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Influence of Digital Self-Harm on Emotional Regulation among Young Adults

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Abstract

Digital self-harm is a new variant of self-harm which is done through social media apps. It is intentionally sending mean comments or self-cyberbullying oneself. This research aims to study the influence of digital self-harm on emotional regulation among young adults. It is a correlation research design. In this quantitative study data were collected by anelectronic survey through WhatsApp and Instagram. Two questionnaires were used in this study. Digital self-harm questionnaire (Patchin & Hinduja, 2017) and emotion regulation questionnaire (ERQ) (Gross & John, 2003). Total participants were young adults (*N*=155 i.e., Male=55, and Female=100), sample was selected through random sampling technique. Thesample size was justified through the A-Priori sample size calculator (Soper, 2021). Data were analyzed by using SPPSS version 24.0. Correlation, regression, and t-test of data was done in analysis. Results show significant relationship between digital self-harm and emotion regulation among young adults. Emotional regulations have a significant impact on digital self-harm. Findings show that male engage more in digital self-harm than females. And hoursspent on social media has positive relationship with digital self-harm among young adults.

***Keywords*:** Digital Self-Harm, Emotion Regulation, Self-Cyber Bullying, Factitious Online Victimization,Social Media Apps

1. Introduction

Social media has played empowering role in our lives and society by providing empowerment to individuals online by an unrestricted flow of information to add to their knowledge bank. Social media has provided many benefits, but it has come at a price (Amedie, 2015). Social media is addictive because it is adaptive as it adjusts according to the preferences and behaviors of individuals which makes it more interesting and engaging (Berger, 2019).

Addiction to social media has taken away the ability to think independently and self- control, made us join any group and follow any person whose posts and pervasive messages amuse our senses and lift our mood without evaluating the consequences. According to January 2022 global overview, in the world's population of 7.91 billion, 4.62 billion people around the world now use social media. The average daily time spent using social media is 2h 27 min (Kemp, 2022). Social media affect people differently, depending on their pre-existing conditions and personality traits (Brown, 2018).

People mostly express their distress on social media or on their selves more than directly with someone which promotes the act of self-harm mostly in generation Z. While facing the challenges to navigate the negative complex and evolving relationships, youth struggle to form a positive sense of self and to cope in prosocial ways. Most of them pass this period unshattered, some contain their selves to certain behaviors including deliberate acts of self-harm and suicidal idealization is also included in self-harm (Brausch et al., 2010).

Research found that up to 10% of students during high school had posted cyberbully or false cruel remarks against themselves. Online self-harassment or self- cyberbullying or digital self-harm have been studied by researchers in recent years (Funnell, 2013).

This research revolves around the concept of the involvement of the young adults of Pakistan in digital self-harm and what percentage of youth is involved in digital self-harm. The role of emotion regulation in digital self-harm is explored.

1.1. Digital Self-Harm

Digital self-harm is a relatively new concept so there is not a decade of research to establish standards surrounding it. Due to this reason, physical self-harm is used as a reference to understand digital self-harm. According to Patchin and Hinduja (2017), "*Digital self-harm occurs when an individual creates an online account and uses this account to anonymously send hurtful or threatening messages to oneself"*. The engagement in self- expression and self-construction has been embraced by teens to embrace and exploit social media to balance their psychological, emotional, social, and relationships. While achieving this balance, youth engage in other maladaptive ways on social media leads them in the wrong direction. It is a new form of virtual self-harm in which both act of cyberbullying oneself and engaging with online space that is detrimental to one's psychological wellbeing (Soengkoeng & Moustafa, 2022).

The term digital self-harm was first introduced and written by blogger Danah Boyd (2010) in a blogpost. According to her analysis, there are teens who are self-harassing by anonymously writing mean questions to themselves and then publicly answering them.

Three distinct explanations for teens this behaviour is (a) It's a cry for help (b) They want to look (c) They are trying to trigger compliments (Boyd, 2010). The first case of digital self-harm was of a 14-year-old girl Hannah smith who did suicide. According to her parents, she was trolled and bullied on the internet, but the investigations revealed

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strong evidence that she had in fact posted all the messages to herself (BBC News, 2014).
Youth represent themselves in an unreal world of social media to gain attention, validation, and feedback from an audience (Patchin & Hinduja, 2017). Digital self-harm can be seen as a cry for help, waiting to be rescued, and gaining reassurance by support messages from peers. Bullying and trolling reflect how the child feels about themselves. Due to low self-esteem, they offend online in the hope to gain negative attention as they think that they deserve it (Preece, 2019). More identified reasons are bullying at school, cyberbullying, depression, self-harming in life, using drugs, participating in risky behaviors, and being identified or exposed as LGBT (Lesbian, Gay, Bisexual, Transgender). Approximately 7.4% of 15 years old are engaged in digital self-harm (Klein, 2020).
Several external motivations that stem back to negative internal feelings are emptiness,self-hatred, abandonment, guilt, depression, desperation, isolation, tension, and stress. According to analysis, those with physical self-harm commonly suffer from broader mental illness so as do those with digital self-harm. Common mental illnesses among physical self- harmer are borderline personality disorder, schizotypal personality disorder, dependent personality disorder, and avoidant personality disorder (Lutkevich, 2020). Association of digital self-harm with eating disorder psychopathology and disordered eating behaviors was examined (Lydecker et al., 2022).
Self-harm involves actual damage to the body whereas digital self-harm seems to be athing for grabbing attention. In actuality, it shows the bigger picture of mental health issues that are heading. The mental health of teens has been distorted because social media has created a fantasy. Teens and adults found difficulty in drawing a line between the real world and the world which is on the internet. Reality and fantasy are a blur for them. Now what happens in one realm can be easily transferred to another (Thomas, 2018). This phenomenon also has different labels fictitious online victimization (FOV), self-cyberbullying or fictitious cyberbullying, and digital Munchausen (Erreygers et al., 2020).

1.2. Fictitious Online Victimization (FOV)

FOV is defined as "Whether the participant had ever pretended to be laughed at, hurt, offended, threatened, ignored, stalked, or ridiculed by someone else online, while they were doing this themselves." FOV victimizes themselves by adopting another identity. It is also consistent with the literature on different types of cyberbullying (Erreygers et al., 2020).
This phenomenon has several labels digital self-harm or self-cyberbullying (Patchin & Hinduja, 2006). According to research by Erreygers (2020), A positive correlation was found between traditional and cyberbullying and self-harm. There is a negative correlation between self- esteem, subjective well-being, and life satisfaction.

1.3. Self-Cyberbullying or Fictitious Cyberbullying

Cyberbullying or Cyber Harassment is a form of bullying and harassment which is done through electronic devices (Smith et al., 2008). According to the survey, about 16% of 9-12 grade students experienced cyberbullying (Assistant Secretary for Public Affairs (ASPA), 2021). Many individual cases have been reported in media of self-cyberbullying (Englander, 2012). Self-cyberbullying or fictitious cyberbullying closely resembles real cyberbullying however using self as a prefix adds a disadvantage in its understanding becausein self cyber bullying perpetrator and the victim are the same (Erreygers et al., 2020).
Reasons behind self cyber bullying are complex emotions and low self-esteem rises from being bullied (Styx, 2020). There is a positive association between bullying victimization and digital self-harm or self-cyberbullying (Patchin & Hinduja, 2017). Intent to be hurt is something that is faked that is done to achieve other goals like gaining attention (Erreygers et al., 2020). All these problems make self-cyberbullying a misunderstood case, making it seems to be a case of cyberbullying (Pacheco et al., 2019).

1.4. Digital Munchausen or Digital Fictitious Disorder

The term "Digital Munchausen" is named because of its resemblance with Munchausen Syndrome (Fictitious Disorder). The syndrome's central identifying symptom is the patients' infliction of self-harm in a quest for sympathy, attention, and admiration fortheir ability to cope with their so-called victimization (Englander, 2012). The term Digital Fictitious Disorder (DFD) is also used for Munchausen by the internet (Reed, 2021). Munchausen by the internet is formally linked to the aspects of trolling. The most worrying thing about it is how easily deception can be carried out online (Pulman & Taylor, 2012).
Nowadays, people tend to respond to 'fake claims' that they believe are fakingdisorders online on social media apps. They got a formal diagnosis, but later admit for faking their condition. This is an emotive subject that leads to heated online criticism and harassment. This online variant cause psychological harm through verbal and nonverbal online behaviour. People pretend to be victimized online and mostly act anonymously or use a pseudonym online, these are the misleading characteristics of this behaviour (Erreygers et al., 2020).

1.5. Emotional Regulation

According to Gross (1998), emotional regulation refers to the process by whichindividuals influence the emotions they have when they have them, and how they experience and express their feelings. Emotional regulation can be automatic or controlled, conscious or unconscious. Emotional behaviour can not only modulate our response tendency but also assert control over the intensity of emotions (Josephs, 2005). Negative emotions are often the focus of studies of emotion regulation (Gross, 1998).
Gratz and Roemer's literature shows a strong relationship between emotion regulationand self-harm. According to Gratz and Roemer, "*Emotional regulation is awareness and understanding of emotions, acceptance of emotions, ability to control impulsive behaviours and behave in accordance with desired goals when experiencing negative*

behaviours, and ability to use situationally appropriate emotional regulation strategies flexibly to modulate emotional responses as desired to meet individual goals and situational demands." The absence of any components would indicate emotional dysregulation (Gratz & Roemer, 2004).
The level of emotional dysregulation is higher in those who engage in self-harm (Taylor et al., 2018). It is suggested that emotional dysregulation may be a key causal pathway underlying self-harm in those with psychopathology. The theory by Husking (2017) of self-harm highlights emotional regulation as the core function of this behaviour. Accordingto Ryan et al (2020), Negative emotions are positively associated with digital self-harm and one-third of the association between bullying victimization and digital self-harm operates indirectly through or is mediated by negative emotions (Fliege et al., 2009; Hay & Meldrum, 2010; Madge et al., 2011; Patchin and Hinduja (2017).

2. Literature Review

Digital self-harm is becoming increasingly evident,and new technology fosters and encourages it. People engaging in digital self-harm often engage in offline self-harm. A studywas conducted to explore the association of digital self-harm with eating-disorder psychopathology and behaviours in adults. Eating-disorder psychopathology and disordered eating behaviours were significantly higher among individuals reporting digital self-harm andis a clinically significant topic that needs further research (Lydecker et al., 2022). A study shows that sleep duration was inversely associated with engaging in digital self-harm. Depressive symptoms attenuated the influence of sleep duration on digital self-harm by 50.72%. Both insufficient sleep and depressive symptoms were associated with engagementin digital self-harm among adolescents (Semenza et al., 2022).
Digital self-harm (DSH) is a common problem including in Pakistan, one of the majorissues in the digital era and getting attention globally. According to an empirical study, around 35% of participants admitted that they injured or scratched themselves. Results also suggested that 6.7% of respondents anonymously posted something online to get attention from parents or peers and 6.7% to test their peers' friendships and 11.7% of students mentioned they posted violence-related and 5.0% hatred content on social media platforms (Ahmed, 2022).
It is also analyzed that there is a strong positive association between bullying victimization and digital self-harm and an indirect association operating through negative emotions (Ryan, 2020). Research conducted in New Zealand on digital self harm reported canters on the prevalence of digital self-harm motivation and its outcomes among teenagers. 6% of New Zealand teens have anonymously posted mean or negative content online bout themselves. The top reason for this behaviour was for fun, to show resilience, and sympathy, seeking reassurance of friendship (Pacheco et al., 2019).
Patchin and Hinduja conducted research to examine the extent of digital self-harm among adolescents. According to the results, 6.2% of students have anonymously posted something about themselves that was mean and 5.3% had anonymously cyberbullied themselves online. Significant correlates of digital self-harm were also identified i.e., sexual orientation, school bullying and cyberbullying, drug use, participation in various forms of adolescent deviance, and depressive symptoms (Patchin & Hinduja, 2017).
Online 'suicide games' are claimed to involve a series of challenges, ending in suicide.A whole succession of these such as the Blue Whale Challenge, Momo, the Fire Fairy, and Doki Doki has appeared in recent years. The 'challenge culture' is a deeply rooted online phenomenon, social media particularly motivates youngsters to take part because of their desire for attention (Bada & Clayton, 2020). In depth study of the "Blue Whale Challenge" shows the role of the Internet in the spreading of self-harm behaviour among vulnerable adolescents who are characterized by epidemiological, psychological, psychiatric, social, and cultural risk factors (Lupariello et al., 2019).
Research shows that exposure to self-harm on Instagram was associated with suicidal ideation, self-harm, and emotional disturbance even controlling for exposure to other sources with similar content. These findings provide evidence that such exposure can lead to contagion in vulnerable users (Arendt et al., 2019). Research conducted by Pan & Yeh (2018). aims to explore the role of Internet addiction in the development of self-harm or suicidal behaviour among adolescents after 1-year of follow-up. There were 3.9% students identified as having developed new self-harm or suicidal behaviours on follow-up assessments. Findings indicate that Internet addiction is prospectively associated with the incidence of self-harm or suicidal behaviour in adolescents.
Studying the role of the internet in self-harm reported that the internet is normalizing young people's self-harm. Images rather than textual interactions are the primary reason cited for using the Internet for self-harm purposes. Images invoke a physical reaction and inspire behavioural enactment, which permits the sharing of images by anonymous individuals, with Tumblr (Jacob et al., 2017). Research conducted by Seko & Lewis (2016), reports the findings of visual analysis while trying to explore how self-injury is narrative through the interplay between image content photographic competition, associated tax, and hashtag and re-blogging. Findings reveal a shift in the iconography of self injury from direct depictions ofself-injured bodies, re appropriations of popular media content represents emotional strugglesimages of self-inflicted wounds received 10 times less reblogs than images without wounds. Media memes convey hopelessness and represent self-injury as a form of life struggle that virtually anyone can face. This study identifies the dominance of a hopeless narrative.

3. Theories Related to Digital Self-Harm

3.1. General Strain Theory

Agnew's (1992) general strain theory (GST) explains the relationship between bullying victimization and digital self-harm. Agnew's GST explains three sources: (a) failure to achieve positively valued goals, (b) loss of positively valued stimuli, and (c) presentationof negative stimuli (Agnew, 2006b). The empirical study support that GST has a positive association between strain and antisocial behaviours (Agnew & Brezina, 2019).

Bullying victimization is a potent source of strain among adolescents that could lead to various forms of deviance (Hinduja & Patchin, 2007). Individuals who experienced bullying victimization were more likely to exhibit depressive symptoms (Moore et al., 2017; Reed et al., 2015) and use drugs, and carry a weapon (Brady et al., 2019). Youth who experience bullying are at a greater risk to experience negative emotions which in turn are associated with an increased risk for self-harming behaviours (Ryan, 2020; Fliege et al., 2009)and thus engage in physical self-harm more frequently (Patchin & Hinduja, 2017).Engagement in physical self-harm, also digital self-harm is due to alleviation of emotional distress by providing a cathartic release. The act of posting negative information about oneself may serve as a distraction from negative emotional states. Therefore, GST is equally well-suited to explaining both traditional and digital forms of self-harm.

3.2. Model of Emotion Regulation (Gross, 1998)

Gross (2001) model of emotion regulation is described as "*Emotion regulation includes all of the conscious and nonconscious strategies we use to increase, maintain, or decrease one or more components of an emotional response*". This model describes several strategies that humans usually adapt for their emotional response levels (Bosse et al., 2007). The Emotion Regulation Questionnaire by Gross & John (2003) was designed to assess cognitive change and response modulation, which have been linked to self-harm (John & Gross, 2004). Cognitive reappraisal diminishes the negative emotional association with the situation thus decreasing negative emotion and distress. Efforts of suppressing negativeemotions often result in amplifying negative emotional states. These processes contribute to the experience of bodies being "under the strain of emotional turmoil" that has been described by individuals who engage in NSSI (Non-Suicidal Self Injury) (Horne & Csipke, 2009).

3.3. The Experiential Avoidance Model

The experiential avoidance model is a behavioural model which is designed to explainself-injurious behaviour. Some people exhibit experiential avoidance, they habitually engage in a range of behaviours e.g., substance use or thought suppression such responses are particularly strong among those who self-injure (Chapman et al., 2006). Engaging in self- harm activities allows individuals to avoid unwanted emotions by focusing attention and activity on self-harm. The temporary relief and reduction in emotional arousal reinforce the behaviour that brings self-harm activity (Hasking, 2017). The experientialavoidance model supports bipolar disorder (Hulbert & Thomas, 2010), NSSI (non-suicidal self-injury) (Buckholdt et al., 2015) and disordered eating or substance misuse (Howe Martin et al., 2012). Self-injury has become a classically conditioned response to aversive emotions (Hasking, 2017).

3.4. Rationale

The purpose of the study is to explore the influence of digital self-harm on emotion regulation among young adults. Digital self-harm has become one of the major problematic issues in the digital era and getting the attention of scholars globally. There have been international researches but very few researches in Pakistan explaining the causes and effects of digital self-harm. The need for this research is felt to find the relation of emotion regulation with digital self-harm among young adults of Pakistan. Therefore, this study that is conducted to find the relationship and impact of digital self-harm on emotion regulation.

3.5. Hypothesis

i. There is a significant relationship between emotion regulation and digital self-harmamong young adults.
ii. There is a significant impact of digital self- harm on emotional regulation amongyoung adults.
iii. There is a significant relationship between time spent on social media and digitalself-harm among young adults.
iv. There is significantly a gender difference in engagement of digital self-harmamong young adults.

4. Method

4.1. Participant Characteristics

Participants (N=155) participated in an online survey through WhatsApp or Instagramwho were using at least one social media app (Facebook, Instagram, Twitter, Snapchat) must.Both males and females with age range of 19-40 years were included in this study. Participants from Pakistan were only included.

4.2. Sample Size

It is a quantitative study consisting of a sample of a total of 155 young adults (N=155).The sample size was justified through the A-Priori sample size calculator (Soper, 2021). There were 100 females and 55 males. The age range of the sample was 19-40 years. Random sampling technique was used to collect data. The participants have randomly participated across different regions of Pakistan.

4.3. Measuring Tools

To measure the digital self-harm in participants Digital self-harm Questionnaire (Patchin & Hinduja, 2017) is used and the Emotion Regulation Questionnaire (Gross & John, 2003) is used to measure the emotional status of the

participants.

4.4. Digital Self Harm Questionnaire (Patchin & Hinduja, 2017)

This scale was proposed by Patchin & Hinduja (2017) in their research. Two items were used to assess youth involvement in digital self-harm: (1) "In my lifetime, I have anonymously posted something online about myself that was mean" and (2) "In my lifetime,I have anonymously cyberbullied myself online." For responses 4 points Likert scale was used "never," "once," "a few times," and "many times". In scoring, "never" = 0 and "many times" = 4. Responses were dichotomized with no involvement coded as 0, while anyinvolvement was coded as 1. Respondents were also asked to describe why they engaged in the behaviour(s) via a single open-ended question.

4.5. Emotion Regulation Questionnaire (Gross & John, 2003)

This questionnaire is proposed by Gross & John (2003) which is a 10-item scale designed to measure respondents' tendency to regulate their emotions. Respondents answer each item on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Reliability coefficients of ERQ were judged as α >.70 as acceptable reliability andα >.80 as good reliability, and α >.90 as excellent reliability (Groth-Marnat, 2009). ERQ cognitive reappraisal (α = .89-.90) and expressive suppression (α = .76-.80) scores hadacceptable to excellent levels of internal consistency reliability (Preece et al., 2019).

4.6. Demographics

Age, gender, education status, city, and area of residence were included as a demographic in the study. Demographics related to social media were also contributed as social media account status (public or private), which social media app you used mostly (Facebook, Instagram, Twitter, and Snapchat), social media account activation year, and how many hours you spent on social media.

4.7. Procedure

It was an electronic survey. This google form survey was sent to adults (Mean age 29.5 years) through WhatsApp and Instagram. Participants were informed about the purpose of the research and their consent was taken before filling out the survey. Random sampling was done to gather data. All participants were from Pakistan. Data collection was done in a month. A total of 155 responses were finalized for the analysis, data were scored according tothe manual of each scale.

4.8. Ethical Consideration

Participant were informed about the confidentiality of their data. The confidentiality and anonymity of participants were ensured. The respect and dignity of participants was taken care of. Prior to the survey, informed consent was given to the participants in which thepurpose of the research was elaborated, and their participation was considered voluntarily. They were given the authority to withdraw at any point in time from the research study.

4.9. Statistic Plan

Quantitative statistical analysis was performed using SPSS version 24.0. For the analysis of collected data correlation, regression, and t- test is performed to test the hypothesis.

5. RESULTS

Table 1: Psychometric Properties of Digital Self-Harm (DSH) Questionnaire and Emotion Regulation Questionnaire (ERQ)

Scale	M	SD	Range	Cronbach's α
DSH	1.37	2.25	29-70	.72
ERQ	51.26	11.81	0-6	.80

Note. DSH= Digital Self-Harm; ERQ=Emotion regulation questionnaire

Table 1 showed the psychometric properties of the scales DSH and ERQ used in this research. The Cronbach alpha value for DSH is .72 which indicates satisfactory internal consistency and of ERQ is .80 that shows a good level of internal consistency and reliability.

Results showed that age and social media app has a significantly positive relationship with emotion regulation.There is a significant negative relationship of gender, education, hours spent on social media, and digital self-harm with emotional regulation. Negative sign indicates the dysregulation of emotions due to hours spent on social media and engagement in digital self-harm.

Table 3 showed a mean difference in Digital self-harm with t (112) = 0.21, p>0.01. Results showed that the mean score on digital self-harm in 19-30 years old (M=1.29, SD=2.39) subsequently decreased in 31-40 years old (M=1.38, SD=2.09). Cohen's d value 0.04 show small size effect. Findings indicate a mean difference in emotion regulation t (112) =1.4, p>0.01. Results showed that the mean score of emotion regulation in 19-30 years old (M=51.93, SD=13.22) subsequently decreases in 31-40 years old (M=48.81, SD=10.49). The value of Cohen's d was 0.26 which showed a small size effect.

Table 2: Hierarchical Regression of Demographics and Digital Self Harm on Emotion Regulation

Variable	B	95% CI for B		SE B	B	^{2}	Δ^2
Apps used mostly	2.15***	-0.03	4.32	1.10			
Activation Year	0.12	-1.21	1.46	0.67			
Step 2 Hours spent on	-1.9*	-4.16	0.194	1.103			
Constant	52.08	38.74	65.44	6.76		0.09	0.04*
Age	0.83*	-0.04	2.07	0.62	0.11*		
Gender	-3.2*	-8.49	2.15	2.69	0.1*		
Education	-0.1**	-2.09	1.10	0.81	-.1**		
SM App	1.85	-3.07	6.79	2.49	0.07		

Table 3: Mean Comparison of Participants of Age 19-30 Years Old And 31-40 Years Old in DSHand ERQ

Variables	19-30 Years Old		31-40 years old		*t* (112)	*p*	Cohen's *d*
		M	SD	M	SD		
Digital Self	1.29	2.39	1.38	2.09	0.21	0.84	0.04
Emotion Regulation Questionnaire	51.93	13.22	48.81	10.49	1.4	0.17	0.26

Table 4: Mean Comparison of Male and Female Participants with DSH and ERQ.

Variables	Male		Female		*t* (153)	*P*	Cohen's
	M	SD	M	SD			*d*
Digital Self-Harm	1.92	2.63	1.07	1.95	2.3	0.01	0.37
Emotion Regulation	50.44	10.95	52.74	10.18	1.16	0.25	0.19

Table 4 showed a significant mean difference in Digital self-harm with t (153) = 2.3, p<0.01. Results showed that the mean score on digital self-harm in Male (M=1.92, SD=2.63) subsequently decreased in Female (M=1.07, SD=1.95). Cohen's *d* value 0.37 show small sizeeffect. Findings indicate a mean difference in emotion regulation t (153) =1.16, p>0.01. Results showed that the mean score of emotion regulation in Males (M=50.44, SD=10.95) subsequently increases in Females (M=52.74, SD=10.18). The value of Cohen's *d* was 0.19which showed a small size effect.

Table 5 revealed the mean comparison of participants of undergraduates and postgraduates on Digital self-harm and emotion regulation. Findings indicated mean differencein Digital self-harm with t (37) = 0.18. Results showed that the mean score on digital self-harm in undergraduates (M=1.00, SD=2.48) subsequently increased in postgraduates (M=1.13, SD=1.59). Cohen's *d* value 0.06 show small size effect. Findings indicated a mean difference in emotion regulation t (37) =1.07, p>0.01. Results showed that the mean score of emotion regulation in undergraduates (M=53.53, SD=10.26) subsequently decreases in Females (M=50.37, SD=6.11). The value of Cohen's *d* was 0.37 which shows a small size effect.

Table 6 shows a significant mean difference in Digital self-harm with t (153) = 2.38, p=0.01. Results showed that the mean score on digital self-harm in public account (M=1.96, SD=2.45) subsequently decreased in private account (M=1.06, SD=2.08). Cohen's *d* value 0.39 show small size effect. Findings indicated a significant mean difference in emotion regulation t (153) =0.01, p=0.05. Results showed that the mean score of emotion regulation in public account (M=51.24, SD=11.12) subsequently increases in private account (M=52.28, SD=13.14). The value of Cohen's *d* was 0.03 which showed a small size effect.

Table 5: Mean Comparison of Participants' Education Status with DSH and ERQ

Variables	Undergraduates		Postgraduate		*t* (37)	*p*	Cohen's *d*
	M	SD	M	SD			
Digital Self-Harm	1.00	2.48	1.13	1.59	0.18	0.85	0.06
Emotion Regulation	53.53	10.26	50.37	6.11	1.07	0.28	0.37

Table 6: T-test Result of Participants' Social Media Accounts Status with DSH and ERQ

Variables	Public		Private		*t* (153)	*p*	Cohen's *d*
	M	SD	M	SD			
Digital Self-Harm	1.96	2.45	1.06	2.08	2.38	0.01	0.39
Emotion Regulation	51.24	11.12	52.28	13.14	0.01	0.05	0.03

Table 7 revealed the mean comparison of participants usage of social media 1-4 hoursper day and 5 hour and more per day on Digital self-harm and emotion regulation. Findings indicated a significant mean difference in Digital self-harm with *t* (133) = 0.71, p=0.01. Results showed that the mean score on digital self-harm in 1-4 hours per day (M=1.05, SD=2.14) subsequently increased in 5 hours and more per day (M=1.32, SD=1.95). Cohen's*d* value 0.13 show small size effect. Findings indicated a significant mean difference in emotion regulation *t* (133) =0.62, p=0.05. Results showed that the mean score of emotion regulation in 1-4 hours per day (M=53.35, SD=13.59) subsequently decreases in 5 hours and more per day (M=52.0, SD=9.81). The value of Cohen's *d* was 0.11 which shows a small sizeeffect.

6. Discussion

This research aims to find the influence of digital self-harm on emotional regulation among adults and to gain a better insight into the term digital self-harm among young adults and its relationship with emotion regulation. There is a significant relationship between emotion regulation and digital self-harm among young adults. Results of this research showed that there is a significant negative relationship between digital self-harm and emotional regulation. A decrease in emotional level leads to emotion dysregulation and is seen to be a cause of the engagement in digital self-harm in young adults. These results are supporting the experiential avoidance theory (Hasking, 2017) which suggests that combination of emotional dysregulation and negative emotional experience leads to self-harm.

Digital self-harm operates indirectly or is mediated by negative emotions (Ryan et al., 2020). Emotion regulation is the most active function in NSSI (non-suicidal self-injury). According to Taylor, individuals who engage in self-harm have greater levels of emotion dysregulation compared to those who do not (Taylor et al., 2018). Results are consistent with the report of Patchin & Hinduja (2017). Negative emotions (emotional dysregulation) have a positive relation with digital self-harm in young adults. According to one open-ended question: why you were engaged in this behaviour. Negative subconscious urges, to release stress, to gain emotional sympathy, loneliness, and for help. These factors are the cause of emotion dysregulation which leads to Digital self-harm. General Strain Theory by Agnew supports these results as it emphasizes various strains and stressors experienced, the emotional and behavioural mechanisms used to alleviate or cope with these strains (Agnew, 1992).

Table 7: T- Test Results of The Hours Participants Spent on Social Media with DSH And ERQ

Variables	>4 hrs per day		<4 hrs per day		*t* (113)	*P*	Cohen's *d*
	M	SD	M	SD			
Digital Self Harm	1.05	2.14	1.32	1.95	0.71	0.01	0.132
Emotion Regulation Questionnaire	53.35	13.59	52.0	9.81	0.62	0.05	0.11

GST explains such behaviors, including delinquency and substance use, cyberbullying,disordered eating, suicidal idealization and physical acts of deliberate self-harm (Ryan, 2020).Negative emotions mediate the association between bullying victimization and digital self- harm (Ryan, 2020; Moore, 2017). Motivations for engaging in this behaviors stated by youth are varied, including self-hatred, depressive symptoms, and attention-seeking (Patchin & Hinduja, 2017). Reinforcement of self-harm behaviour, cause the development of self-harm into a repeated classical conditioned response to negative emotions (Chapman et al.,2006).

According to hypothesis, there is a significant relationship between hours spent on social media and digital self-harm among young adults. Results show that there is a significantly positive relationship between the hours spent on social media and digital self- harm. The inverse relationship shows that more hours spent on social media cause emotional dysregulation in young adults. Disturbed emotions due to long hours of use of social media lead to digital self-harm. The participants who engaged in digital self-harm were spending 5 hours and more per day.

Greater time spent on social networking websites led to higher psychological distress and increased suicidal ideation. Self-harmers are more active on online social networks. These networks increased exposure and engagement in self-harm behaviour due to users receiving negative messages promoting self-harm and adopting self-harm practices from shared videos (Memon, 2018). There is a positive and significant association between broadband Internet adoption and suicide on average (Kyung, 2021). Digital tools provide young people with a range of beneficial opportunities but there are risks and potential harm due to their use and misuse (Pacheco & Melhuish, 2018).

According to the hypothesis, there is significantly a gender difference in engagement of digital self-harm among young adults. According to the results, more males reported engagement in digital self-harm than females. As males have more public accounts than females. According to Patchin & Hinduja's (2017) research, more males reported being engaged in self-harm than females. According to Pacheco et al (2019) report, 7% of male and5% of female teenagers engaged in digital self-harm. Girls who engage in digital self-harm reported wanting to show resilience, looking for friends' sympathy, and seeking reassurance of friendship meanwhile, for boys it was about making a joke.

7. Conclusion

In this research, the influence of digital self-harm on emotional regulation among young adults was investigated. Results show significant relationship between digital self- harm and emotion regulation among young adults. Findings show a positive relationship between emotional regulations and digital self-harm. Findings show that males engage more in digital self-harm than females. And hours spent on social media have a positive relationship with digital self-harm among young adults.

7.1. Limitations of the Study

There are at least two potential limitations concerning the results of this study. The first limitation concerns the unequal number of genders (male=55, female=100) included in the study. The second potential limitation is that the age limit was taken from 19 to 40 years old, younger adults which was a long range to specify the occurrence of digital self-harm in the specific age range. The present research cannot rule out these explanations, it seems useful to point out issues that may conflict with these results. Despite these limitations, these results suggest several practical and theoretical implications.

7.2. Recommendations for the Future Research

The most important contribution of this research may be that it raises a variety of intriguing questions for future study. There is a need for research to explore the causal factor related to emotional regulations in detail with digital self-harm. The present research contributes to a growing body of evidence suggesting that digital self-harm is a very newterm and measuring its extent in Pakistan is important so that the prevention and therapiescan be suggested to help psychologists in their understanding and management before it raises an unmanageable extent.

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