Beyond Time Spent Online: Differential Effects of Internet Importance and Usage Time on Well-being and Social Connections

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Abstract

As internet use becomes an important part of daily life, understanding its impact on psychological wellbeing and social connections is crucial. However, previous research has primarily focused on internet usage time, potentially overlooking the psychological significance individuals attribute to internet use. This study examines how both internet usage time and perceived internet importance relate to multiple dimensions of wellbeing and social outcomes in contemporary Chinese society. Using data from 14,940 participants in the 2022 China Family Panel Studies (CFPS), we investigated the relationships of these two aspects of internet engagement with happiness, life satisfaction, meaning in life, interpersonal relations, and social trust. Results revealed distinct patterns: while internet usage time showed minimal or slightly negative associations with outcomes, perceived internet importance demonstrated consistent positive relationships with wellbeing and social measures, particularly interpersonal relations. These associations persisted after controlling for demographic and socioeconomic factors. The findings suggest that in highly digitized societies, the psychological meaning attributed to internet use may be more consequential for wellbeing than actual usage time. By extending previous research predominantly focused on Western societies, this study highlights the importance of differentiating between behavioral and psychological dimensions of internet engagement in highly digitized societies. Implications for understanding internet use as a potential resource for well-being are discussed. Future research is encouraged to employ longitudinal designs to clarify causal relationships.

Introduction

Over the last decade, internet use has increased globally, and it is known that more than half of the global population (65.7%; approximately 5.3 billion) uses the internet (International Telecommunication Union, 2023). This is a remarkable increase compared to 2013, when the global internet penetration was only 35% (World Bank, 2023). However, the increase might have been catalyzed by the COVID-19 pandemic. During the initial phase of the pandemic (2020-2021), people moved into the new normal of lockdowns and social distancing, and research has found a 40% increase in global internet traffic (Feldmann et al., 2021). This, in turn, changed the landscape to one truly digital, with people adopting online alternatives at a rapid rate for work, education, and essential services. For instance, video conferencing platforms reported a twenty-fold surge in daily active participants (Zoom, 2021), surely an indication that the internet has played a critical role in sustaining social and professional networks during and after this crisis.

Internet Use and Wellbeing

With the popularity of the internet, researchers have started to investigate its psychological impact on users' wellbeing. A meta-analysis by Çikrıkci (2016) provides substantial evidence suggesting the negative impact from internet use. The study synthesized data from 23 studies with 21,054 participants, revealing a significant negative correlation between internet use and psychological wellbeing ($r = -0.18$, $p < 0.001$). Importantly, the result corresponds to the cognitive-behavioral framework proposed by Senol-Durak and Durak (2011). This framework argues that problematic internet use often develops as a maladaptive coping strategy: individuals use the internet to avoid addressing negative emotions (Senol-Durak & Durak, 2011). Consequently, this avoidance pattern can create a

self-perpetuating cycle, where excessive internet use postpones real-world problem-solving and impairs positive mental states (Valkenburg & Peter, 2009).

Research consistently supports the theoretical framework linking excessive internet use to diminished wellbeing across diverse populations and methodological approaches (i.e., longitudinal and cross-sectional). In their cross-sectional investigation of young adults, Lachmann et al. (2016) found a significant inverse relationship between problematic internet use and life satisfaction. These findings align with Mei et al.'s (2016) research on adolescents, which demonstrated that excessive internet use was associated with diminished psychological well-being and impaired self-control. Longitudinal evidence from Teng et al. (2020) provides particularly robust support for these relationships. Their one-year study examined the predictive relationship between problematic internet use and key indicators of psychological wellbeing (e.g., self-esteem, social support, and life satisfaction). They found that problematic internet use predicted decreased wellbeing at both six-month and one-year follow-ups, demonstrating the enduring, deleterious effects of excessive internet engagement.

However, despite these seemingly conclusive findings, recent longitudinal evidence has introduced important nuances to our understanding. A nine-year longitudinal study by Schemer et al. (2021) suggests that general internet use has minimal impact on wellbeing when controlling for important confounding variables. This contradiction highlights important questions about whether negative psychological states drive problematic internet use or vice versa. In addition, for older adults specifically, internet use demonstrates positive effects on wellbeing through various mechanisms. Cross-sectional and longitudinal studies report significant associations between internet use and decreased depression, with internet use reducing the likelihood of depression by 20-28% in older adults (Cotten et al., 2012, 2014). The positive impact appears to be mediated through enhanced social connectivity and support, as internet use is associated with greater social support, decreased loneliness, better

life satisfaction and improved psychological wellbeing among older adults (Heo et al., 2015; Seifert et al., 2017). A recent systematic review by Sen et al. (2022) further reinforces these findings, showing that access to internet use helps reduce social isolation among older adults by facilitating family connections, enabling access to healthcare resources, and promoting both physical and mental wellbeing. However, these benefits are contingent upon older adults' digital literacy and skills, highlighting the importance of providing appropriate training and support to maximize the positive potential of internet use in this population (Hunsaker & Hargittai, 2018).

To conclude, the above evidence suggests that internet use can present both risks and benefits for well-being, and potential moderators (e.g., age, type of internet use, digital literacy) need to be carefully considered. This duality of internet impact invites a deeper examination of how internet use influences social relations, as social connectivity is a crucial mediator that can either mitigate or amplify the psychological outcomes of internet use (Valkenburg & Peter, 2009). The following section explores this critical intersection between internet use and social relationships, examining how internet use influences human connection.

Internet Use and Social Relationships

As digital platforms increasingly mediate human interactions, it is important to understand the relations between internet use and social relationships. Do Internet use improve social connections, or diminish them? Theoretical frameworks have emerged to explain this relationship, with empirical evidence supporting both potential benefits and risks.

Early research primarily supported the displacement hypothesis, first proposed by Kraut et al. (1998), which suggests that time spent online might replace face-to-face interactions and potentially weaken traditional social bonds. Supporting this perspective, Hall

et al. (2014) found that increased smartphone use during face-to-face interactions significantly reduced conversation quality and emotional connection between participants. Similarly, Twenge et al. (2018) documented concerning trends in their large-scale study of adolescents, revealing that teenagers who spent more time on social media reported lower quality friendships and increased feelings of social isolation.

However, more recent research has emerged, suggesting that the impact of internet use on social relationships depends largely on how it is used. Burke and Kraut (2016) found that personalized, direct communication through social media strengthened social bonds and increased perceived social support, while passive consumption of social content showed minimal or negative effects on relationship quality. This distinction helps explain seemingly contradictory findings, as demonstrated by Yang (2016), who found that specifically lurking behaviors on social media platforms were associated with decreased relationship satisfaction and increased social comparison, ultimately leading to higher levels of loneliness. These findings align with the stimulation hypothesis, which proposes that online communication tools primarily stimulate connection by complementing traditional face-to-face interactions. This theoretical perspective suggests that internet use can enhance social connections by providing additional channels for relationship maintenance and development. Supporting this view, research has revealed that internet use is positively associated with increased face-to-face interactions with friends (Hampton, 2019), to stronger quality of existing friendships (Antheunis et al., 2016), and to enhanced psychological well-being (Bessière et al., 2008). Several studies have also shown that online communication strengthens offline social networks (Domahidi, 2018) and increases social capital (Ellison et al., 2014).

While these studies have documented the mixed relationship between internet use and social relationships, this body of research has primarily focused on direct interpersonal outcomes (for reviews, see Castellacci & Tveito, 2018; Çikrıkci, 2016), a critical dimension

of this phenomenon is how internet use patterns influence broader social trust. This construct warrants investigation, as it might be a potential mediating mechanism explaining the divergent effects of internet use on social relationships (Sabatini & Sarracino, 2019).

Indeed, compared to internet use and social relationships in general, research on internet use and social trust is limited. Also, research examining this relationship has revealed complex and sometimes contradictory patterns. Recent studies indicate that while general internet use can positively influence interpersonal trust when properly mediated through effective information processing, participation specifically in social networking sites (SNS) tends to decrease both social trust and trust in institutions. For instance, Sabatini & Sarracino (2015) found that SNS use significantly reduces trust in others, neighbors, and police by nearly a full point on measurement scales. The mechanisms underlying these effects appear to operate through multiple pathways. Beaudoin (2008) identified information processing capabilities and social resource motivation as key mediating factors - users who can effectively manage online information tend to develop more trust, while perceived information overload has negative effects. Additionally, Welch et al. (2012) distinguished between transparency (one-way information sharing) and interactivity (two-way engagement) in online interactions, finding that experienced internet users show higher satisfaction with transparency but lower satisfaction with limited interactivity, both of which influence trust development. These findings suggest that the impact of internet use on trust depends heavily on how the technology is used, individual differences in information processing abilities, institutional approaches to online engagement, and user expectations and motivations.

Internet Use in China

The preceding discussion has primarily focused on internet use patterns and their implications in Western contexts. However, to develop a more comprehensive understanding,

it is crucial to examine these dynamics in different cultural and developmental contexts. China, as the world's largest internet market with distinct characteristics (Wang & Li, 2012), provides a particularly compelling case study.

By 2008, China had surpassed the United States to become the world's largest internet user base, reaching 1,099.67 million users by 2024. This explosive growth is reflected in the country's internet penetration rate, which increased dramatically from 47.9% in 2014 to 78% in 2024 (Statista, 2024). More significantly, China has developed a distinctive digital ecosystem characterized by widespread adoption of mobile payments, integrated super-apps, and innovative digital services that have become deeply embedded in daily life. For instance, mobile payment transactions in China far exceed those in Western countries, with services like WeChat Pay and Alipay fundamentally transforming how people conduct their daily activities, from shopping and dining to accessing public services. The internet has thus catalyzed a profound transformation in Chinese daily life (China Internet Network Information Center (CINIC), 2022). The rapid adoption of these advanced internet technologies has potentially significant implications for individual wellbeing. However, despite the growing importance of internet use in China and its unique characteristics, research examining its effects on Chinese users' social and mental outcomes remains limited.

Present Study

Therefore, the current study aims to examine the relationship between internet use, psychological wellbeing, interpersonal relationship and social trust in the Chinese context, making several important contributions to the existing literature. First, by focusing on China's unique digital ecosystem, we extend previous research that has predominantly examined Western contexts. This extension is crucial because China's distinctive internet landscape may yield different patterns of internet use impacts compared to Western societies. Second, to

address the methodological limitations in prior studies, we employ a comprehensive measurement approach that distinguishes between behavioral and psychological aspects of internet engagement. Specifically, we measure both internet usage time (behavioral dimension) and perceived internet importance (psychological dimension), while assessing multiple outcome variables including happiness, life satisfaction, meaning in life, interpersonal relations, and social trust. This approach would allow for a deeper understanding of how different aspects of internet engagement influence various dimensions of wellbeing and social connections. Third, unlike most previous research which either studies the population as a whole or focuses on specific age segments (e.g., adolescents, older adults), we examine these relationships across the entire adult lifespan. This approach allows us to investigate whether and how the effects of internet usage and perceived importance vary or persist across different life stages.

Based on the preceding literature review, we hypothesize that Internet usage time would be negatively predictive of psychological and social outcomess. However, drawing on the distinction between behavioral and psychological patterns to the internet, we hypothesize that internet importance would show different patterns of associations, that Internet importance would demonstrate distinct (and potentially positive) relationships with outcomes. These relationships are expected to hold even after controlling for demographic factors (age, gender), socioeconomic characteristics (education level, perceived income and status), which have been shown to influence both internet use patterns and wellbeing/social outcomes in previous research.

Method

Participants

This study draws on data from the China Family Panel Studies (CFPS), a comprehensive national longitudinal survey administered by Peking University's Institute of Social Science Survey (ISSS). The CFPS employs a sophisticated stratified, multi-stage probability sampling design to collect data from 25 provinces in mainland China (excluding Tibet, Qinghai, Xinjiang, Ningxia, Inner Mongolia, Hainan, Hong Kong, Macau, and Taiwan). This ensures coverage of approximately 95% of the Chinese population, rendering the CFPS dataset nationally representative (Institute of Social Science Survey, Peking University, 2022).

Starting in 2010, the CFPS has conducted seven waves of data collection (2010, 2012, 2014, 2016, 2018, 2020, and 2022). Our analysis utilizes the 2022 wave as it captures post-pandemic digital behavior patterns. To address our research questions, we applied two primary inclusion criteria: (1) participants must be adults (≥18 years old), and (2) they must have access to internet services via either mobile devices or computers (see Table 1 for detailed variable operationalization). From the initial 2022 CFPS sample of 27,001 respondents, 14,940 individuals met our inclusion criteria, with 7284 (48.8%) female and 7656 (51.2%) male participants. In terms of education level, 921 (6.2%) were illiterate, 1,953 (13.1%) had primary school education, 4,794 (32.1%) had completed junior high school, 3,354 (22.4%) had completed senior high school, 1,934 (12.9%) had junior college degrees, 1,792 (12.0%) held bachelor's degrees, 172 (1.2%) held master's degrees, and 20 (0.1%) held doctoral degrees. Table 1 presents other demographic characteristics of the final sample.

Variables

For variable selection, our study incorporates two categories of dependent variables: well-being components and social outcomes. The well-being components include happiness, life satisfaction, and meaning in life, following established approaches in subjective well-being research (Diener et al., 2018).

Social outcome measures comprise interpersonal relations and social trust, which have been identified as key indicators of social well-being in digital contexts (Castellacci & Tveito, 2018). Our independent variables focus on two distinct aspects of internet engagement: internet usage time (measured in daily hours) and internet importance in daily life. Internet usage time is measured by averaging the time spent using computers and mobile devices. This dual measurement allows us to distinguish between behavioral and psychological dimensions of internet use. To account for potential confounding effects, we include several control variables: age, gender, education level, perceived income level, and perceived social status (See Table 1 for detailed variable descriptions, including measurement scales and descriptive statistics.)

Table 1.

Descriptive statistics and definitions for variables.

Variable	**Variable definition**	**Mean**	***SD***	**Min**	**Max**
Dependent Variable					
Happiness	How happy do you feel? (1 = unhappy, 10 = very Happy)	7.41	1.958	0	10
Life Satisfaction	Are you satisfied with your life? (1 = very unsatisfied, 5 = very satisfied)	3.92	0.890	0	10
Meaning in Life	To what extent do you consider your life to be meaningful? (1 = not meaningful, 10 = very meaningful)	7.39	1.940	0	10
Interpersonal Relations	Do you think you are popular? (1 = not popular, 10 = very popular)	6.96	1.775	0	10

Social Trust	Do you think that most people are trustworthy, or it is better to take greater caution when getting along with other people? (1 = Most people are trustworthy; 5 = The greater caution, the better)	2.72	1.980	1	5
Independent Variables					
Internet Time	In general, how long do you access the Internet using mobile/computers devices every day? (minutes)	172.42	147.07	1	1440
Internet Importance	How important is the Internet to your everyday life? (1 = not important, 5 = very important)	3.85	1.264	1	5
Control Variables					
Age	Age of the respondent	40.66	14.15	18	88
Gender	Dummy Coded, Male = 1, Female = 0	0.51	0.5	0	1
Education	Dummy Variable,1 = Illiterate, 2 = Primary School, 3 = Junior High School, 4 = Senior High School, 5 = Junior College, 6 = Bachelor's degree, 7 = Master's Degree, 8 = Doctoral Degree	4.56	1.71	0	10
Perceived Income	Where does your personal income stand locally? (1 = Very Low, 5 = Very High)	2.84	0.96	1	5
Perceived Status	What is your social status in your local area? (1 = Very Low, 5 = Very High)	2.86	0.98	1	5

Data Analysis

First, we conducted preliminary analyses to examine the distributional properties of all variables. We also checked for potential violations of statistical assumptions. Descriptive statistics, including means and standard deviations were calculated (see Table 1).

To test our hypotheses, we first examined the correlations among all variables in the study (see Table 2 for correlation matrix). We then employed a series of multiple regression analyses, with internet usage time and internet importance as independent variables. The analyses were conducted separately for each dependent variable (happiness, life satisfaction, meaning in life, interpersonal relations, and social trust). This resulted in 10 regression models in total. All analyses were conducted using SPSS version 27.0. For each outcome, we estimated two models:

Model 1: Internet Usage Time

$$Y = \beta_0 + \beta_1(internet\_time) + \beta_2(age) + \beta_3(gender) + \beta_4(education) + \beta_5(income) + \beta_6(status) + \varepsilon$$

And Model 2: Internet Importance

$$Y = \beta_0 + \beta_1(internet\_importance) + \beta_2(age) + \beta_3(gender) + \beta_4(education) + \beta_5(income) + \beta_6(status) + \varepsilon.$$

Results

Pearson correlation coefficients were computed to examine the relationships among the key variables (see Table 2). The analysis revealed distinct patterns between internet time use and perceived internet importance, supporting our conceptual separation of these constructs. Internet usage time and perceived importance showed a weak but significant positive correlation ($r = .185$, $p < .01$), suggesting these are indeed distinct aspects of internet engagement. Notably, these two measures showed different patterns of association with well-being outcomes. While internet importance demonstrates small but positive correlations with happiness, life meaning and life satisfaction, internet usage time showed negative correlations with life satisfaction and life meaning, but no relationship to happiness.

The regression analyses (Table 3) revealed several notable patterns. First, internet importance consistently showed positive associations with well-being and social outcomes, while internet time demonstrated either non-significant or slightly negative relationships. Specifically, internet importance was positively associated with happiness, life satisfaction, life meaning, and interpersonal relations, with the strongest effects observed for interpersonal relations and life meaning. In contrast, internet time showed a slight negative association with life meaning and no significant relationships with other outcomes.

Among the control variables, subjective social status and income emerged as the most consistent predictors across different well-being measures. Education showed a particularly strong negative association with social trust, while demonstrating positive relationships with other outcomes. Age and gender showed relatively minimal effects across most outcomes, though age was significantly associated with interpersonal relations and life satisfaction.

Notably, the models explained varying amounts of variance across different outcomes, with life satisfaction showing the highest explained variance, followed by interpersonal

relations. The models for social trust showed relatively lower explanatory power, suggesting that internet use patterns and perceived internet importance may play a less crucial role in determining social trust compared to other outcomes.

Table 2.

Correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1											
2. Gender	.039**	1										
3. Edu	-.336**	.028**	1									
4. Income	.070**	.038**	-.033**	1								
5. Status	.222**	.011	-.105**	.568**	1							
6. Time	-.323**	-.078*	.254**	-.048**	-.121**	1						
7. Importance	-.267**	-.009	.189**	.042**	-.014	.185**	1					
8. Happiness	.001	.006	.041**	.242**	.256**	.001	.082**	1				
9. Meaning	.024**	.025**	.018**	.240**	.252**	-.033**	.108**	.657**	1			
10. Life satis	.108**	.008	-.060**	.342**	.329**	-.064**	.026**	.511**	.471**	1		
11. Trust	.071**	.006	-.149**	-.066**	-.058**	-.027**	-.041**	-.141**	-.118**	-.102**	1	
12. Relations	.074**	.026**	.020*	.205**	.275**	-.027**	.105**	.466**	.417**	.264**	-.099**	1

Note. *$p < .05$. ** $p < .01$. Time = Internet Use time. Importance = Internet Importance.

Table 3. *Multiple Regression Analyses predicting wellbeing, interpersonal relations, and social trust*

Variables	**Happiness**		**Life Satisfaction**		**Life Meaning**		**Interpersonal Relations**		**Social Trust**	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Controls										
Age	.010	.007	.046**	.060**	-.011	.022*	.047**	.077**	.023*	.018
Gender	-.002	-.002	-.008	-.007	.015	.017*	.015	.014	.013	.013
Education	.061**	.055**	-.011	-.017	.045**	.029**	.065**	.051**	-.153**	-.150**
Income	.130**	.126**	.229**	.227**	.132**	.127**	.067**	.061**	-.036**	-.035**
Social Status	.202**	.200**	.193**	.192**	.190**	.188**	.242**	.238**	-.064**	-.064**
Predictors								.		
Internet Time	.006		-.012		-.020*		.003		.008	
Internet Importance		.072**		.042**		.109**		.121**		-.011
Model Summary										
R^2	.087	.092	.150	.151	.082	.092	.087	.100	.031	.031
F	222.40	232.25	409.57	413.78	208.66	237.80	223.01	259.73	73.237	72.748

Note. N = 14,940. Standardized regression coefficients (β) are reported. Model 1 includes controls and Internet Time as predictors; Model 2 includes controls and Internet Importance as predictors. *$p < .05$. ** $p < .0$

Discussion

This study investigated the differential effects of internet usage time and perceived internet importance on psychological wellbeing and social outcomes in the Chinese context. The results revealed several key findings. First, internet importance demonstrated significant positive associations with both wellbeing and social outcomes, including happiness, life satisfaction, life meaning and interpersonal relations. In contrast, internet usage time showed a slight negative relationship with life meaning and non-significant associations with other outcomes. This pattern suggests that the psychological significance attributed to internet use may have a more substantial impact on wellbeing than actual usage behavior. Notably, internet importance showed the strongest positive relationship with interpersonal relations, indicating that recognizing the internet's significance in daily life may particularly benefit social connections in contemporary Chinese society.

Our findings both align with and extend previous research in several important ways. Regarding internet usage time, our results partially support earlier meta-analytic findings by Çikrıkci (2016), who reported negative correlations between internet use and psychological wellbeing. However, our study found more nuanced effects, with usage time showing a significant negative relationship only with life meaning rather than broader negative impacts. While Çikrıkci (2016) did not specifically investigate life meaning as one of the well-being components, our findings regarding meaning in life align with subsequent research by Aydin (2017), who found that problematic internet use was negatively associated with meaning in life in a sample of 410 university students. Notably, Aydin's research revealed a bidirectional relationship, where lower meaning in life also predicted increased problematic internet use, suggesting a potential downward spiral where excessive internet use and diminished life meaning may reinforce each other. This selective effect suggests that the relationship between

internet use and wellbeing may be more complex than previously understood, particularly in highly digitized societies such as China.

On the other hand, the positive associations we found between internet importance and well-being outcomes contribute to a growing body of research highlighting the potential benefits of internet engagement when used meaningfully. These findings underscore the importance of distinguishing between the *psychological significance* (i.e., perceived importance) and *behavioral engagement* (i.e., usage time) of the internet. Perceived importance likely reflects an individual's appraisal of the internet as an integral part of their life for achieving personal, social, or professional goals (Kim & Davis, 2009; Valkenburg & Peter, 2009). For instance, individuals who value the internet highly may leverage it to maintain meaningful social connections, access resources for personal development, or explore fulfilling activities, thereby enhancing well-being. This aligns with Burke and Kraut's (2016) findings that active, intentional internet use—such as direct communication or seeking specific resources—promotes social support and psychological benefits. By contrast, behavioral engagement metrics like usage time often fail to capture the quality or intentionality behind internet use, which may explain the lack of significant or even negative associations observed in this study. As Çikrıkci (2016) noted, excessive, unstructured internet use tends to correlate with maladaptive behaviors such as procrastination or social comparison, leading to reduced well-being.

These findings also challenge the pervasive narrative that internet engagement inherently entails negative outcomes. While problematic internet use has been linked to adverse effects such as loneliness and impaired mental health (Twenge et al., 2018), emerging evidence suggests that these effects are highly context-dependent. For example, Domahidi (2018) found that meaningful and purposeful internet engagement enhances social capital and well-being, especially when the internet is used as a tool for maintaining existing offline

relationships. Similarly, research in older adults has demonstrated that internet use reduces loneliness and improves life satisfaction by facilitating social connections and access to resources (Cotten et al., 2012, 2014; Seifert et al., 2017). In this sense, the positive role of perceived importance observed in this study reflects the internet's capacity to act as a psychological resource, fostering meaningful engagement rather than mere consumption. Together, these findings highlight the need for a new perspective on internet engagement—one that recognizes its potential to contribute to well-being when used in ways that align with individuals' goals and values.

Despite its contributions, this study has one limitation that warrant consideration. I employed cross-sectional data, which precludes the ability to draw causal inferences about the relationships between internet engagement and well-being outcomes. While our findings suggest significant associations, longitudinal or experimental designs are needed to confirm the directionality of these relationships. Future research could address these limitations by employing longitudinal designs to explore the causal relationships between internet engagement and well-being.

In conclusion, this study makes several important contributions understand the relationship between internet use and wellbeing in contemporary Chinese society. By distinguishing between behavioral and psychological aspects of internet engagement, our findings reveal that this relationship is different than previously understood. While excessive time online may pose some risks, particularly to life meaning, viewing the internet as important appears to facilitate rather than hinder wellbeing and social connections. As societies become increasingly digitized, understanding these patterns of internet effects becomes crucial for promoting psychological wellbeing in the digital age.

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