & Hasselbring, 2004). Special need students require trained teachers to implement the individualized education program (IEP) but due to the non-availability of specialized programs in assistive technologies in teacher education, learning of students with special needs has become difficult (Naraian & Surabian, 2014). The use of social media by pre-service teachers helps to develop the mindset and skills for ICT usage. Therefore, it has become an essential requirement for pre-service teachers to adopt ICT (Gabbidon, 2020). Social media not only trained the pre-service teachers for social collaboration, rather it prepares them for ICT adoption in practical fields with appropriate use of these platforms. Special need education teachers aim to facilitate students with quick feedback on comments, audio and video clips, and academic assignments (Starkey, 2010). Different sites can be used in special education e.g. Habbo, provides cyber guarded and customized programs (Ogbonnaya, 2019). Empirical researches have ascertained the results based on the findings that social media increases online classroom participation of the students, wherever they are (Gorfinkel, Muscat, Ollerhead, & Chik, 2021; Jomezai et. al., 2021; Naraian & Surabian, 2014; Ogbonnaya, 2019; Suhail & Bargees, 2006).

The terminology “Self-compassion” is defined by different philosophers. But it is well defined by Neff, (2011), and Neff and Pommier (2013) in terms of self-kindness, common humanity, and mindfulness. Self-kindness refers to the way we think or treat ourselves with understanding and consciousness without self-judgment. While Common Humanity refers to the way a person thinks about the experiences and adventures of life that were linked to others without isolating himself from his sufferings and calamities. Whereas, mindfulness refers to the way a person balances positive and negative feelings without feeling pain, agony, discomfort, ignorance, and amplification. Self-compassion is different from self-esteem and closely associated with emotional balance (Adams & Leary, 2007; Boonlue, 2017; Neff, Rude & Kirkpatrick, 2007; Suhail & Bargees, 2006). Social media sites specifically designed for learning allows educators to remain connected to their students other than classrooms and it proves to be time effective (Boonlue, 2017; Shoup, et al, 2019).

Different researches i.e. Boonlue, 2017; Wasykwi, MacKinnon and MacLellan, 2012; Wong and Mak, 2013 show the association between self-compassion and online class participation through social media and revealed that higher association between self-compassion and online classroom participation increases through the use of social media. Self-compassion boosts up self-confidence and morale in people on failures without negative thoughts and losing hope (Boonlue, 2017; Breines & Chen, 2012; Wong & Mak, 2013). Self-compassion keeps special students active with an interest in life after getting lower grades (Neff et al., 2005). If self-compassion fails to be built in special need students then they could suffer from addiction, misuse of alcohol, and higher rates of suicides than the high compassionate adolescents (Boonlue, 2017; Crocker & Canevello, 2008; Tanaka et al, 2011). Self-compassion would become the cause of decreasing self-criticism, segregation, depression, and over-identification in special need students when they deal with difficulties (Boonlue, 2017; Dumont & Provost, 2011; Neff, Rude & Kirkpatrick, 2007; Terry & Leary, 2011). Use of social media reduce depression and boost up the perceived social support in special need students (Boonlue, 2017; Gabbidon, 2020; Naeemi, Tamam, Hassan & Bolong, 2014; Shaw & Gant, 2002).

### **Research Objectives**

This research study involved following research objectives:

1. Measure the effect of social media usage on online class participation among pre-service special education teachers.

2. Find out the effect of online class participation on self-compassion of students.
3. Identify the mediating role of online class participation of social media usage and self-compassion.

### **Hypotheses**

This study was based on the following research hypotheses:

- Ho1: There is no significant effect of social media usage on online class participation.
- Ho2: There is no effect of social media usage on the self-compassion of the special need education (SNE) students learning.
- Ho3: There is no significant mediation role of self-compassion in between social media usage and online class participation of prospective teachers.

### **Methodology**

It was a quantitative study in nature with the application of survey design. The population of this study consisted of all the seven universities offering programs in special needs education (SNE) in Pakistan. Pre-service special education teachers were the target population for this study. A multi stage sampling technique was used to collect data. A convenient sampling technique was used to select 387 pre-service special education teachers from randomly selected two public and two private universities.

A self-developed instrument was based on three factors i.e. self-compassion, social media usage, and online class participation. The self-compassion construct has the following items:

- 1- When you have to deal with difficult situations, you think that many people are feeling
- 2- When something upsets you, you feel annoyed
- 3- You think that your failing is not a part of your life
- 4- Sometimes you think that lots of people might be unhappier than you are

The social media usage has the following items:

- 1- You spend time online every day.
- 2- You spend time on social media everyday (e.g. Facebook & What's app).
- 3- Social media helps you to keep in touch with your friends and family.
- 4- You use social media for academic purposes.

The online class participation has the following items:

- 1- You can ask online your teachers if you do not understand something they have said.
- 2- Your teachers encourage you to participate in your online classroom activities.
- 3- Your teachers give you the chance to share your opinions or thoughts in online classes.

The reliability of the instrument (SM: .891, OP: 0.85, SC: 0.771 )was found through Cronbach's alpha (see table 01). Five experts of the relevant field established the content validity of the instrument. The response of the participants were measured on 5 Likert type scale ranging from *Strongly disagree=1* to *Strongly agree=5*. Data were analyzed through descriptive statistics and inferential statistics techniques in SPSS. Confirmatory factor analysis (CFA) and path analysis were measured by AMOS.

Table 1  
*Reliability and Validity*

	$\alpha$	rho_A	CR	AVE
OP	0.735	0.736	0.85	0.654
SC	0.567	0.572	0.771	0.53
SM	0.837	0.843	0.891	0.671

Note: OP= Online class participation, SC= Self-Compassion, SM=Social Media

Table 1 shows the CR of each construct ranges from 0.771 to 0.891. These results indicate that the constructs pose satisfactory internal consistency reliability.

Table 2  
*Divergent validity Farnell Larker criteria*

	OP	SC	SM
OP	0.809		
SC	0.316	0.728	
SM	0.452	0.302	0.819

Table 2 shows the range of DVF between 0.72 to 0.819.

Table 3  
Cross loading

	OP	SC	SM
Q22	0.768	0.249	0.363
Q23	0.83	0.257	0.352
Q24	0.826	0.261	0.381
Q28	0.223	0.738	0.148
Q29	0.288	0.765	0.253
Q32	0.162	0.678	0.246
Q15	0.361	0.292	0.847
Q16	0.28	0.291	0.834
Q17	0.352	0.166	0.816
Q18	0.46	0.233	0.779

Table 3 indicates the discriminant validity of this study, the discriminant validity was assessed by using cross-loadings. All the items loaded higher against their respective intended latent variable compared to other variables.

Table 4  
VIF

	VIF
Q15	2.29
Q16	2.363
Q17	1.908
Q18	1.493
Q22	1.323
Q23	1.611
Q24	1.553
Q28	1.293
Q29	1.121
Q32	1.2

Table 4 presents the variance inflation factor (VIF) for each independent variable and is found within the value of 10.

**Findings of the Study**

**Path Analysis**

The AMOS 20.0 was used for the testing of the social media usage model through the structural equation model and path analysis. Social media and self-compassion, were considered as exogenous variables, and online class participation was considered as an endogenous variable.

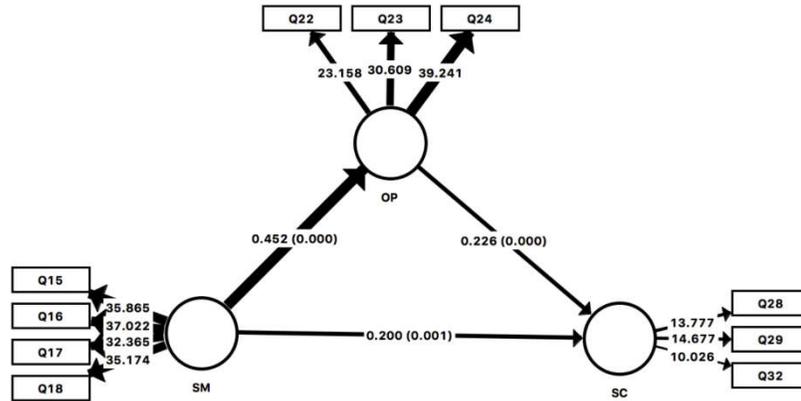


Figure 1. Social media usage, Self-Compassion and online Class Participation model

The estimates were analyzed for direct and indirect effects for the tested model with 5000 bootstrapped samples (see Table 5 and 9).

Table 5

Direct effect of online class participation, Self-compassion(SC) and Social media

	O	M	SD	t	P
OP -> SC	0.226	0.231	0.056	4.018	0.000
SM-> OP	0.452	0.455	0.046	9.828	0.000
SM -> SC	0.200	0.200	0.059	3.371	0.001

\*p-value less than .05; \*\*p-value less than .01; \*\*\*p-value less than .001  
 Results of direct effects showed that social media was found a significant predictor of self-compassion. Whereas online class participation was found significantly predicted by self-compassion.

Table 6  
*Coefficient of Determination (R<sup>2</sup>)*

	R <sup>2</sup>	R Square Adjusted
OP	0.205	0.202
SC	0.132	0.127

The exogenous constructs' effect size on endogenous constructs was measured by the structural equation model's evaluation. Chin (1998), described R2 values i.e. 0.67, 0.33 or 0.19 as strong, moderate, or weak, respectively. Table 6 indicates a model with the variance of the endogenous construct value between a moderate range of explanatory power.

Table 7  
*F-square for endogeneity*

	OP	SC
OP		0.047
SM	0.257	0.037

The effect size of f2 is measured by the contribution of the exogenous construct to the R2 values of the endogenous construct of the model. Cohen, Manion and Morrison, (2011), described values of the f2 i.e. 0.02, 0.15, and 0.35 which indicate an exogenous construct's small, medium, or large effect respectively. Table 7 shows that the f2 values for this model were in the large range.

Table 8  
*The q<sup>2</sup> Effect Sizes*

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
OP	1140	992.793	0.129
SC	1140	1069.666	0.062
SM	1520	1520	

Hair et al. (2017) suggest that values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium, or large predictive relevance, respectively. Table 8 presents the q2 effect size values for the study model showing that the effect sizes for this study fell in the medium range.

Table 9  
*Indirect effect of online class participation in between social media usage and Self-Compassion*

	O	M	SD	t	P
SM -> OP -> SC	0.102	0.105	0.029	3.564	0.000

*\*p-value less than .05, \*\*p-value less than .01, \*\*\*p-value less than .001*  
 Results of the indirect effect in table 9 show that online class participation found a significant mediator between Self-compassion and the use of social media.

## Discussion

The results of this study highlighted a moderate correlation between social media usage, self-compassion, and online class participation. This indicates that the students who scored higher on social media usage have shown high scores on the self-compassion scale. Social media was proven to be a significant predictor of self-compassion. Self-compassion, on the other hand, was revealed to be a major predictor of online class participation. The results further revealed that online class attendance was revealed to be a significant mediator between Self-compassion and the usage of social media.

Empirical research has proved a strong relationship between self-compassion and usage of social media i.e. (Davis, 2013; Boonlue, Briggs, and Sillence, 2016; Bore, 2008; James and Harville, 2018). The study conducted by Boonlue, Briggs, and Sillence (2016), endorse the findings of current study. According to Kyeong, (2013), Self-compassion has a positive and significant adaptive emotion-focused strategy of acceptance. Bilgin and Taş, (2018) revealed that social media enhance online class participation. The findings of this study revealed the impact of social media on the self-compassion of SNE students. The use of social media has changed the meaning of privacy, as most of the friends in contacts of profile want to know the current status of their friends (Manago, Taylor & Greenfield, 2012). The study conducted by Boonlue (2017) and Thompson, Klass, and Fulk (2012) also endorsed the findings of the present study that social media usage enhances self-compassion and online classroom participation of the students. Furthermore, there were many studies conducted in different eras to findout the effect of social media as performing the mediated role to reduce the communications distance between teachers, students, and class fellows, which also results in reduce face-to-face communication barriers. Social media helps students to get themselves adjusted to a new

environment (Boonlue, Briggs & Silence, 2016 ;Boonlue, 2017; Christiansen, 2008; Greenhow & Robelia, 2009; Zhang, Jiang, and Carroll, 2012).

### **Conclusion and Recommendations**

The usage of Social media for the improvement of the teaching-learning process of pre-service special needs teachers was explored in a few of the researches. The present study has significantly assessed the mediation of self-compassion as well between social media usage and online class participation of the pre-service special needs teachers. Furthermore, the findings of this study can be best used for the improvement of SNE pre-service institutions, curriculum developers as well as policymakers to improve their plans for the area of SNE teachers. The social media model to facilitate the SNE students learning process can be developed by conducting future research based on the findings of this research. There is less literature found in the field of SNE in the context of the self-compassion of pre-service special needs teachers in Pakistan. The research recommended that the Higher education commission should facilitate the institutions to incorporate social media for the teaching-learning process especially among SNE teachers. Further, the research must be conducted to develop strategies for use of the social media in inclusive education.

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