

# The Relationship of Instagram Use and Self-Transcendence: An Analysis of Female Youth

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## ABSTRACT

Building on Uses and Gratification Theory, the present study theorizes that the relationship of Instagram use is positively related to self-transcendence directly and indirectly via online pro-social behaviors. Moreover, the present study also theorizes that direct and indirect (via online pro-social behaviors) relationship between Instagram use and self-transcendence is contingent on gender such that the relationships are strong for women as compared to men. Based on questionnaire, survey data collected from 417 students from the public sectors universities in Punjab and analyzing data by using structural equation modeling and multi-group analysis, the present study empirically revealed that Instagram use is positively related to self-transcendence directly and indirectly via online pro-social behaviors. Proceeding further, the present also found that direct and indirect (via online pro-social behavior) relationship between Instagram use and self-transcendence was contingent on gender such that the relationships was strong for men as compared to women. The present study signifies the consequential potential of Instagram use in shaping and developing user' self-transcendence experience via online pro-social behaviors and extended the homological networks of antecedents and outcomes of Instagram use, online pro-social behaviors and self-transcendence. The present study also provides valuable suggestions on practical front that help parents and teachers to understand and encourage the transcendental importance of meaningful Instagram use for the social and psychological development of the students.

**Keywords:** Instagram use, Self-transcendence, Online Pro-social Behavior, Uses and Gratification Theory, Moderated mediation, Meaningful media experience.

## Introduction

In recent times, internet has gained immense popularity in individual's affairs and provides convenient and frequently used tools that facilitate human life. For instance, individuals can exchange information and build relationships via social Media (Shareef, 2018). The last decade witnessed the immense popularity of social media networking sites has dramatically changed the patterns of social interactions, governments and business operations and revolutionize human life style. Moreover, it has changed the

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patterns of human behaviors including their sociopolitical behaviors (Kapoor, 2018). A global survey titled as “We are Social” conducted in 2016 revealed that social media networking sites has almost 2.307 billion active users and increasing with a great speed day by day. These growing numbers in social media users’ indicate the critical role that social media is playing in the daily affairs of individuals (Shiau, 2018). A statistical report highlighted that the monthly users of Instagram exceed 1.30 billion (Facebook, 2020). Instagram has become an integral part of users’ lives that helps them enrich their understanding of personal, political and social life. Recent studies informed that Instagram has gained popularity among adolescents and young adults, as more than half users checked their account once a day at least (Pew Research Center, 2019). The past research revealed that social media such as Instagram is linked to higher rates of depression, Fraud, anxiety as well as loneliness. But analyst have another view about it as they say this does not a complete picture of Instagram full impact on self-transcendence of female users. Instagram use as meaningful media experiences can impact different psychological aspects of the individuals such as psychological betterment, satisfaction of life, social trust, social capital, sociopolitical engagement and loneliness.

The meaningful media experiences can develop and shape core human values such as basic psychological needs (competence, relatedness, and autonomy), self-acceptance, self-realization and self-transcendence (Algoe & Haidt, 2009). Self- transcendence refers to a developmental of maturity or it can be described as an effort for maturity wherein there is enhanced awareness of the surroundings and an orientation toward larger perspectives about life”. (Runquist,2007; Reed, 2008). Furthermore self-transcendence is individual’s quest for searching meaning, hope and integrity that shapes their development maturity. Meaningful media experiences are likely to impact the self- transcendence experiences through enhanced awareness of environment via discussion and sharing views with others. Fredrickson (2001, 2009) points out that personality and others orientation can shape and develop self-transcendence experiences as it is dispositional trait that is striving for greater purpose and meaning to go beyond personal interest in favor of community or society.

However, despite the close theoretical relevance and its potential to enhance self-transcendence experience there is surprising paucity of empirical research on the relationship of meaningful media experience and self-transcendence. Exceptions include a small number of studies has explored the impact of meaningful media experiences on self-transcendence. Thus, to gain deeper insight into the relationship of meaningful media experience and self-transcendence this thesis is an attempt to fill this research gap by exploring role of Instagram use (as meaningful media experience) on self-transcendence.

As Instagram use has positive significant influence on individual’s psychological aspects such as satisfaction of life, psychological betterment, social trust, sociopolitical engagement. With this line of reasoning in mind it is timely and relevant to explore the underlying psychological mechanism through which Instagram use influence self-transcendence experience. This study has taken pro-social behaviors online as a mechanism through which Instagram use can enhance self-transcendence experience. The selection of online pro-social behavior as mediator is inspired because online pro social behaviors creates a better and positive civic norms interaction that leads towards many positive returns such as quality in relationships, enhanced positive feel of meaningful connections, improved self- esteem and psychological well-being. (Jang *et al.*, 2016; Valkenburg & Peter, 2009; 2011). Past research on individuals revealed that online pro social behaviors help them to establish strong relationship with others to gain positive experience of media (Reich *et al.*, 2012).

In order to make advancement in our knowledge of the boundary conditions of the relationship in between the role of Instagram use and self-transcendence, this study propose that gender has a direct relationship between Instagram use and self-transcendence or it moderates as well as it has indirect relationship between Instagram use and online pro-social behaviors and self- transcendence. Therefore, gender into the framework is linking the use of Instagram and self-transcendence and online pro-social behaviors can boost our understanding of gender which is based on different effects of Instagram use towards self-transcendence.

The intent of this study is threefold first, to check the effects of Instagram use on university student's self-transcendence experience then to test the mediatory role of online pro-social behaviors between the relationships of Instagram use on university student's self-transcendence experience.

### ***Instagram and its Usage in Pakistan***

Instagram in Pakistan is not new. With its advancement upper class of Pakistan is obsessed for its users. As the Instagram is an almost new experience for the people of Pakistan. It is less popular in common people however the upper class has a different scenario of it. Instagram use among female users especially female youth is popular. In Pakistan there are almost more than 5 million users on Instagram on monthly basis. However these numbers are less as compared to the Facebook users which were almost 36 million. 5 million Instagram users are only 4% of our population and the remaining are still in target.

Among other social media sites Instagram is also popular among young female and it is fast growing as well as popular social media platform for females. As Instagram is an image-based platform, it has the ability and healthy potential to influence female youth's beliefs, self-transcendence and concerns related to their appearances. Moreover, as Instagram is a photo and video sharing social media network and it is heavily popular among the female youth of the world. In Pakistan player from sports and celebrities from media, brands owners. And now even businesses either in small or large businesses has started to reach their followers and customer via Instagram as their preferred mode.

Women in Pakistan are highly obsessed in use of Instagram as they think it is useful for their self-transcendence. An expert, Fioravanti (2020) has described that females that are attached with social media especially Instagram for a short period of time reported higher life satisfaction as compared to females who do not have Instagram use. Instagram's use effects are seemed to be specific for female users than men.

### ***Self-Transcendence***

In the word of Reed and Runquist (2008) Self- Transcendence refers to developmental of maturity or it can be described as an effort for maturity wherein there is enhanced awareness of the surroundings and an orientation toward larger perspectives about life. (Runquist,2007; Reed, 2008). Furthermore self-transcendence may be a quest for individuals for searching meaning, hope and integrity that shapes their development maturity. Self- transcendence is the enhanced sense of meaning and connectedness with others. According to Freckle self-transcendence is the motivated search for meaning that can be experienced through the interactional process with others and world (Franckl, 1992) that leads towards the satisfaction in life.

The concept of meaning in self-transcendence can be achieved through enjoyable interaction with certain activity, object, others and community (Nakamura & Csikszentmihalyi, 2003), which provide them better way of connection generations of past and future (Tornstam, 1994). The self-transcendence enables individuals to attain the "*peak experiences*" that can have several positive consequences such as positive view of self, others and the world. "Peak experience" may be triggered from different settings and experience which includes listening music, interacting with other, mediation, prayer, deep relaxation and physical accomplishment (Maslow, 1964).

The extent literature on self-transcendence revealed that self-transcendence is positively related to individual's psychological development. For instance, self-transcendence is found to the mean of achieving spirituality (Burkhardt, 1993; Reed, 1991b), a strong indicator of enhancing and shaping psychological wellbeing (Coward, 1990) and develop individual's ability to improve self-esteem and mental health (Carpenter *et al.*, 1999). Moreover, self-transcendence enhances sense of connectedness (Levenson *et al.*, 2005), sense of coherence with life, comfortable state of emotions (Coward, 1996). Self-transcendence is negatively related to the negative effects of depression or its symptoms and emotional exhaustion (Ellermann, 2001; Evers, 2004). Consequently, self-transcendence can contribute and shape positive psychological development and reduce negative psychological development.

## ***Problem Statement***

The past research on Instagram use yields contradictive influence on users psychological aspects. On the one hand, Instagram use is positively related to civic engagement, sociopolitical participation and life satisfaction, social capital. Moreover, Instagram use is positively related to trust of socially bound, civic engagement and life satisfaction, social capital. There are many studies which linked the use of Instagram for poor psychological conditions (Huang, 2017). Excessive Instagram use has been linked with psychological disorders such as eating and poorer body image (Holland, 2016).

Meaningful media experience has opened up a new window to explore Instagram use on searching meaning through online interaction. To date, to best of our know there is not even a single study that have explored the relationship of Instagram use on the self-transcendence experience as self-transcendence enables individuals to broaden his/her life satisfaction perspective. Moreover the online pro-social behavior is investigated as underlying psychological mechanism through Instagram use influences the experience of self-transcendence.

## ***Significance of the Study***

The work at hand carries several significant theoretical contributions. Despite emerging research on the role and impact of Instagram use on several positive psychological outcomes of individuals, theory and empirical studies the link between the use of Instagram and self-transcendence is scarce. The present thesis contributes to the literature by addressing this gap and offers related contributions moreover this study is the empirical evidence of the mediatory role of online pro-social behaviors in the relationship between the use of Instagram side by side self-transcendence. Additionally this study extends the meaningful media experience literature by providing empirical evidence of the gender's (male and female) moderating role in the link between the use of Instagram and self-transcendence.

## ***Research Objectives***

Following are the objectives of this research

1. To examine the role of Instagram use and self-transcendence among university students.
2. To check how the use of Instagram effects on self-transcendence among university students.
3. To investigate the mediatory role of online prosocial behaviors between relationship of Instagram use and self-transcendence.
4. To explore the moderated mediation role of gender between the relationships of the use of Instagram, and self-transcendence and online pro-social behaviors

## ***Research Questions***

This study deals with following research questions

**RQ<sub>1</sub>**. Does the use of Instagram have a positive effect on Self-transcendence?

**RQ<sub>2</sub>**. Does the Intensive use of Instagram have a positive effect on Self-transcendence?

**RQ<sub>3</sub>**. Do online prosocial behaviors positively mediate the relationship between the use of Instagram and Self-Transcendence?

**RQ<sub>4</sub>**. Does gender moderate the relationship/link between the use of Instagram and Self-transcendence?

**RQ<sub>5</sub>**. Does gender moderate the indirect relationship/link between the use of Instagram and self-transcendence?

## **Theoretical Framework**

### ***Uses and Gratification Theory***

In the mass communication research Uses and Gratification Theory has been extensively debated and used according to the needs of research. Katz *et al.*, (1973-1974) coined the concept of audience gratification needs that can be achieved through traditional media such as newspaper, radio and television.

### ***Social Media w.r.t Uses and Gratification Theory***

There is enough literature on uses and gratification theory in social media research which highlighted that uses and gratification theory told how and why people use social media sites for their social, political and psychological needs. When the audience select the specific or desired type of social media that provides them participation for active opportunity to develop their orientations according to targets in communication process. They develop and shaped their targets according to media selections. (Hossain, 2019; Gan & Wang, 2015; Wu, 2019).

According to Hossain (2019) uses and gratification theory can provide enough information about the intentions and reasons of people who actively use Instagram that to satisfy their emotional or cognitive needs. Side by side Wu and Sang (2019) theorized and explained how and what effects people have while using social media and he described that how the people fulfill their civic and cognitive needs in relation to uses and gratification theory. After studying these researches of reasoning recent study choose the same theory as Uses and Gratification theory for establishment and to explain hypnotized relationships.

### ***Instagram Use and Self-Transcendence***

The literature suggests that computer mediated communication (e.g., Instagram) plays vital role to remove major hindrances for enhancement of self-disclosure and interaction and (Bargh *et al.*, 2002) (Tidwell & Walther, 2002). Past research revealed that Instagram facilitates interpersonal interaction that leads towards positive psychological outcomes such as positive emotions, enhance sense of connectedness and sense of meaningfulness that can shape and develop broader view for attaining life satisfaction (Burke *et al.*, 2010; Kim and Lee, 2011; Hampton *et al.*, 2011). The meaningful media experience such as joy and happiness can also be achieved through computer mediated communication such as Instagram that can enhance awareness about that environment and shape individuals orientation towards community.

Self- transcendence can be enhanced through the meaningful interconnectedness through media as media provides an opportunity for interaction with others that includes content of the media and interpersonal interaction through computer mediated communication (Oliver *et al.*, 2018). To broaden the perceptiveness of life in order to enhance self-transcendence a purposive interaction and sense of awareness about environment are the fundamental building (Runquist & Reed, 2007). Being Instagram as social media has the ability to manipulate, shape and development of meaningful experience towards awareness regarding surroundings to help people to attain the self- transcendence.

It is said in regards to Uses and gratification theory most of the people use media to gratify their needs as source of awareness. The needs of gratification may include gatherings or meeting on social level with others for meaningful experience in regards to the environmental awareness. Moreover, emotional and cognitive experiences such as self-confidence, and integrity as an advance form of media, the use of Instagram provides the facilitates to all people to ratify their cognitive needs through various activities. Recent literature established a theoretical link for the relationship of Instagram use and self-transcendence through the uses and gratification media theory. Based on the media theory of uses and gratification theory recent work suggest that the use of Instagram help people to gratify their need in search of meaningful relation or interaction with world or other people. Instagram also boost awareness of environment to broaden perspective of life satisfaction that in turn enhances their experience of self-transcendence. In this backdrop, it is postulated that,

***H<sub>1</sub>: The use of Instagram is positively related to self-transcendence.***

### ***Online Pro-Social Behaviors a Mediator between the use of Instagram and Self-Transcendence***

According to the researches online pro social behaviors refer to a voluntary behavior take out in an electronic frame with the mind of benefiting particular others or promoting dangerous relationships with people” (Vandebosch *et al.*, 2018).

Online pro social behaviors include the resources which are available online, sharing, and answering the post of a friend, moreover to share and participate in joys and sorrows of people via electronic channels or means, and establish relationship through care and concern for others. Past research revealed that pro social online behaviors help individuals to establish strong relationship with other to gain a healthy experience of media (Erreygers, 2018; Reich *et al.*, 2012). Online pro social behaviors create a positively healthy social values and norms relations that may leads towards many positives such as best possible positive relationships, which positive and meaningful connections with people, which enhanced cognitive well-being and emotional satisfactions (Jang *et al.*, 2016; Valkenburg & Peter, 2009; 2011).

The positive interactional process based on the social norms facilitates individuals to gain deeper insight of the environment that help them mature and broadened their perspective about life satisfaction. This altruistic online behavior initiate two way process of reciprocity through the principal of reciprocation (Blau, 1964). The positive reciprocation facilitates the feeling of self-transcendence through meaningful media experience gained by individuals via online social interaction. Instagram as an established media platform can provide opportunity for its user to perform pro social behavior. Wright and Li (2011) concluded that time spent on specific platform (as Instagram in our case) positively influence the engaging in online pro social behaviors. In sum, Instagram use is likely to enhance the engagement of individuals in pro social behaviors.

Drawing on the Uses and gratification media theory people seeks and use different social media to gratify their needs for social interaction and others. Such as, other gratification needs may include relations with others or accomplish self-fulfillment to mature perspective about life. The study proposes that Instagram use promote pro social behavior among individuals through meaningful media experience that would enhance self- transcendence experience. This implies that Instagram use provide an opportunity for the people to intermingled themselves in online pro social behaviors that will enhance the experience of self-transcendence. Based on the above discussion, it is postulated that

***H<sub>2</sub>: The relationship between the use of Instagram and self-transcendence is positively mediate through online pro social behavior.***

### ***Gender as Moderator***

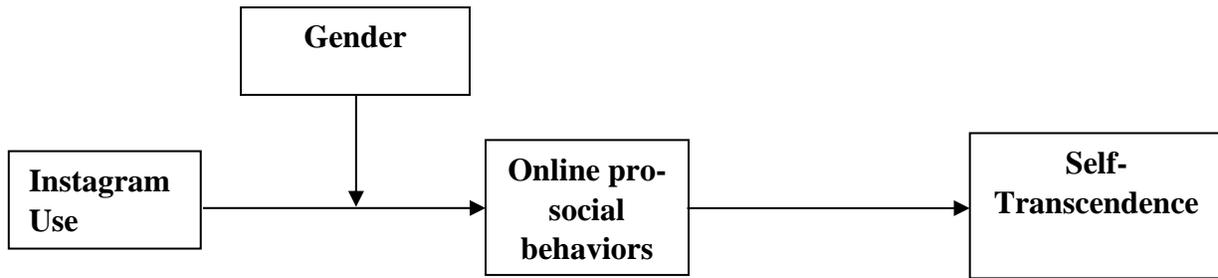
The past research revealed that social media use can have heterogeneous influences across gender for instance male students spend more time on social media then females (Agahazami, 2010). In terms of online socialization, females are careful and limit themselves to family members and close friends while males are open to found new friends for social interaction (Sheldon, 2008). Due to their traditional and social roles, females feel insecure to initiate online interactional exchange process with stranger and often hide their identities as compared to males (Mazman & Usluel, 2011; Alzahrani, 2016). Females used social media in their gender constraints and communicate with family friends with the prime motive of entertainment and time killing while males sought to accomplish social recognition and compensation through social media networks (Barker, 2009).

Drawing on the above discussion the study postulate following hypothesis

***H<sub>3</sub>: Gender moderates that use of Instagram and self-transcendence has positive relationship stronger for female youth than male youth.***

***H<sub>4</sub>: Gender moderates the indirect effect of Instagram use on self-transcendence such that effect is stronger for female youth than male youth.***

## Conceptual Framework



## Research Methodology

Specifically the research methodology is about to how a researcher systematically or practically designs or arranged his study to ensure the validity and reliability in results that is the core of a research aims and objectives.

### *Research Designs of the Study*

According to the Bryman and Bell (2004) research design is arrangement in the form of logic reasoning that interlinks the questions and outcomes of a specific research. In the words of Creswell (2003) who suggested that a relevant choice of design in research is the key steps in a successful research design. Creswell (2003) that the nature and purpose of the research must guide the choice of the research design rather the design of a research should not be selected as of purpose to a research design. Mostly the quantitative research methods are used as they are more adjusted in media studies which may also help in to test hypotheses and generalize the findings (Easterby, 2008). It is also to mention here that the data in a research should be selected and collected by using quantitative method as it is mostly based on secondary numerical data or surveys depends upon the need of research.

Depending on the demand and purpose of the theories or research papers different data collection and analysis methods have been used. There are may be some flaws and limitations in a research. Surveys were used as data collection method and different statistical tools were also used for data analysis.

### *Survey Research Method*

To gather empirical evidence of a research problem, the instrument developed or the tool used is called method (Sarantakos, 2012). The researchers have employed survey method to examine the use of Instagram and Self-Transcendence. Jackson (2011) the true face of survey method is as inquiring on different topic and then describing responses in research.

### *Universe of the Study*

Universe is set of entire units of objects (physical things) or subjects (human being) selected for the study. For example, in this study of Instagram use and Self-transcendence, entire female Instagram users looking for self-transcendence are the universe of study.

### *Collection of Data*

Questionnaire used to make the quantification of data more understandable. Furthermore utilization of questionnaire method is the best easy approach for arranging raw information from numbers of respondents in a short time.

### ***Target Population***

The population meaning is a set of components of premium explored by a researcher. The target population is characterized as the whole group a scientist is intrigued by. The target population were female youth from the public sector Universities' students in Punjab.

### ***Unit of Analysis***

The respondents were public sector university students mostly female youth from. The unit of analysis were individuals.

### ***Sample Techniques***

Non-probability convenience sampling utilized as inspecting procedure. Convenience sampling refers to the accumulation of data from parts of the population who are beneficially available to furnish it. Convenience sampling is frequently utilized for exploration on the grounds that it was the most ideal method for getting some fundamental data rapidly and proficiently (Silverman, 2013).

### ***Sample Size***

Sample size is the amount of component to be incorporated in the study. The sample size for the study is consist of 417 respondents (University Students) from the Public Sector Universities in Punjab.

### ***Data Collection Procedure***

Survey data and Questionnaire were collected from public sector university students studying in Punjab. The potential respondents were provided complete information in all aspects in the form of a cover letter having information of the study such as the promise of confidentiality of respondents and voluntary participation and explained and the key constructs such as Instagram use and self-transcendence. The data was collected about the independent variable – Instagram use – and gender, age and number of Instagram followers, mediators and self-transcendence was gathered.

Initially 500 respondents were contacted thorough their Instagram accounts and emails addresses and survey questionnaire. 471 respondents who filled questionnaire in first round and received 433 (response rate 91%) responses. Of 433 responses 16 had missing data and were excluded from the final analysis and 417 responses were selected for the test of final analysis of hypothesized relationships of present study.

### ***Variables and Measures of the Study***

All the constructs in this study were measured using a five-point Likert scale arranged as 1 (strongly disagree) to 5 (strongly agree). The use of Instagram was measured using the scale developed by Ellison *et al.* (2007). Self -Transcendence were measured adapting fifteen-item scale developed by Hugan *et al.*, (2012).

## **Results Data Analysis & Interpretations**

### ***Means and Correlations***

Table 1: *Means, correlations*

Constructs	Means.	SD.	1	2	3	4	5
1. IG	2.82	1.23					
2. PSB	3.08	1.13	.29**				
3. ST	3.00	1.09	.31**	.54**			
4. Age	26.57	3.98	.05	-.01	.07		
5. Gender	.53	.49	.07	.03	.02	.07	
6. Education	2.63	2.64	.03	.03	.07	-.04	.07

Notes. \* P <0.05. \*\* P. <0.001 level (tailed-2). n = 417. Gender: 01 = male, 02 = Female. IGU = Instagram use. PSB = Online pro-social behavior. ST = Self-transcendence. Education: 1 = Graduation, 2 = Master, 3 = MS/MPhil, and 4 = PhD.

### Measurement Model

Measurement model provides an insight about the overall model containing the entire studied variable on the basis of covariance among variable and model fitness. Further, to evaluate the measurement model, Confirmatory factor analysis is used that made up of Instagram Use (IGU), online prosocial behaviors (OPSB), and self-transcendence (ST). Fit indices are  $\chi^2(431) = 886.42$ ,  $\chi^2/df = 2.05$ , I.F.I = .95, T.L.I = .94, CFI = .95, and R.M.S.E.A. = .07 highlighted its measurement model had fit satisfactory with the desired data. Hair et al. (2010) proposed cut off values for good of fitness indices that  $\geq .90$  and fit badness should  $\leq .08$ . The fitness and badness values of our model shows good model with the data are fit.

Average variance extracted (AVE) and its values along with maximum share variance (MSV), average share variance (ASV), and Cornbrash alpha ( $\alpha$ ) is presented in Table 2. It is evident from table 2 that  $\alpha > .70$ . Moreover, for each of the variable, the SR (Square root) values of Average Variance extracted (AVE) is great in comparison to its correlations with inter-construct (Table No. 2). Moreover, A.S.V < M.S.V, as well as both M.S.V and ASV < A.V.E. Thus, the scales we used to measure the variables of the present study described good level of internal consistencies, discriminant validity, and convergent validity.

Table 2. *Disriminant validity, Conergent validity, internal consistecy*

Constructs	1	2	3	A	CR	AVE	MSV	ASV
<b>1. IG</b>	<b>.82</b>			.92	.86	.68	.09	.08
<b>2. PSB</b>	.28	<b>.80</b>		.93	.93	.64	.29	.18
<b>3. ST</b>	.31	.54	<b>.88</b>	.94	.95	.61	.29	.19

Notes. n = 417. IGU = Instagram use. PSB = Online prosocial behavior. ST = Selftranscendence. MSV = Maximum share variance.

ASV = Average shared variance. AVE = Average variance extracted. CR = Composite Reliability

Bold value on the diagonals of columns 2 to 4 are the SR values of AVE.  $\alpha$  = Cronbach alpha.

Table 3: *Laded factors*

Instagram Use	Factor Loadings	Criteria
Insta1	0.82	Factor loading of each factor should be greater than 0.50
Insta2	0.82	
Insta3	0.82	
Insta4	0.87	
Insta5	0.88	
Insta6	0.74	
Online Prosocial Behaviours	Factor Loadings	Criteria
<b>PSB1</b>	0.73	Factor loading of each factor should be greater than 0.50
<b>PSB2</b>	0.83	
<b>PSB3</b>	0.83	
<b>PSB4</b>	0.83	
<b>PSB5</b>	0.72	
<b>PSB6</b>	0.84	
<b>PSB7</b>	0.78	
<b>PSB8</b>	0.80	
<b>PSB9</b>	0.75	
<b>PSB10</b>	0.85	

Table 4: *Laded factors*

Self-Transcendence	Factor Loadings	Criteria
ST1	0.79	
ST2	0.88	
ST3	0.79	
ST4	0.75	
ST5	0.80	
ST6	0.77	
ST7	0.80	Factor loading of each factor should be greater than 0.50
ST8	0.87	
ST9	0.89	
ST10	0.74	
ST11	0.74	
ST12	0.64	
ST13	0.65	
ST14	0.66	
ST15	0.75	

### ***Structural Model***

Structural model is used to evaluate the significance of the proposed model that explains the hypothesized relationships among studied variables. The direct and indirect relationships are tested in the structural models

### ***Instagram Use and Self-Transcendence-Direct Relationship***

Structural model (SM) was evaluated in three steps. First, in the structural model (1), a direct relation in between the use of Instagram and self-transcendence was examined. Findings suggested a significant positive relationship between Instagram and self-transcendence ( $\beta = .33, p < .001$ ). The fit indices –  $\chi^2(188) = 495.94, \chi^2/df = 2.63, IFI = .95, TLI = .94, CFI = .95,$  and  $RMSEA = .06$  suggested a good fit of structural model (1) with the desired data. Thus, hypothesis 1 was supported. That is, Instagram use has a significant positive relationship with self-transcendence.

### ***Mediation Analysis***

Mediation analysis provides insight about the underlying mechanism that can explain relation in independent variables and dependent variable. A mediator inclusion as a third variable in relation to independent variables and dependent variables. Fundamental assumption, a mediation is that a significant relationship should have been between independent and dependent variable or direct relationship among variables should be significant. If the relation between variable become insignificant after including a mediator it indicates that there is full mediation while if the significance value between independent and dependent variable drops down due to including a mediator but the direct relation of independent, dependent variable still remains significant then it is called partial mediation.

### ***The Use of Instagram and Self-Transcendence via Online Pro Social Behaviors- Indirect Relationship***

The first step of structural analysis indicates a positive but significant direct relation in Instagram usage and self-transcendence so it meets that basic assumption of mediation analysis. In step 2, the structural model (2) included pro-social behavior in regards to online a mediator of relationship between the self-transcendence and use of Instagram use. Fit in dices –  $\chi^2(431) = 886.4.2, \chi^2/d.f = 2.05, I.F.I = .95, T.L.I$

= .94, C.F.I = .95, R.M.S.E.A = .05 highlighted the structural model (2) had a good fitness with the desired data, suggesting that role online pro-social behaviors as mediator of relationship Instagram use among self-transcendence was important.

In final step, the role of the mediator and its significance in relation between Instagram use along with self-transcendence was examined. For this purpose, bootstrapping (a sample of size 2000 was specified) was used. Suggested results in (Table No. 3) showed a significant indirect relationship (through online pro-social behaviors) between Instagram use and self-transcendence ( $\beta = .15$ , 95% did not overlapped confidence interval with zero). However, as despite mediator was included the direct relation between Instagram use along with self-transcendence was significantly ( $\beta = .17$ , 9.5% did not overlap confidence interval with zero), which highlighted partially online pro-social behaviors mediated the relationship between Instagram use and self-transcendence. Therefore, we conclude online pro-social behaviors mediated partially this relation between Instagram use and self-transcendence. Thus, hypothesis 2 was justified.

Table 5: 95 % confidence intervals and Direct and indirect effects (Model No. 2)

Parameters	Estimate	L.L	U.P
<b>Standardized direct effect</b>			
Instagram use → Self-transcendence	.17*	.08	.26
Instagram use → Pro-social behaviors	.30*	.20	.40
Pro-social behaviors → Self-transcendence	.51*	.41	.60
<b>Standardized indirect effects</b>			
Instagram use → Pro-social behaviors → Self-transcendence	.15*	.10	.21

Notes: \* confidence interval which is empirically 95% does not overlap with zero. n = 417 (specifying a sample bootstrapping by of size 2000). LL lower limit. UP.

Upper limit

### ***Moderation Analysis***

The present study conducted multi group analysis, bootstrapping specified at sample size 2000 and 95% of confidence interval and  $\chi^2$  difference test using to empirically test moderating gender effects in direct/indirect relations between Instagram use with self-transcendence. Before performing, these analyses the assumptions of SEM was assured by computing measurement and structural model across gender for male and female.

### ***Measurement Model for Males and Females***

To assess the measurement model for males and females Confirmatory factor analysis (CFA) was used that comprise Instagram use (IGU), pro-social behaviors (OPSB), and self-transcendence (ST). Fit indices –  $\chi^2(862) = 1463.53$ ,  $\chi^2/df = 1.69$ , IFI = .93, TLI = .93, CFI = .93 RMSEA = .04 suggested satisfactory fit of measurement modal with the data. Hair et al. (2010) proposed cut off values for good fit indices that  $\geq .90$  with bad fit should  $\leq .05$ . The fitness and badness values of our model shows good model fit with the data.

### ***Structural Models for Males and Females***

#### ***Instagram Use and Self-Transcendence for Males- Direct Relationship***

Structural model was evaluated in three steps. First, in the structural model (1), a direct relation among the use of Instagram with self-transcendence was examined. Findings throws light on positive significant relation between Instagram use and self-transcendence ( $\beta = .50$ ,  $p < .001$ ). Fit indices –  $\chi^2(188) = 739.06$ ,  $\chi^2/df = 1.96$ , I.FI = .93, T.LI = .94, C.FI = .93, RM.SEA = .04 highlighted a better fit of structural model (1) with the data. Thus, hypothesis 1 was supported. That is, Instagram use has a significant positive relationship with self-transcendence across males.

### ***Instagram Use and Self-Transcendence for Females- Direct Relationship***

Structural model was evaluated in three steps. First, in the structural model (1), a direct relation among the use of Instagram with self-transcendence was examined. Findings throws light on positive significant relation between Instagram use and self-transcendence ( $\beta = .15, p < .05$ ). Fit indices –  $\chi^2(188) = 739.06, \chi^2/d.f = 1.96, I.FI = .93, TLI = .94, CFI = .93, RM.SEA = .04$  highlighted a better fit of structural model (1) with the data. Thus, hypothesis 1 was supported. That is, Instagram use has a significant positive relationship with self-transcendence across males.

### ***Gender as Moderator-Direct Relation of use of Instagram and Self-Transcendence***

The present study conducted multi group analysis, bootstrapping specified at sample size 2000 95% of confidence interval and  $\chi^2$  difference test used to assess moderating results of gender in direct relations between Instagram use with self-transcendence. For performance multi group analysis the present study used Amos multi group function and then conducted  $\chi^2$  difference in two steps. In the first step constrained model was estimated by using Amos and its  $\chi^2$  values and degree of freedom was calculated ( $\chi^2 = 737.76, df = 376$ ). In the second step unconstrained model was estimated by using Amos and its  $\chi^2$  values and degree of freedom was calculated ( $\chi^2 = 777.20, df = 396$ ). The comparison of  $\chi^2$  values and degree of freedom both models constrained or unconstrained yield significance  $\chi^2$  difference ( $\chi^2$  difference = 39.44 and  $df = 20$ ) (Hair. et. al., 2010) that indicates that gender moderated direct relationship among Instagram use along with self-transcendence and different for both male and female. The  $\beta$  value for male is much higher than female which indicates the gender moderator the direct positive relation among Instagram use with self-transcendence such that relation is stronger for male as compared to female. Thus, 3 hypotheses is fully supported.

### ***Moderate Mediation Model***

Structural model fitness across gender is required to established to assess the moderated mediation model. As direct relationship among the use of Instagram and self-transcendence are significant across gender (both for males and female) so it merits further mediation and moderated mediation analysis.

### ***Structural Model for Males***

The structural model included online prosocial behavior as mediator of relationship between the use of Instagram with self-transcendence across males. Fit indices  $\chi^2(862) = 1436.86, \chi^2/df = 1.69, IFI = .93, TLI = .93, CFI = .93, RMSEA = .04$  suggested a good fit of structural model (2) with the data, suggesting that the character of online pro-social behavior as a mediator in relation of the use of Instagram with self transcendence across males. The role and significance of the mediator across males was tested in relationship among Instagram use with self-transcendence. For this purpose, bootstrapping (a sample of size 2000 was specified) was also used.

(Table 3) findings highlighted significant indirect relationship (through online pro-social behaviors) between Instagram use and self-transcendence for males ( $\beta = .21, 95\%$  did not intersecting confidence interval with zero). However, despite the involvement of mediator the direct relationship between Instagram use with self-transcendence has significance ( $\beta = .25, 95\%$  CI did not intersect with zero), which suggested online pro-social behaviors mediates partially the relationship among the use of Instagram with self-transcendence across males. Therefore, we conclude that online pro-social behaviors mediated partially this relationship among the use of Instagram with self-transcendence for males.

Table 6. 95 % confidence intervals for males-Direct and indirect effects

Parameters	Estimate	L.L	U.P
<b>Standardized direct effects</b>			
Instagram use → Self-transcendence	.25*	.14	.37
Instagram use → Pro-social behaviors	.36*	.22	.49
Pro-social behaviors → Self-transcendence	.60*	.46	.70
<b>Standardized indirect effects</b>			
Instagram use → Pro-social behaviors → Self-transcendence	.21*	.13	.30

Notes: \*Empirical 95% confidence interval does not overlap with zero. n = 417 (bootstrapping by specifying a sample of size 2,000). LL= lower limit. UP = upper limit

### Structural Model for Females

For female respondents' structural model consisted on the entire under studied variables Instagram use, online pro-social behaviors with self-transcendence was tested. Fit indices  $\chi^2(862) = 1436.86$ ,  $\chi^2/d.f = .169$ , I.FI = .93, T.LI = .93, C.FI = .93, R.MSEA = .04 suggested a good fit of structural model for females with the data. The role of the mediator in relationship among Instagram use with self-transcendence across males was examined with bootstrapping specified at sample size 2000 having 95% CI. The results in table no. 3 showed a significant indirect relationship (via online pro-social behaviors) between Instagram use and self-transcendence for females ( $\beta = .10$ , 95% CI not overlapping with zero). Interestingly the findings revealed that after the inclusion of the mediator the direct relationship among the use of Instagram with self-transcendence has become insignificant ( $\beta = .07$ , 95% CI not overlapping with zero), which implies that online pro-social behaviors fully mediated the relationship among the use of Instagram with self-transcendence across females.

Table 7. 95 % confidence intervals for females-Direct and indirect effects

Parameters	Estimate	L.L	U.P
<b>Standardized direct effects</b>			
Instagram use → Self-transcendence	.07	-.06	.20
Instagram use → Pro-social behaviors	.23*	.08	.39
Pro-social behaviors → Self-transcendence	.40*	.22	.55
<b>Standardized indirect effects</b>			
Instagram use → Pro-social behaviors → Self-transcendence	.10*	.03	.17

Notes: \* 95% confidence interval did not empirically overlap with zero. n = 290 (bootstrapping by specifying a sample of size 2,000). LL= lower limit. UP = upper limit

### Moderated Mediation Analysis

Multi group, heterogeneity and  $\chi^2$  difference test has been conducted to analyze moderated mediation role of gender in indirect relationship among the use of Instagram with self-transcendence through online prosocial behaviors. For multi group analysis the data is categorized in two groups of gender consisting on males and females. In the first step unconstrained model was estimated by using Amos and its  $\chi^2$  values and degree of freedom have been calculated ( $\chi^2 = 1463.86$ ,  $df = 862$ ). In second step fully constrained model was estimated by using Amos and its  $\chi^2$  values and degree of freedom ( $\chi^2 = 1515.94$ ,  $df = 893$ ). The  $\chi^2$  difference test revealed a significant difference ( $\chi^2 = 52.08$ ,  $df = 31$ ) between constrained and unconstrained model.

The significant  $\chi^2$  difference indicates that the effect of gender is heterogeneous for model across males and females. To calculate the effect individually on males along with female present study conduct diverse test highlighted indirect relationship between Instagram use and self-transcendence ( $B = .23$ , standard error = .05) is significantly strong ( $z = 2.572$ ,  $p < 0.05$ ) for males as compared to females ( $B = .08$ , standard error = .03). The results concluded that the gender's effects to indirect relationship among

Instagram use with self-transcendence is strong for males as compared to females. Thus hypothesis 4 was supported.

## **Discussion**

It is observed that meaningful and comprehensive social media positively alters the users' attitudes and behaviors towards needs (Erreygers, 2018; Tsay-Vogel & Krakowiak, 2016) this study is also built on uses and gratification media theory to highlight the relationship between the use of Instagram self-transcendence among female youth through online pro-social which is made mechanism. Further, this study of research also investigated gender as moderator on indirect relationship of the use of Instagram and online pro-social behaviors and self-transcendence. This study hypothesized that Instagram use is positively related to Female youth's experience of self-transcendence both directly and via pro-social behaviors. Moreover in this study it is proposed that indirect relationship, the use of Instagram is contingent on gender such that relationship is strong to women as compared to men. The study used questionnaire and survey method for collection of data from the students of Government universities of Punjab. After the research the hypothesized relationships between the use of Instagram and self-transcendence were supported.

Final results revealed a significant positive relationship between the use of Instagram and self-transcendence among female youth. The final result of study shows that those young females who use Instagram as meaningful communication tool have enhanced experience of self-transcendence and are in line with recent research on meaningful social media use contribute towards several positives. Moreover the mediation results showed that pro-social behaviors mediates positive relationship of Instagram use and self-transcendence and established pro-social behaviors in term of self-transcended as an important underlying mechanism through which positive relationship between Instagram use and self-transcendence can be better explained. Moreover, the findings offer deeper insight into why Instagram use is positively related to self-transcendence.

Finally, the present study found that in the use of Instagram and self-transcendence there is a positive relationship via online pro-social behavior is contingent on gender such that the indirect relation between Instagram use and self-transcendence via pro-social behavior is strong for female youth. These findings extend our understanding about the gender difference on the indirect relation between Instagram use and self-transcendence via online pro-social such that female youth gained experience of self-transcendence through the Instagram use as compared to men. The potential reasons of this difference can be traced in the improvement of cultural and traditional societal values of Pakistan. The plight of women in Pakistan was miserable due to the cultural and traditional constraints. But know these women are doing good jobs in their relevant fields. But some social, cultural and religious taboos are strong enough that even highly educated women are unable to break these taboos to receive equal rights (Yasmee, 2005). The patriarchal society of Pakistan imposed many restrictions on women based on different traditional and cultural values and these barriers restrict their active participation (Shaheed, 1989).

## **Theoretical Implications**

This study explored the relationship between Instagram use, pro-social behavior, gender made several theoretical contributions. It is also involved self-transcendence. By revealing positive significant relationship, the use of Instagram and self-transcendence it has made valuable contribution to the Instagram use (Lin & Utz 2015; Kramer *et al.*, 2014; Coviello., 2014; Deter & Mehal; 2012; Seder & Oishi,2012) and self-transcendence literature.

By responding to find out the influence of social media positive experience (Erreygers, 2018) recent study extend the antecedents and outcomes of homological networks and the use of Instagram and self-transcendence to contribute to the literature on the meaningful social media use (Erreygers, 2018) by theorizing and providing empirical evidence of the significant relationship between the use of Instagram and self-transcendence.

Moreover, through establishing pro social online behaviors a mediator between relationship use of Instagram and self-transcendence this study contributed to nascent yet growing literature for pro-social behavior (Erreyger, 2018; Reich, 2012) Instagram use (Kramer, 2014; Coviello, 2014) and self-transcendence (Oliver, 2018). The present study brought to the fore online pro social behavior that explains how the use of Instagram enhances individual's experience of self-transcendence. Finally present study by revealed that gender moderates the relationship between the use of Instagram, pro social behaviors and self-transcendence indirectly such that effect is strong for female youth. In doing so present study contribute to the literature that showed inconsistent results about the influence of Instagram use across gender (Sheldon, 2008; Mazman & Usluel, 2011; Alzahrani, 2016)

## Conclusion

The relationship between the use of Instagram use and self-transcendence based on the Uses and gratification theory, and collecting survey data the present study theorizes and empirically tested the use of Instagram and self-transcendence relationship directly indirectly via online pro-social behaviors. Findings of currents study highlighted that there is positive relationship between the use of Instagram and self-transcendence. Moreover results also posited that pro-social behavior positively mediates the relationship between Instagram use and self-transcendence. Side by side, direct indirect relationship between the use of Instagram and self-transcendence remained significant after the inclusion of mediator that indicates that pro-social online partially mediated the relationship between the Use of Instagram and self-transcendence. Moreover, results showed that the direct and indirect relationships (via online pro-social behavior) between the use of Instagram and self-transcendence are contingent on gender such the relationship are strong for men as compared to women. Finally, the study not only contributed to the homological networks of antecedents and outcomes of the use of Instagram use, online prosocial behaviors and self-transcendence but also signifies the practical importance by offering suggestions to parents and teacher to inspire the meaningful use of Instagram among students to enhance their socio-psychological development.

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## Conflict of Interest

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