









Relationship and Difference of Levels Between Schadenfreude, Social Media Addiction and Social Comparison Among Adults and Adolescents

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Abstract:

This study aims to explore the relationship and difference in levels of Social Media Addiction, Social Comparison and Schadenfreude among adults and adolescents. The study followed a quantitative, correlational survey design. The research was conducted with a sample size of 500 participants (Males n= 252 & Females n=248) aged between 13 to 25 years (M= 17.54, SD= 3.32). A purposive convenient sampling technique was used. Findings from statistical analysis revealed that social media addiction and Social Comparison have positive moderate correlation. This study also found that there is no significant difference between adolescents and adults in Social Media Addiction and Social Comparison, but the difference is manifested in Schadenfreude between adolescents and adults. This study highlighted the importance of identity exploration, virtue education, empathy as well as raising awareness regarding behavioral addiction that can reduce the later on negative consequences.

Keywords: *schadenfreude, social media addiction, social comparison, adolescents, adults.*

Introduction

Background of the Study

Schadenfreude can be defined as happiness or satisfaction that derived from other's misfortune (Heider, 1958), which is a socially unacceptable and undesirable emotion (McNamee, 2003; McNamee, 2007). However, the Schadenfroh person is not the one who causes harm which distinguishes it from Sadism. Schadenfreude is a dark, secret, implied and malicious form of pleasure (Leach et al., 2015). People expressing the feelings of Schadenfreude are examined as less empathetic with no moral values by the society (Jung & Karasawa, 2016). Some

researchers classify Schadenfreude as a positive emotion. However, Schadenfreude is a very complex state than that (Solomon & Stone, 2002). Concerning the statement of this emotion the laughter associated with Schadenfreude is as intense or deep as a joyful laughter (Hofmann et al., 2017). Prior researches have shown that Schadenfreude has a moderate relationship with misanthropic beliefs, revenge attitude and sadism (Asim et al., 2020). Sometimes Schadenfreude can be a response of unfairness (Dvash et al., 2014) evoked in a competitive environment (Cikara et al., 2012) a study showed that Schadenfreude is more evident in work place (Dasborough et al., 2017). A



neurophysiologic study, found that when a person experience Schadenfreude his body releases a hormone called Oxytocin i.e. Love hormone (Takahashi et al., 2009). A recent study explained neural activities through a functional magnetic resonance imaging (fMRI) technique; there is a significant correlation between pleasure and harmful behavior proneness towards others (Cikara et al., 2011), envy is the predictive factor of Schadenfreude, which has the higher intensity towards same sex (Van Dijk et al., 2006). In a distinction made by researcher's men experience Schadenfreude more strongly and frequently than any other gender, regardless of a sense of deservingness and envy. As Schadenfreude is a commonly experienced emotion which is connected with frequent social interaction (Li et al., 2019) and modern technology (Kim & Kim, 2018). The aim of current study was to explore the relationship and difference of levels on social media addiction, social comparison and schadenfreude among adults and adolescents.

Social media addiction can be defined as an impulsive and unmanageable urge to use social media or seen online on social media platform; it is characterized as a behavioral addiction. (Hilliard, 2021). Social media has increased to 75% since 2005, and young adults are among the earliest social media users and still have the highest ratio among social media users. In today's time social media usage plays an important part in the lives of emerging adults. Adults use social media approximately 6 hours per day. Although, main purpose of social media is to gather information, for social interaction, entertainment and to pass time (Whiting et al., 2013). Social media give liberty and encouragement to people to express their feelings, moods and emotions. Social media platforms like Facebook is most used social networking site in the world (Beyens et al., 2016; Steers, 2016) But it has a negative impact on our psychological wellbeing (Tromholt, 2016). Also, according to Cognitive Behavioral model of internet use, people with maladaptive tendencies are more vulnerable towards becoming a social media addict (Davis, 2001). A recent study revealed that people who use social media

(Facebook, Instagram and Twitter) are the one who encounter Schadenfreude more strongly (Ouwerkerk & Johnson, 2016). Social media Addiction involves mood modification which includes using social media as coping strategy or to feel a sense of escape (Griffiths, 2013). However, individuals with dark traits are more involved in social media addiction (Kircaburun & Griffiths, 2018) high level of dark traits are associated with high level of Schadenfreude. (Samantha James et al., 2014). Also, excessive use of social media is interconnected with dark motives like high need of popularity, narcissism and Schadenfreude (Ouwerkerk et al., 2016).

A research conducted by students of University of Pennsylvania (Wei and Liu, 2020) found that social media have an effect on pro-social and antisocial behavior like Schadenfreude perceived deservingness and empathy. A study revealed that individuals who are psychologically distant are able to derive more pleasure from other's misfortune (Comb, 2009), A recent study, that conducted through a lexicometric automatic analysis, based on the incident of Notre fire, in which they collected the data of Italian comments. Resulted in complex emotions like Schadenfreude that can directly extracted from social media which means people can also experience schadenfreude towards social incidents (Cecconi, 2020).

As humans, we all possess a natural characteristic of comparing ourselves with others, which serves us with a sense of affiliation (Schachter, 1959), Self-evaluation (Festinger, 1954) self-regulation, emotional well-being (Taylor & Brown, 1988; Tesser & Campbell, 1982) decision making (Camerer & lovallo, 1999) and for inspiration (Lockwood & Kunda, 1997). Researches have mentioned two types of social comparison, which include upward social comparison, it occurs when we compare ourselves with someone who is superior and have positive attributes. While the other type is downward social comparison in which people compare their selves with someone who is inferior and who have negative characteristics (Wills, 1981; Wood, 1989). Sometimes comparison can be beneficial too, if we take inspiration from the targeted comparison

(Lockwood & Kunda, 1997), but many researchers found out that there is more negative impact of social comparison which includes negative effect of poor self-evaluation and inadequate feelings (Marsh & Parker, 1984; Morse & Gergen, 1970; Pyszczynski et al., 1985). Among these, upward social comparison has the most impact on individual's own cognition and behavior (Rancourt et al., 2015) and it can be difficult to avoid on social media (Troom & Leonardi, 2013; Walther, 1997). In some cases, Social comparison can act as a coping Strategy and also for mood regulation (Wood et al., 1966). According to the findings of prior researches, social media gives vast opportunities for social comparison (Appel et al., 2016), because it is predicted that people have more online friends than social friends (Dunbar, 1993). Social media gives more opportunities for social comparison (Pew Research Center, 2014). The main motive is to obtain gratification (Smock et al., 2011). Also, the like feature of Facebook has an underline motive; sometimes it is used for manipulation, and to influence others (Leary & Kowalski, 1990; Piwinger & Ebert, 2001). Against this people tend to give like to more of friend picture than a stranger (Egebark & Ekstrom, 2011; Eranti & Lonkila, 2015). However social media addiction and social comparison have some element of Schadenfreude too, a recent study investigate that people who use social media excessively have the tendency of making social comparisons to others who are inferior to maintain their positive self-image, also they experience Schadenfreude more strongly (Ouwerkerk & Johnson, 2016). According to a study downward social comparison has the ability to activate the pleasure of pride and Schadenfreude (Tesser, 1991; Smith et al., 1996). On the other side some researches claimed that people showcase more Schadenfreude towards upward comparison target than downward comparison target (Jessica et al., 2011). Social comparison and Schadenfreude are not only present in adults but in children too. A developmental research examined Schadenfreude and social comparison among 7-13-year-old based on reward punishment task which found out those children

felt pleasure when won alone and other lost than the both won situation. (Steinbeis et al., 2013).

We can say that people have innate tendencies of social comparison and Schadenfreude, in today's era social media addiction somehow are affecting or increasing these tendencies. In this study we explored the relationship between social media addiction and social comparison along with difference of levels of Schadenfreude, social media addiction and social comparison among adults and adolescent.

The main research objectives are:

- to find out the relationship between social media addiction and social comparison;
- to find out the difference on levels of Social media addiction, Social Comparison and Schadenfreude among adolescents and adults.

Literature Review

According to the Envy theory of Schadenfreude, people possess higher envy towards high status individuals than the average status individuals (Brigham et al., 1997; Feather, 1989; Smith et al., 1996; van Dijk et al., 2006). The envy and Schadenfreude both derive from social comparison, (Smith et al., 1996) the idea of Schadenfreude and envy are related to each other is not new. Evidences also support the role of envy in experience of Schadenfreude, (Smith et al., 1996; Takahashi et al., 2009). In the light of deservingness theory, it is based on the idea of bad is for bad and good is for good (Cook, 1979). People are addicted towards social media because of intolerance and inconsistency (Cooper, 2007). The people who use social media (Facebook, Instagram and Twitter) are the one who encounter Schadenfreude more strongly (Ouwerkerk & Johnson, 2016). Also, excessive use of social media is interconnected with dark motives like high need of popularity, narcissism and Schadenfreude as well (Ouwerkerk et al., 2016).

Furthermore, in the light of social learning theory, people learn more from social interactions. These interactions also lead to

comparisons. A theory given by Albert Bandura which highlights that learning is a part of social environment and our learning is gained through our observation from our environment. Self-evaluation and Schadenfreude are interlinked, as when people compare themselves with others, they feel threatened or inferior (Van Dijk & Wesseling, 2011; Van Dijk et al., 2015).

According to Cognitive Dissonance Theory, people feel psychological distress when they when they act against their will (Festinger, 1954). In context with social media addiction, people are addicted to social media because of intolerance and inconsistency (Cooper, 2007). However, people can control their social media addiction by giving limited attention to the urge (cognitions). A recent study revealed that people who use social media (Facebook, Instagram and Twitter) are the one who encounter Schadenfreude more strongly (Ouwerkerk & Johnson, 2016). Also, excessive use of social media is interconnected with dark motives like high need of popularity, narcissism and Schadenfreude as well (Ouwerkerk et al., 2016).

Rationale and Significance

The purpose of using these variables is that there is limited research work available which explain these three variables collectively. The previous researches on Schadenfreude are mostly linked with Dark Triad, and self-esteem and envy, jealousy and Psychopathy. Schadenfreude in adolescents is yet to be investigated this population is ignored by researchers mostly so this study will provide cultural relevance to Pakistani researches. Quantitative survey-based researches are less and experiment based is more (Greenier, 2018; Womick, 2018; Smith et al., 2009). This study fills the literature gap by discussing all the three variables' collectively in any methodology. Also, it gives an insight that Schadenfreude might go towards dark triad if it is not controlled. Schadenfreude is mostly present in educational setting which needs to be controlled otherwise it will lead towards organizational politics. The present research used a multidimensional and psychometrically validated Schadenfreude scale. Importantly this research highlight Schadenfreude related to

social media and social comparison. Nevertheless, past research has shown that variables collectively. Moreover, our findings would provide a novel contribution to the literature on social comparison promoting Schadenfreude. It will also help to study the long-lasting effects of Schadenfreude. Study will be beneficial for the self-enhancement, virtue education, self-awareness and to know the importance of empathy for others.

Methodology

Research Design

The current study aims to explore the quantitative Correlational design. It is explanatory and applied in nature.

Participants

The participants used in our research are adolescents and emerging adult's population. Sample size consists of 500 participants from school and university premises. The sampling technique used in our research is purposive convenient sampling. 13-25 is the age range of participants, 252 males and 248 females are included.

Inclusion Criteria

In current study the population will be school and university students. Participants must be in an age range of 13-25

Equally both males and females have chances to participate in research.

The participants must have social media accounts.

Participants should have an understanding in English language in order to conduct the research authentically.

Exclusion criteria

Participants who use only Facebook will not be included.

Participants who use only Instagram will not be

included.

Participants below the age of 13 and above 25 should not be included.

A participant who do not have an understanding of English language is excluded from the study.

The population studied does not involve the individuals with diagnosed psychological disorder.

Table 1. Frequency and Percentages of Demographic Variable Analyzed by Descriptive Statistics (N=500)

Descriptive	F-Values	%
Gender		
Male	252	50.4
Female	248	49.6
Age		
13 to 17 Years	256	51.2
18 to 21 Years	172	34.4
22 to 25 Years	72	14.4
Birth Order		
1st born	174	34.8
Middle Born	152	30.4
Last Born	135	27
Only Child	12	2.4
Others	27	5.4
Type of Family		
Nuclear	307	61.4
Joint	150	30
Extended	43	8.6
Socio economic status		
Lower class	14	2.8
Middle class	421	84.2
Upper class	65	13
Social Media Friends		
0	19	3.8
1-50	438	87.6
51-100	25	5
101 and above	18	3.6
Real life Friends		
0	75	15
1-50	208	41.6
51-100	56	11.2
101 and above	161	32.2

Active Social Media Accounts		
Facebook	68	13.6
Instagram	206	41.2
Snapchat	22	4.4
Tiktok	9	1.8
Others	195	39
Time Spend on Social Media		
Less than 2 hours	118	23.6
2 Hours	121	24.2
4 hours	145	29.0
6 Hours and more	116	23.2
Addiction to Social Media		
Yes	301	60.2
No	199	39.8

Table 1 shows the demographic variable such as age, gender, number of siblings, birth order, type of family, socio economic status, real life friends, social media friends, active social media accounts, number of hours spent on social media and do people feel attracted towards social media.

Measures

Following measures were used in the study.

Informed Consent

The first subsection based on the informed consent form in which the text including brief instruction of their voluntarily basis participation and a space for their consent given to them and also the researcher ask them that there is no such risk in the whole procedure Participants are allowed to withdraw at any time or refuse to answer any question without any penalty. If they decide not to participate, they must be informed that it does not affect any relationships they have with the researcher and environment in which it's administered. Participants are ensured about their confidentiality of information; their identity will remain anonymous during the report and results of study and also, they will not receive

any kind of compensation for taking part in this study.

Demographic Information Form

While the second subsection of the study the demographic form which includes Name, Age, Gender, Number of siblings, Birth order, family type, Relationship status, Education, Current status, socio- economic status, and some general research study questions like how many friends they have in real life and on social media, and hours spend on social media, addictions towards social media, and whether any diagnosed psychological disorder is present or not. If any history of conviction, then they will be excluded them from study.

Instruments

Social Media Addiction Scale-Student form (SMAS-SF)

A 29 items response sheet comprises of 5-point Likert scale which consist of responses that is vary between strongly disagree to strongly agree along with 4 sub subdivisions that include virtual tolerance (1-5), virtual communication (6-14), virtual problem (15-23), virtual information (24-29). The internal consistency and reliability of the scales was calculated by peer-to peer- correlation, Spearman-brown formula, Guttman split-half reliability coefficient, and Cronbach Alpha reliability formulas. Analyses revealed that measures have excellent internal consistency ($\alpha = .93$). Cronbach alpha values vary between .81 and .86 which shows reliably results of dimension and sub-dimensions.

Social Comparison Scale

It consists of 11 items, the statement given in the scale are about how people indulge in self-comparison with others and they have to respond on Five-point scale ranging from A, strongly disagree, to E, strongly agree. scale has a good internal consistency Cronbach Alpha

($\alpha = .88$). Items from first dimension (1- 6) are justly right-skewed, suggesting that respondents hesitate while making comparisons of their abilities and items from second dimension (6- 11) are moderately skewed which shows that respondents have slight tendency to compare themselves with others on the basis of behavior, opinions, and experiences.

12 Item Schadenfreude Scale

Schadenfreude 12 item scale showed a good over all reliability of ($\alpha = .79$, $M = 3.65$, $SD = 1.17$). However, the subscales of 12 item schadenfreude scales were positively correlated, benign ($\alpha = .77$, $SD = 1.65$) malicious ($\alpha = .73$, $SD = 1.14$). There were 6 reversed scoring items present to control and reduce response bias.

Procedure

Firstly, participants were given Informed consent then demographic form. The participants who attempted both surveys of social media addiction and social comparison were next handed out the schadenfreude scale. There was five minutes break in between all these three forms. Corresponding emails of researchers were also given in demographics so they can contact them and get debriefed regarding the results or if any query they have. The participants were fully informed about the nature of study. They were given the right to withdraw from the study at any point. And they were given the choice to submit responses anonymously to protect them from any social risk. It was also assured that the results of the participants were not disclosed to anyone except the researchers of the study. The confidentiality will not be breached under any circumstances. It was made sure that there was no physical or mental harm induced during the study. Each ethical consideration was taken into account. At the end participants were thanked for their time and were presented with an

opportunity to provide their feedback. All these analyses are carried out via SPSS 21.

Results

Descriptive Analysis

The data analysis was carried out using SPSS. This chapter includes statistically calculated information of demographics of participants. Descriptive statistics of variables have been calculated. Additionally, the relationship between different variables of study has been

calculated by using correlation (Pearson r) and Independent Sample T test. Reliability analysis for three scales has been calculated that were used in study.

Table 2 represents Mean, Standard Deviation, Skewness value, Kurtosis value, and Cronbach's alpha for the research measures. The values of skewness and kurtosis shows that the data is normally distributed, and the Cronbach's alpha fall under acceptable reliability range.

Table 2. Descriptive Statistics and Reliability Test of Study Variables (N= 500)

Variables'	Items	N	α	M	SD	S	SES	K	Min	Max
VT	5	500	0.633	14.42	4.45	.091	.109	-.384	5	25
VC	9	500	0.660	24.67	6.00	.010	.109	.115	9	44
VP	9	500	0.746	22.99	6.54	.316	.109	.003	9	42
VI	6	500	0.655	18.21	4.56	.408	.109	-.124	6	30
AB	6	500	0.638	17.32	4.61	-.037	.109	-.223	5	30
OP	5	500	0.546	16.96	3.55	-.510	.109	.226	6	25
BE	6	500	0.483	17.40	4.70	.078	.109	.486	6	30
MA	6	500	0.605	15.60	5.19	.221	.109	.253	6	30
SMA	29	500	0.857	80.32	16.80	-.057	.109	.519	33	133
SC	11	500	0.655	34.28	6.50	-.013	.109	.015	16	55
SF	12	500	0.668	33.00	8.28	.345	.109	1.603	12	60

Note. VT= Virtual Tolerance, VC= Virtual Communication, VP= Virtual Problem, VI= Virtual Information, AB= Ability, OP= Opinion, BE= Benign, MA= Malicious, SMA= Social Media Addiction, SC= Social Comparison, SF= Schadenfreude

Social media addiction and social comparison have positive moderate correlation and the relationship between Social media addiction and social comparison is significant.

H1 Accepted $p < 0.05$, i.e., 0.0001.

Table 4 presents group statistics, there is a comparison of mean difference of Social Media Addiction between adolescent and adults. Adults have more Social Media Addiction than Adolescents ($M = 81.50$). Additionally, in Social

Comparison comparing the mean difference between adolescents and adults, it is found that adolescents have more Social Comparison than adults ($M = 34.36$). Furthermore, while comparing the mean difference of Schadenfreude between adults and adolescents, it is found that adolescents experience more Schadenfreude than adults ($M = 34$).

Table 5 represents Levene's Test for Equality of Variances, which shows that only in

Schadenfreude there is a significant difference between adolescent and adults $t(498) = 3.407$, $p < 0.05$, i.e., 0.001.

		SMA	SC
SMA	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000
	N		500
SC	Pearson Correlation		1
	Sig. (2-tailed)		
	N		500

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

Note. SMA= Social Media Addiction, SC= Social Comparison.

Table 3. Correlational Analysis Between Main Scales of the Study

Table 4. Independent Sample T-test Between Two Groups of the Study

		N	M	SD	STE
SM A	adoles cent	264	79.2652	16.85585	1.03741
	Adults	236	81.5042	16.69922	1.08703
SC	adoles cent	264	34.3636	6.52724	.40172
	Adults	236	34.1992	6.48719	.42228
SF	Adoles cent	264	34.1894	8.65488	.53267
	Adults	236	31.6864	7.66112	.49870

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

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

Table 5. Levene's Test for Equality of Variances

95% CI

		F	Sig.	T	df	p	LL	UL
SMA	Eq. Va. assumed	.062	.804	-1.489	498	.137	-5.192	.714
	Eq. Va. not assumed			-1.490	492.76	.137	-5.191	.713
SC	Eq. Va. assumed	.208	.649	.282	498	.778	-.981	1.310
	Eq. Va. not assumed			.282	492.44	.778	-.980	1.309
SF	Eq. Va. assumed	.166	.684	3.407	498	.001	1.059	3.946
	Eq. Va. not assumed			3.430	497.95	.001	1.069	3.936

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

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

Discussion

Addiction of social media is not just limited to the addiction it is far ahead of this idea in short it is pandemic of the current era which almost sink everything in it without the discrimination of gender, age, social class, their education and other important areas of the living beings. As the focus population of the current study is adolescents and adults so in context of this numerous studies suggests that it effects every aspect of life of the adolescents and adults, research indicates that social media significantly

affect their everyday life. However, comparison in terms of everything leads to vulnerability at present time or in future yet the study referenced social media entertainment could give tremendous open doors to social comparison it happens due to its users' inclinations to contrast themselves and others on aspects that are applicable to self-esteem (Appel & Gnabis, 2020) So, for the whole picture portrayed above current study is framed.

Whereas the results of the current study provide precedent evidences for a relationship between

social media addiction and social comparison in adults and adolescents as there is also a justification present for it from previous researches. Social media addiction produces pleasure and escape from pain and stress (Kesici & Baloğlu, 2018)

Study conducted by Kim et al. (2021) reveals that tendency of social comparison causes social media addiction. Additionally, this addiction not just limited to the internal factors or internal underlying factors but there is a social or friend circle leads to its addiction whereas the numerous studies supports the idea that people have more friend's connection from social media rather than in real life (Quinn, 2017). However, there is still a conspiracy and a debate exist in between the idea that different or couple of outlets of social media forms more addiction to the individuals for this idea research was conducted and the conclusive remarks highlights that Facebook and Instagram are the only source of Social Media Addiction (Kuss & Griffiths, 2017). This particular idea also supported by the outcome of the demographics of the current study among the data 206 are those individuals who uses Instagram most then the other outlets of social media and also spends their more time there. Social media not just causes addiction itself but also it leads to the social comparison and it comes first (Royal Society for Public Health, 2017). People declines more towards social comparison on social media than in self (Contributor, 2020), there is always a significant relationship between social media addiction and social comparison as the current study hypothesized. Yet people have more time and opportunity to compare on social media. The more they spend time on social media platforms, the more vulnerable they become towards social comparison (Jiang & Ngien, 2020). People experience more Schadenfreude towards high achievers and perceived them as a deserving candidate for misfortune (Feather, 1989).

The second hypothesis indicated that there will be a difference on levels of Social media addiction, Social Comparison and Schadenfreude among adolescents and adults. Previously, a study investigated that people who are between the ages 18-22 are more vulnerable towards social media addiction then people aged 23-38. This can be linked to the current study, where the results indicated that in adults aged between 18-25 experience more social media addiction than adolescents 13-17 (Gonzalez-Gadea et al., 2018)

But the outcome of the current research reveals that adolescents have more social comparison tendencies with low social media addiction than adults. Also, in social comparison there is no significant difference between adults and adolescents. Furthermore, prior researches explained that Social Comparison always leads towards Schadenfreude (Smith & Kim, 2007). As the idea is supported by the present study

The results of the current study indicate that in social media addiction there is no significant difference between adults and adolescents. However, previous researches indicated that social media addiction is increasing in high school student's day by day (Adem, 2021). Moreover, the results indicates that in social comparison there is no significant difference between adults and adolescents. But according to the previous research young children tends to do social comparison to maintain their self- esteem (Chafel, 2006). Furthermore, in Schadenfreude there is a significant difference between adults and adolescents, as adolescents experience more Schadenfreude. The previous research stated that adolescents between ages 12-15 experience Schadenfreude more (Peplak et al., 2020).

Moreover, the findings also highlighted the demographic factor of being the first-born child experiences more Social Media Addiction, Social Comparison and Schadenfreude. Another

contributing factor can be nuclear family that people tend to be more isolated in real life and socially connected in such type of family (Tsuneo, 1967). Also, people with middle class background have more time and access to social media, hence, they are more towards Social Comparison. Few samples from research were discarded because it met the exclusion criteria (presence of psychological disorders like depression, epilepsy, bipolar and anxiety).

Conclusion

Conclusive remarks of current study reveal that Social media addiction and Social Comparison have positive moderate correlation which indicate that relation is significant among them. Furthermore, in Social Media Addiction and social comparison there is no significant difference between adolescent and adults. Additionally, However, in Schadenfreude there is a significant difference between adolescent and adults.

Implications

Our research signifies the relevance of Schadenfreude in emerging adolescents and adults, and their sense of social media addiction and social comparison. Our intervention targets the students who have social media addiction, low self-esteem issues and tendencies of social comparison. Once identified, the target population is taken into consideration so preventive measures can be taken for social media addiction. Schools and universities can provide counseling services so they can utilize their time in a more productive manner. A focus on increasing a sense of social comparison and Schadenfreude will be catered by virtue education, empathy and identity exploration. The workshops can be provided to students regarding addiction of social media and ways to reduce it.

Recommendations and Limitations

There were few limitations found while conducting the study. The length of questionnaire was a hindrance, as most people refused to conduct the survey after looking at it due to length issue, the wordings used in social media addiction scale and Schadenfreude scale was difficult to comprehend especially for adolescents, so researchers were continuously present to guide them. In Schadenfreude scale “Do Not” statement seemed confusing for both adolescents and adults. The Likert scale ranged from Strongly Disagree to Strongly Agree, became difficult for people to comprehend for instance A which referred as Strongly Disagree was miscomprehended as Strongly Agree and so on. A huge amount of sample was discarded due to Psychological disorders present which were in our exclusion criteria. The adolescent filled their respective forms in a rush so probability of genuine responses of that age range might have affected the results. However, this study can be replicated in cross-culturally as the sample can be taken from all over Pakistan and worldwide to see the emerging trend.

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