Impression of excessive digital media utilization on psychological well-being: A case of Pakistan’s metropolitan cities

Mehreen Fatima¹, Qazi Mohammed Ahmed²*

¹Department of Management Sciences, Bahria University, Islamabad, Pakistan
²Department of Business Studies, Bahria University Islamabad Campus (BUIC), Islamabad, Pakistan

*Corresponding Author email: qazi.buic@bahria.edu.pk

Submitted: 13 June 2022 Revised: 19 August 2022 Accepted: 30 August 2022

ABSTRACT

Digital media utilization assumes an imperative part in changing millennials’ way of life. The rapid growth in the usage of digital media may have an impact on the mental prosperity of users. The primary focus of this research is to examine how excessive usage of digital media affects its consumers’ psychological well-being in Pakistan’s major cities. In January this year, there were 72 million digital media users in Pakistan, equal to 32% of the total population, of which 28% of Pakistan is between the ages of 26-41 (Kemp, 2022). This is the most probable age group to be used and influenced by digital media. Based on prior works, it delivers a more inclusive study of the spectacle by the view of independent variables (social capital, social isolation, and smartphone addiction), dependent variable (psychological well-being), and one mediator (excessive digital media utilization). This study sheds light on the best ways to mitigate the negative effects of using digital media, which claims to have a clear adverse effect on mental health through social capital creation and management. Overall, this research provides important insights for academics, scholars, and society at large. This paper consists of a quantitative approach of 236 users from metropolitan cities in Pakistan with the help of structural equation modeling to test the projected propositions. The research study could be additionally upgraded if we center around more factors and other various areas of Pakistan for exploring the effect of excessive digital media utilization on mental prosperity.

Keywords: Digital Media; Social Capital; Psychological Well-Being; Social Isolation; Smartphone Addiction

1. INTRODUCTION

Digital media usage has filled significantly as of late Leong et al. (2019), alludes to intelligent electronic platforms that work with the making and allotment of information, opinions, benefits, and different types of delivery through digital networks and organizations (Swar & Hameed, 2017). The bigger part of the world presently uses digital media (58.4%), 4.62 billion people all over the planet at the moment utilize virtual entertainment and 24 million new clients have come to the internet based inside the most recent year. In 2022, more than 3.5 billion individuals will devote energy to the informal community no less than once each month (Insider Intelligence, 2022). In January 2022, there were 82.90 million digital media users in Pakistan. At the beginning of 2022, 36.5% of the population had access to digital media (Kemp, 2022). The typical everyday time spent utilizing virtual entertainment...
is 2h 16m (Chaffey, 2022). However, an astonishing report in July 2020, looks at changes in online entertainment utilization during the start of the COVID-19 lockdown period. Outstandingly an imaginary development in on the network and computerized exercises. The raise came following several years where development had appeared to dial back, this behavior was attributed to changes in client conduct because of the lockdown. In any case, with progress going on in 2022, there might be more having an effect on everything than simply the primary lockdown patterns. Thus, digital media use fixation has quickly expanded post-Coronavirus-19 and it has inclined especially on human psychological well-being.

Thus, social media use fixation has quickly expanded post-Coronavirus-19 and it has influenced especially on human psychological well-being. The progress in digital media utilization has led to fears about its effects on users' well-being. Investigation into the outcome of social media use (DMUU) on prosperity (e.g., bliss), and ill-being (e.g., sadness) has detonated throughout recent years. From 2019 to August 2021, 27 reviews have been distributed: nine meta-investigations, nine deliberate surveys, and nine-story surveys, which together included many experimental examinations. A growing body of research has shown that using social media negatively affects one's mental well-being, especially among youngsters — for instance, it might add to the expanded hazard of misery and uneasiness side effects (Roeder, 2020). Thus, the effect of advanced media uses on mental prosperity is related to uneasiness, dejection, sorrow, social seclusion, and the act of ignoring somebody while they use a cell phone (Chatterjee, 2020).

Digital media is become an integral part of everyday life, from online shopping to education and business tools. Social media includes a wide range of informal communication channels and websites where people and things might unavoidably interact. The development of these long-distance informal communication platforms, like Facebook, as crucial tools for journalists and their connections, has since played out as a challenging exercise (Asough, 2012). These locations are now a regular part of people’s schedules. Social media has mostly been defined as any of the numerous, reasonably affordable, and generally open electrical gadgets that collaborate with anyone to disseminate and access information, collaborate on a common task, or establish relationships.

The work simultaneously provides detached indicators regarding how social media usage affects users’ prosperity, highlighting both any potential negative effects and any potential social benefits. This study argues that there is a genuine need to comprehend the impact of social media use on users’ mental health, particularly by taking into account many variables that mediate and further explain this impact (Ostic et al., 2021).

The main purpose of this paper is to reveal knowledge regarding the impact of social media use on mental health. This research examines the mediating impact of excessive digital media utilization, as explained in detail in the topic below. To provide a thorough understanding of the uniqueness, it takes into account a few elements that are discussed in the article as impacting the relationship between social media use and mental prosperity, including smartphone addiction and social isolation. The study employs a
quantitative report focused on Pakistan with 236 social media users to examine several research hypotheses. Below, we go over each of these components:

2. REVIEW OF CURRENT LITERATURE AND HYPOTHESES DEVELOPMENT:

Social capital is defined by Putnam (2000), as "Highpoints of a social association like establishments, standards, and social trust that work with harmonization and alliance for common benefit". Lin (2001), further explained that social capital envelops by conceptualizing as admittance to assets through network ties, the intricacy and elusive nature of social and mental aspects is kept away. Putnam (2000), theorized social capital to have two different functions, bridging and bonding, given the different networks and norms in which they occur. The nature of the associations or relationships in the social cluster or community is expressed by the social capital for bonding and bridging. Generally speaking, social capital is supposed to be categorically connected with mental prosperity or psychological well-being (Bano et al., 2019). Indeed, Williams (2006), focused on how communication produces full of feeling associations, bringing about good effects, like emotional support. This has good consequences on interaction including acceptance, trust, and reciprocity, which are connected to people’s physical and mental well-being, and social capital between social circles that exist outside of digital media, such as when social media aids in maintaining it (Bekalu et al., 2019). Bano et al. (2019), collected and considered data from 266 students and analyzed it, the results showed that WhatsApp use had beneficial impacts on social capital forms and that social capital had favorable effects on psychological well-being, with a focus on the mediating role of social integration. Pang (2018) researched Chinese students who were studying in Germany and discovered the beneficial impacts of social capital, which was positively correlated with psychological well-being. Accordingly, in light of the literature over, this study proposes the accompanying hypotheses:

H1: Psychological well-being is significantly and favorably impacted by social capital.

H4: Excessive digital media utilization has a significant and detrimental influence on social capital.

Social isolation, states to have an absence of human interaction and being surrounded by few individuals to consistently associate and collaborate. In earlier works of literature, social isolation was described as the inability to live alone without feeling lonely or cut off from society as well as the inability to feel alone even while surrounded by others (Aging, 2021). About 25 years prior, it distributed a milestone survey of forthcoming research on social isolation in people. They stated that social disengagement was a significant risk factor for widespread cynicism and compassion, which has been documented in the research (Holt-Lunstad et al., 2010). People originate before each other, and people are equipped for trickiness, selling out, double-dealing also sympathy, empathy, conviction, and intended behavior. The presence of others, even if they are deemed to be friends, poses a social risk at any given moment due to some acknowledged shifting complications and flexible social ordered progressions. Therefore, the impartial existence of individuals is insufficient to
ensure the social ties necessary for human endurance and success. Luckily, evaluations have been created with which to quantify apparent as well as genuine disconnection. Concentrates on utilizing these appraisals demonstrate that objective social confinement can influence the impression of isolation, however, show that deceptive social disconnection is more determinedly connected with the quality than the number of social interactions. Social isolation lowers psychological well-being, made a similar argument (Chappell & Badger, 1989). When people feel socially isolated from their relatives, mates, homes, or communities, their psychological well-being tends to decline. Thus, this study puts up the following hypothesis in light of the literature already mentioned:

H2: Social isolation has a substantial and negative impact on psychological well-being.

H5: Social isolation has a substantial and negative impact on excessive digital media utilization.

Smartphone addiction alludes to "people over the top utilization of a smartphone and its pessimistic impacts on his/her life because of his/her failure to control his way of behaving" (Gökçearslan et al., 2018). No matter what its structure, smartphone addiction brings about friendly, clinical, and mental damage to individuals by restricting their capacity to go with their own decisions (Chotpitayasunondh & Douglas, 2016). The fast headway of data and correspondence advances has prompted the idea of online entertainment, online games, and digital gadgets habit (Chatterjee, 2020). The inordinate utilization of smartphones for digital media utilization, alteration (inspecting recordings, paying devotion to music), and playing online games is more normal among individuals in need of smartphones. As Past examinations have proven the connection between friendly use and cell phone compulsion. While smartphones are bringing people nearer, they are additionally, somewhat, pulling individuals separated (Tonacci et al., 2019). For example, they can quickly overlook people with whom they have genuine relationships or networks; this current condition is typically brought about by disdainful smartphone usage (for example, during supper, in gatherings, at social affairs, and in other day-to-day exercises). There is a connection between digital utilization and smartphone addiction, according to an earlier study. Accordingly, the following proposed assumptions are put forth:

H3: Psychological well-being suffers significantly and adversely from smartphone addiction.

H6: Smartphone addiction has a substantial and positive impact on excessive digital media utilization.

Psychological well-being has been considered the combination of feeling far improved and occupied great; the knowledge of good moods like bliss and pleasure as well as the enhancement of one's true capacity, having some control over one's life, feeling purposeful, and coming across positive inspirations. An economic condition documents the individual or general public to produce and flourish. World Health Organization, exemplifies positive psychological well-being condition of prosperity wherein the individual understands their capacities, can adapt to the typical burdens of life, can work gainfully and productively, and can make a commitment to their local area". This concept of prosperity drives the shortfall
of intellectual medical affliction, integrating the discernment that life is occupied in a good way. From 2019 to August 2021, 27 reviews have been distributed: nine meta-investigations, nine deliberate surveys, and nine-story surveys, which together included many experimental examinations. Therefore, a developing collection of exploration has exhibited that digital media use is adversely connected with emotional well-being and prosperity, especially among youngsters—for instance, it might add to the expanded hazard of misery and uneasiness side effects (Roeder, 2020). Thus, the effect of advanced media usage on mental prosperity is related to uneasiness, dejection, sorrow, social seclusion, and the act of ignoring someone while using a mobile phone, which indicates to the extent with a single purpose, or else preoccupied with, their cell phone throughout up close and personal communication with others (Chatterjee, 2020).

Except this, in light of the literature over, this study suggests the accompanying mediation hypotheses:

H7: Excessive Digital media utilization mediates the link between social capital and psychological well-being.

H8: Excessive Digital media utilization mediates the relationship between social isolation and psychological well-being.

H9: Excessive Digital media utilization mediates the relationship between smartphone addiction and psychological well-being.

### 2.1. Conceptual Framework:

![Conceptual Framework Diagram](image)

**Fig. 1. Conceptual Framework**
3. METHODOLOGY:

3.1. CONTEXT:

The study aims to investigate in-depth how social capital, social isolation, and smartphone addiction affect mental health and how social media use mediates these effects.

To inspect the study of Ostic et al. (2021), "The effect of social media use on psychological well-being: A mediated model" (Frontiers in Psychology) for a wider view and beyond its limitation, it has been executed on different populations specifically millennials in Pakistan. In this study, which is based on the aforementioned literature, there are three independent variables—social capital, social isolation, and smartphone addiction—one dependent variable—psychological well-being—and a mediator—excessive use of digital media. Gender and age were once thought to be controlling factors that may affect consumers' online behavioral intentions (Ostic et al., 2021).

For this purpose, the questionnaire has been floated among 50 respondents to check its reliability for the objective of pilot testing. After that, the remaining data has been composed of 236 respondents. This paper includes 3 independent variables and 1 dependent variable; however, one mediator is also included.

3.2. RESEARCH INSTRUMENT:

The research tool has been used in SPSS by applying different tests as such descriptive statistics, reliability, and co-relation for all the variables. Except that Haye's process has been applied for simple mediation.

The research instrument used in this study is a questionnaire and the type of study done is Quantitative Analysis. The questionnaire comprised 5 unsaid categories of 5 variables of the study. A total of four questions were targeted at mediator digital media usage. Whereas the remaining questions targeted information sharing dependent variable of the study. All the questions were close-ended and the respondents had to choose answers within a given scale (Likert scale). To get some fundamental information, a few personal questions were asked at the beginning of the questionnaire regarding the respondent in terms of demographic, education, age and occupation, etc. the questions have been referred from (Ostic et al., 2021).

All the scales used to determine the variables in the suggested model, which ranged from "strongly disagree" to "strongly agree," were 5-point measures. Kim and Kim (2017), scale measuring the relationship between digital media use and psychological well-being was changed. Also, the time horizon of the study is cross-sectional in nature.
4. RESULTS AND ANALYSIS:

4.1. RESPONDENT’S PROFILING:

Table 1. Gender and Age-Wise Distribution of Respondents

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106</td>
<td>45%</td>
</tr>
<tr>
<td>Female</td>
<td>130</td>
<td>55%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-23 years old</td>
<td>140</td>
<td>59.3</td>
</tr>
<tr>
<td>23-29 years old</td>
<td>58</td>
<td>24.6</td>
</tr>
<tr>
<td>30-35 years old</td>
<td>26</td>
<td>11.0</td>
</tr>
<tr>
<td>35-40 years old</td>
<td>12</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Out of the total sample size, 45% of the questionnaires were filled by males and 55% by females. Most respondents were in age between 18-23 years old whose percentage is 59.3%, whereas 24.6%, 11 %, and 5.1% were of age groups 23-29 years old, 30-35 years, and 35-40 years old respectively (see Gender and Age-Wise Distribution of Respondents).

4.2. CORRELATIONAL AND RELIABILITY ANALYSIS

Table 2. Reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.793</td>
<td>8</td>
</tr>
<tr>
<td>SI</td>
<td>.784</td>
<td>3</td>
</tr>
<tr>
<td>SA</td>
<td>.674</td>
<td>3</td>
</tr>
<tr>
<td>DMU</td>
<td>.564</td>
<td>4</td>
</tr>
<tr>
<td>PW</td>
<td>.779</td>
<td>5</td>
</tr>
</tbody>
</table>

**p<0.05

The correlation coefficients for all the variables that are significant at the .05 levels are displayed (see Reliability). The Cronbach alpha values demonstrate the internal consistency and dependability of each variable’s elements, and reliability and acceptable value are higher than 0.7 (DeVellis, 2016). Social capital (SC) consisted of eight items (α=0.625), Social isolation (SI) consists of three items (α=0.706), smartphone addiction consists of three items (α=0.739), digital media usage (DMU) consists of four items (α=0.779) and psychological well-being (PW) consists of five items (α=0.832). The Cronbach alphas of all variables were found to be reliable (23 items α>0.50).

Table 3. Correlations

<table>
<thead>
<tr>
<th>Construct</th>
<th>SC</th>
<th>SI</th>
<th>SA</th>
<th>DMU</th>
<th>PW</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>1</td>
<td>-.041</td>
<td>-.223</td>
<td>.345</td>
<td>.546</td>
</tr>
<tr>
<td>SI</td>
<td>-.041</td>
<td>1</td>
<td>.157</td>
<td>.103</td>
<td>-.076</td>
</tr>
<tr>
<td>SA</td>
<td>.223</td>
<td>.157</td>
<td>1</td>
<td>.619</td>
<td>.520</td>
</tr>
<tr>
<td>DMU</td>
<td>.345</td>
<td>.103</td>
<td>.619</td>
<td>1</td>
<td>.521</td>
</tr>
<tr>
<td>PW</td>
<td>.546</td>
<td>-.076</td>
<td>.520</td>
<td>.521</td>
<td>1</td>
</tr>
</tbody>
</table>
The above table shows the correlation among all variables. Correlation interprets the relationship between two variables with a range of +1 to -1. When the correlation coefficient between the independent and dependent variables ranges from 0.01 to 0.39, a weak correlation is present. Additionally, a moderate connection exists between coefficient values of 0.40 and 0.59, whereas a strong correlation is evident between 0.60 and 0.99 (see Correlations).

Denoting to the above table, social capital (SC=0.546), smartphone addiction (SA=0.520) and excessive digital media utilization (DMU=0.521) has a strong positive correlation. Social isolation, on the other hand, exhibits a negative correlation with the study’s dependent measure (SI=0.076).

4.3. Regression Analysis

H1: Psychological well-being is significantly and favorably impacted by social capital.

H4: Excessive digital media utilization has a significant and detrimental influence on social capital.

Table 4. Linear Regression-Model Summary and Anova

<table>
<thead>
<tr>
<th>Construct</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>.304</td>
<td>50.771</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SC  
b. Predictors: (Constant), DMU, PW

Table 5. Linear Regression - Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.047</td>
<td>.159</td>
<td>12.913</td>
</tr>
<tr>
<td></td>
<td>PW</td>
<td>.353</td>
<td>.045</td>
<td>7.863</td>
</tr>
<tr>
<td></td>
<td>DMU</td>
<td>.058</td>
<td>.046</td>
<td>1.280</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SC

Conferring to the results (see Linear Regression-Model Summary and Anova & Linear Regression - Coefficient), R square which demonstrates co-variance or coefficient of determination is the proportion of variability in the independent variable (X) that is clarified dependent variable (Y) in a model. X variables are digital media usage and psychological well-being and Y variable is social capital. Hence, 30.44% of modification in digital media usage and psychological well-being is instigated because of social capital. F-test or F-value is to regulate whether regression analysis is substantial or not. Hence bestowing or analysis of the value of F-statistics positioned at 50.771 which shows the regression model is statistically significant. The beta is 0.353, which assumes that only 45% variation in the social capital was clarified by PW. Except that, the value of t-statistics placed at 7.863 of psychological well-being which validates the significant relationship with social capital at less than 0.05 (p<0.05). Along with this, the beta is .058, which hypothesizes that only 46% of the variation in the social capital was elucidated by digital media usage. And, the value of t-statistics placed at 1.280 for digital media usage which establishes the insignificant relationship with social capital at a .202 level of confidence. Hence, H1 is recognized that social capital has a positive relationship through psychological well-being and H4 has been
proven wrong as results showed that social capital has an insignificant relationship with digital media usage (see Table 5).

H2: Social isolation has a substantial and negative impact on psychological well-being.

H5: Social isolation has a substantial and negative impact on excessive digital media utilization.

Table 6. Linear Regression-Model Summary and Anova

<table>
<thead>
<tr>
<th>Construct</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI</td>
<td>.034</td>
<td>4.042</td>
</tr>
</tbody>
</table>

Table 7. Linear Regression - Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.285</td>
<td>.301</td>
</tr>
<tr>
<td>PW</td>
<td>-.201</td>
<td>.085</td>
</tr>
<tr>
<td>DMU</td>
<td>.224</td>
<td>.087</td>
</tr>
</tbody>
</table>

_a. Dependent Variable: SI_

According to the findings, R square, which illustrates co-variance or co-efficient of determination according to the results, is the percentage of variability in the independent variable (X) that is clarified by the dependent variable (Y) in a model. Digital media use, psychological health, and social isolation are the X and Y variables, respectively. Hence, 34% of modification in digital media usage and psychological well-being is instigated because of social isolation. F-test or F-value is to regulate whether regression analysis is substantial or not. Hence, bestowing to or analysis of the value of F-statistics positioned at 4.042 which shows regression model is statistically significant (see Linear Regression-Model Summary and Anova). Table 7 exposes that the beta is -.178, which assumes that only 85% variation in the social isolation was clarified by PW. Except that, the value of t-statistics placed at -2.352 of psychological well-being which validates the significant relationship with social isolation at less than 0.05 (p<0.05). Along with this, the beta is .195, which hypothesizes that only 87% of variation the in social isolation was elucidated by digital media usage. And, the value of t-statistics placed at 2.589 the digital media usage which establishes the significant relationship with social isolation at .010 of the level of confidence. Hence, H2 is recognized social isolation has a favorable relationship with psychological well-being and H5 has been proven wrong as results showed that social isolation has a significant relationship with digital media usage (see Linear Regression - Coefficient).

H3: Psychological well-being suffers significantly and adversely from smartphone addiction.

H6: Smartphone addiction has a substantial and positive impact on excessive digital media utilization.

Table 8. Linear Regression-Model Summary and ANOVA

<table>
<thead>
<tr>
<th>Construct</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>.437</td>
<td>90.422</td>
</tr>
</tbody>
</table>

_a. Dependent Variable: SA_  
_b. Predictors: (Constant), DMU, PW_
Table 9. Linear Regression - Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.543</td>
<td>.206</td>
<td>2.629</td>
<td>.009</td>
</tr>
<tr>
<td>PW</td>
<td>.275</td>
<td>.058</td>
<td>.271</td>
<td>4.689</td>
</tr>
<tr>
<td>DMU</td>
<td>.492</td>
<td>.059</td>
<td>.478</td>
<td>8.305</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SA

Deliberating the results, R square is 43.7% modification in digital media usage and psychological well-being is instigated because of social capital. Analysis of the value of F-statistics positioned at 90.422 which shows regression model is statistically significant (see Linear Regression-Model Summary and ANOVA). The beta is 0.275, which assumes that only 58% variation in smartphone addiction was clarified by PW. That, the value of t-statistics placed at 4.689 of psychological well-being which validates the significant relationship with smartphone addiction at 100% of the level of confidence (see table 9). Along with this, the beta is .492, which hypothesizes that only 59% the of variation in smartphone addiction was elucidated by digital media usage (see Linear Regression - Coefficient). And, the value of t-statistics placed at 8.305 for digital media usage which establishes the significant relationship with smartphone addiction. Hence, H3 and H6 are recognized that smartphone addiction has a constructive relationship with psychological well-being and digital media usage.

Mediation Analysis – Haye’s Process:

H7: Excessive Digital media utilization mediates the link between social capital and psychological well-being.

Table 10. Direct and indirect effects

<table>
<thead>
<tr>
<th>Direct and indirect effects</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>UUCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>The direct effect of X on Y</td>
<td>.5938</td>
<td>.0755</td>
<td>7.863</td>
<td>0.000</td>
<td>.4450</td>
<td>.7426</td>
</tr>
<tr>
<td>The indirect effect of X on Y</td>
<td>.1857</td>
<td>.0520</td>
<td>0.0875</td>
<td>.2928</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mediation analysis was performed to assess the mediating role of MV in the linkage between IV and DV (Baron, & Kenny, 1986). The results revealed that the indirect effect of the X-variable (SC) on the Y-variable (PW) is significant as the value of p is 0, whereas the direct effect of the X variable on the Y variable is insignificant. This analysis shows that there is complete or total mediation, which means that the impact of social capital on PW is completely transmitted through DMU (see Direct and indirect effects).

H8: Excessive Digital media utilization mediates the relationship between social isolation and psychological well-being.

Table 11. Direct and indirect effects

<table>
<thead>
<tr>
<th>Direct and indirect effects</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>UUCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>The direct effect of X on Y</td>
<td>-1.156</td>
<td>.0491</td>
<td>-2.3523</td>
<td>.0195</td>
<td>-2.124</td>
<td>-0.0188</td>
</tr>
<tr>
<td>The indirect effect of X on Y</td>
<td>.0486</td>
<td>.0366</td>
<td>-.0913</td>
<td>.1236</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The preceding table confirms that although the direct effect of the X variable on the Y variable is minor, the indirect effect of the X variable (SI) on the Y variable (PW) is substantial.
as the value of \( p \) is 0.0195. This investigation shows that there is full mediation, which means that the impression of social isolation on PW is completely transmitted through excessive DMU (see Direct and indirect effects).

H9: Excessive Digital media utilization mediates the relationship between smartphone addiction and psychological well-being.

**Table 12. Direct and indirect effects**

<table>
<thead>
<tr>
<th>Direct and indirect effects</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>UUCI</th>
</tr>
</thead>
<tbody>
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<td>The direct effect of X on Y</td>
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<td>.0670</td>
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<td>.1829</td>
<td>.4470</td>
</tr>
<tr>
<td>The indirect effect of X on Y</td>
<td>.1972</td>
<td>.0553</td>
<td></td>
<td></td>
<td>.0982</td>
<td>.3112</td>
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</table>

Table 10 confirms that although the direct effect of the X variable on the Y variable is small, the indirect effect of the X variable (SA) on the Y variable (PW) is considerable because the value of \( p \) is 0. This examination demonstrates that there is full mediation, which means that the impression of smartphone addiction on PW is completely conducted through excessive DMU (see Direct and indirect effects).

5. **DISCUSSION AND IMPLICATIONS:**

5.1. **Discussion of the study:**

This research provides evidence that may shed light on the disparate claims made in writings that suggest both favorable Chen and Li (2017), and negative Chatterjee (2020), effects of using digital media on psychological well-being. Despite some undesirable side effects, this study concludes that the overall effect is satisfactory. The findings of this study are congruent with those of other studies because they advance ongoing writing by providing empirical support for the links suggested by surviving writing and by highlighting the value of adopting a more involved, intentional approach, specifically, the roundabout inspiration of digital media utilization on mental well-being. In that capacity, this paper is a reason for forthcoming examination Van den Eijnden et al. (2016), planning to comprehend the effects of digital platforms usage and to track down conducts of decreasing its possible adverse consequences. The present study's H1 findings highlight the significant relationship between social capital and psychological well-being which suggests that, throughout the pandemic, digital media utilization enables millennials to endure their relationship with family, networks, and close ties. This discovery is consistent with the preceding literature of Chan (2015). Findings from H4 indicate that the connection between social capital and excessive digital media usage is insignificant. When millennials trust that social connection support overcoming hindrances to interface and appreciate additional online disclosure, digital media utilization can recover truthfulness and shape social association, thus enhancing well-being. This finding is consistent with earlier research by Gong et al. (2021).

According to the H2 and H5 findings, social isolation, and psychological health are positively and significantly correlated, as are social isolation and DMU. It proves that social isolation has an impact on millennials’ well-being and it might be affected due to excessive
utilization of digital media. These results agree with earlier research by Adnan and Anwar (2020) and Choi and Noh (2020).

Similarly, H3 and H6 findings show the significant and subsequent relationship between smartphone addiction and psychological well-being, along with smartphone addiction and excessive digital media usage. These discoveries are in line with previous work. Additionally, H7, H8, and H9 demonstrated that the impact of independent variables on dependent variables was entirely communicated by excessive digital media use when the mediator’s excessive digital media use was included. Therefore, this study provides evidence that could shed light on the contradictory literature contributions indicating both beneficial and unfavorable impacts of using digital media on psychological well-being. This study succeeds in achieving a favorable overall impression with only one indirect negative influence.

5.2. Theoretical Implication:
According to Kim and Kim (2017), who highlighted the significance of various digital platforms in enhancing social capital, this paper suggests that to positively impact mental prosperity, using digital media must be related to both strong and weak ties, as both are important in creating social capital, which is subsequently associated with bonding and bridging. In the future, researchers can work on other elements like phubbing and sub-variables of social capital, to study the consequence of digital media utilization on psychological well-being.

5.3. Practical Implications:
In the consideration of practical implications, these discoveries are huge for specialists, especially those keen on managing the conceivable adverse consequences of digital media usage on mental well-being. Although digital media usage is related to factors that adversely stimulate mental prosperity, these adverse consequences can be diminished by assuming the associations within the cooperation of solid, in addition to powerless bonds, worked with digital media. To be sure, digital media platforms offer a few elements, from working with correspondence with the close clan, and companions, along with colleagues, to recognizing and offering admittance towards others with collective benefits. Nonetheless, the subject is essential to get to heterogeneous frail bonds (Li, & Chen, 2014) so digital media offers access to more extensive wellsprings of data and new assets, subsequently upgrading associating social capital.

6. Limitations of the Study and Future Research:
This study dealt with respondents in a convenient investigative manner. Additionally, this study was only focused on Pakistan, which limited the analysis of the findings; hence, future research should use a different research approach, the effects of digital media use on psychological well-being, and the role of projected builds as an intermediary (e.g., social capital, social isolation, and smartphone addiction). Since responders were largely educated, the dissemination example might also be seen as a review limitation. Even
though Internet channels address an especially reasonable method for moving toward digital media users, the means through which this study took on online-based review doesn't ensure a delegate test of the populace. Subsequently, inferring the outcomes involves wariness, and study imitation is suggested, especially through digital media users from different regions besides societies. The current review led with regards to mostly millennials, fundamentally knowledgeable females, using a digital media overview in Asia in the time post-pandemic; subsequently, the discoveries address a depiction of a specific period.

Both of the projected speculations of this paper, particularly with the normal adverse consequences of social capital on digital media utilization, ought to be additionally investigated. Different ideas for future examination incorporate utilizing blended strategy draws near, as subjective investigations could help further approve the outcomes and give corresponding viewpoints on the connections between the thought about factors.

**Author Contributions:**

Mehreen Fatima: Methodology, Data Analysis, Validation, Visualization, Writing-Original Draft Presentation.

Qazi Mohammed Ahmed: Conceptualization, Supervision, Writing- Review and Editing.

**Funding:**

This research received no external funding

**Institutional Review Board Statement:**

Not applicable

**Informed Consent Statement:**

Informed consent was obtained from all subjects involved in the study

**Data Availability Statement:**

Data is available on request of corresponding author

**Conflicts of Interest:**

The authors have declared no potential conflicts of interest

**Reference:**


