The Impact of Social Media on the Psyche of Youth: A Factorial Analysis

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ABSTRACT:

Netizens have adopted a wide range of digital technologies into their communication realms. Ambiguity construes a notion, reliance om multiple platforms for communication as opposed to swapping one medium for another. In retrospect this anomaly strikes curiosity amongst researchers: Which introspect does each of these media fulfill? Hitherto, our article, conducts comparative work that examines the ramifications obtained from Facebook with those from Instagram. This comparison between social media platforms aggregates conclusions about multiple acolytes of social media and the tug of war between need and want. Data were collected from UAE high school students, based in Dubai, through a multimethod study based on 51 surveys. A factorial analysis of desire-based notions obtained from Facebook revealed six key dimensions: pastime, affection, fashion, information, sociability, and procuring friends of the opposite gender. Comparative analysis showed that Facebook is about having fun and knowing about the social activities occurring in one's social network, whereas Instagram is geared on the synopsis of reason. The researcher discusses differences in the two applications and outlines a framework based on application and slaking theory tantamount to youth integration in social media.

Keywords: *UAE Youth, Neuroscience Perspective, Youth, Psychological Analysis, Netizens, Social Media*

1. INTRODUCTION:

Hitherto, the impact of Social media on the masses is profound within the first quarter of the 21st century, yet the most affected group of the populace are the youth. Incidentally, the country in focus the UAE, in 2023, the population in Dubai stands at 3.61 Million and the population was 3.43 million in 2021. From 2.56 million in 2016 the population has grown by over 1 million in just six years. The most populous emirate now has a population density of about 762.6 per sq. km. in the metro area alone. There are 2.36 million males and 1.04 million females in Dubai.[1] Amongst the 3.61 Million Dubai residents about 1.5 Million have been classified in the age group of 11-41, which is our target audience for this research. Furthermore, the reliance on social media to form, an opinion about life is an affirmation second to none, as 98% plus people have been recorded to be an audience at Facebook and Instagram.[2] The UAE does curb its internet accessibility to be restricted to a certain content. Any content, which is vulnerable to upsetting the UAE laws, culture, codes, ethics, or religion (any religion practiced in the UAE). These sensible censorship standards have protected the community from harms of racism, misogynism, and discrimination.[3] Hitherto, the Legal structures of the UAE are albeit desirable to compare with the West. The United Arab Emirates, as a developing country has been experiencing cybercrime even more rapidly in the recent years. The overall Internet penetration as well as the use of cyber-based systems in Critical Infrastructure is growing at a never-seen pace in the country just as in the rest of the world. The UAE was the first country in the Middle East to implement its first cyber law in 2006, with 29 Articles.[4] Consequently, the law was repealed six years later because of its ineffectiveness; some Articles needed to be clarified and offer more specificity regarding the crimes they addressed. Hitherto, the UAE has emerged to be on the forefront of many technological advances in the recent past. Consequently, in the case of technological advances security advances must follow or the whole state becomes vulnerable. In the modern world

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[1] https://www.dsc.gov.ae/en-us/Themes/Pages/Population-and-Vital-Statistics.aspx?Theme=42
[2] https://www.globalmediainsight.com/blog/uae-population-statistics/
[3] Thanvi, Irfan Ali. "Challenges In Implementation of Personal Data Protection Law No. 45 of 2021: A Case Study of The United Arab Emirates." *Cyber Law Reporter* 2, no. 3 (2023): 1-15.
[4] Richter, Carola. "Digital MENA: An Overview of Digital Infrastructure, Policies, and Media Practices in the Middle East and North Africa." *The Handbook of Media and Culture in the Middle East* (2023): 134-146.

there are several options for a state that wants to improve its cyber-security, co-operating with various international agencies.[5]

2.   AN OVERVIEW OF FACEBOOK

Created in 2004 by Marc Zukerberg, Facebook was reported to have more than 21 million registered members generating 1.6 billion page views each day by 2007.[6] The site is tightly integrated into the daily media practices of its users: The typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day.[7]Capitalizing on its success among high school students, Facebook launched a high school version in early September 2005. In 2006, the company introduced communities for commercial organizations; as of November 2006, almost 22,000 organizations had Facebook directories. In 2006, Facebook was used at over 2,000 United States high schools and was the seventh most popular site on the World Wide Web with respect to total page views.[8]

Much of the existing academic research on Facebook has focused on identity presentation and privacy concerns.[9] Looking at the amount of information Facebook participants provide about themselves, the relatively open nature of the information, and the lack of privacy controls enacted by the users, Gross and Acquisti (2005) argue that users may be putting themselves at risk both offline (e.g., stalking) and online (e.g., identify theft). Other recent Facebook research examines student perceptions of instructor presence and self-disclosure, temporal patterns of use, and the relationship between profile structure and friendship articulation.[10]

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[5] Yesil, Bilge. "Activism and Surveillance in the Middle East." *The Handbook of Media and Culture in the Middle East* (2023): 526-534.

[6] Mortensen, Nanna Møller, and Catherine Needham. "'I do not want to be one of her favourites'. Emotional display and the co-production of frontline care services." *Public Management Review* 25, no. 7 (2023): 1260-1281.

[7] Cissé, Mohamed Kadiatou, Arn Keeling, Marie Guittonny, and Bruno Bussière. "Integration of Cree traditional ecological knowledge (TEK) into the revegetation process of the Eleonore mine tailings storage facility." *The Extractive Industries and Society* 14 (2023): 101263.

[8] Cho, Hyunji. "Inner-group and inter-group relations in Seoul participatory planning: revisiting the concept of social capital." *Asian Geographer* 40, no. 2 (2023): 169-183.

[9] Stutzman, Frederic D., Ralph Gross, and Alessandro Acquisti. "Silent listeners: The evolution of privacy and disclosure on Facebook." *Journal of privacy and confidentiality* 4, no. 2 (2013): 2.

[10] Vyas, Pallavi Ghanshyala, and Swarn Priya. "Social Media and Gen Y at Work: The Uses and Gratifications of Technology." In *5G, Artificial Intelligence, and Next Generation Internet of Things: Digital Innovation for Green and Sustainable Economies*, pp. 123-142. IGI Global, 2023.

In contrast to popular press coverage which has primarily focused on negative outcomes of Facebook use stemming from users' misconceptions about the nature of their online audience, we are interested in situations in which the intended audience for the profile (such as well-meaning peers and friends) and the actual audience are aligned. We use Facebook as a research context to determine whether offline social capital can be generated by online tools. The results of our study show that Facebook use among High school respondents was remarkably associated with measures of social capital.

2.1. Social Capital: Online and Offline:

The Internet has been linked both to increases and decreases in social capital.[11] In hindsight, it is argued that netizens detract from face-to-face time with others, which might diminish an individual's social capital. Consequently, this perspective has received strong criticism.[12] Moreover, some researchers have claimed that online interactions may supplement or replace in-person interactions, mitigating any loss from time spent online.[13] Indeed, studies of physical (e.g., geographical) communities supported by online networks, such as the Neville community in Toronto or the Blacksburg Electronic Village, have concluded that computer-mediated interactions have had positive effects on community interaction, involvement, and social capital.[14]

Recently, researchers have emphasized the importance of Internet-based linkages for the formation of weak ties, which serve as the foundation of bridging social capital. Because online relationships may be supported by technologies like distribution lists, photo directories, and search capabilities),[15] it is possible that nascent forms of social capital and

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[11] Quan-Haase, Anabel, and Barry Wellman. "How does the Internet affect social capital." *Social capital and information technology* 113 (2004): 135-113.

[12] Bargh, John A., and Katelyn YA McKenna. "The Internet and social life." *Annu. Rev. Psychol.* 55 (2004): 573-590.

[13] Wellman, Barry, Anabel Quan Haase, James Witte, and Keith Hampton. "Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment." *American behavioral scientist* 45, no. 3 (2001): 436-455.

[14] MILAK, Matea. "Mateo ŽANIĆ1 Geran-Marko MILETIĆ2." *Journal of Community Positive Practices* 23, no. 1 (2023): 67-83.

[15] Tyagi, Shachi, Neil M. Resnick, Becky D. Clarkson, Gehui Zhang, Robert T. Krafty, Subashan Perera, Arohan R. Subramanya, and Daniel J. Buysse. "Impact of Sleep on Chronobiology of Micturition among Healthy Older Adults." *American Journal of Physiology-Renal Physiology* (2023).

relationship building will occur in online social network sites. Bridging social capital might be augmented by such sites, which support loose social ties, allowing users to create and maintain larger, diffuse networks of relationships from which they could potentially draw resources.[16] The duo further hypothesize that SNSs could greatly increase the weak ties one could form and maintain, because the technology is well-suited to maintaining such ties cheaply and easily.

2.2. Maintained Social Capital and Life Changes:

Social networks change over time as relationships are formed or abandoned. Particularly remarkable psychological impact is observed in social networks may affect one's social capital, as when a person moves from the geographic location in which their network was formed and hence loses access to those social resources. We argue that one of the possible causes of decreased social capital in the UAE is the increase in families moving for job reasons; other research has explored the role of the Internet in these transitions, for example, find that heavy Internet users rely on email to maintain long distance relationships, rather than using it as a substitute for offline interactions with those living nearby.[17]

Some researchers have coined the term "friend sickness" to refer to the distress caused by the loss of connection to old friends when a young person moves away to high school.[18] Internet technologies feature prominently in a study of communication technology use by this population, who found that services like email and instant messaging help high school students remain close to their high school friends after they leave home. We therefore introduce a measure focusing specifically on the maintenance of existing social capital after this major life change experienced by high school students, focusing on their ability to leverage and maintain social connections from high school.

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[16] Gayathri, R. "Sustainability in the Age of Networking and Virtual Social Capital: Neoteric Approach." In *Social Capital in the Age of Online Networking: Genesis, Manifestations, and Implications*, pp. 73-90. IGI Global, 2023.

[17] Lee, Ronalyn C., and Elizabeth D. Dioso. "THE EFFECTS OF FACEBOOK APPLICATION ON ACADEMICS AND VALUES OF THE STUDENTS." *EPRA International Journal of Environmental Economics, Commerce and Educational Management (ECEM)* 10, no. 8 (2023): 31-44.

[18] Schelly, David, Alisha Ohl, and Heidi Meramo. "College students with food allergy: from hypervigilance to disclosure fatigue." *Journal of Pediatric Nursing* 70 (2023): e32-e39.

Young adults moving to high school need to create nascent networks at high school. Consequently, they often leave friends from high school with whom they may have established rich networks; completely abandoning these high school networks would mean a loss of social capital. The author has suggested that weak ties provide more benefit when the weak tie is not associated with stronger ties, as may be the case for maintained high school relationships. To test the role of maintained high school relationships as weak, bridging ties, we adapted questions about general bridging relationships, such as those in, to be specific to maintained relationships with high school acquaintances as opposed to close friends. We state this concept as "maintained social capital, which has been emphasized based upon the psychological impact on the youth."[19] Subsequently, all youth adhere to this principle of normalization.

2.3. Awareness and empowerment:

The human behaviors and interactions on social media have maintained themselves as highly dynamic real-time social systems representing individual social awareness at fine spatial, temporal, and digital resolutions. In this chapter, we introduce the opportunities and challenges that human dynamics-centered social media bring to Digital Earth. We review the information diffusion of social media, the multi-faced psychological implications of social media, in most cases. Social media, on one hand, has facilitated the prediction of human dynamics in a wide spectrum of aspects, including public health, emergency response, decision making, and social equity promotion, and will also bring unintended challenges for Digital Earth, such as rumors and location spoofing on the other. Considering the multifaceted implications, this chapter calls for GI Scientists to raise their awareness of the complex impacts of social media, to model the geographies of social media, and to understand ourselves as a unique species living both on the Earth and in Digital Earth.[20]

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[19] Salameh, Anas A. "SOCIAL MEDIA-BASED SOCIAL CAPITAL ON PSYCHOLOGICAL WELL-BEING: EXPLORING THE MEDIATIONAL ROLE OF SELF-ESTEEM." *Hellenic Journal of Psychology* 20, no. 2 (2023): 113-138.

[20] Howden-Chapman, Philippa, Franz Wilhelm Gatzweiler, Rachel Cooper, and Isaac Luginaah, eds. *Cities Under COVID-19: A Systems Perspective*. Springer Nature, 2023.

3. PSYCHOLOGICAL APPLICATION OF INSTAGRAM

Instagram is currently a very popular social network site, especially among teenagers.[21]Instagram allows its users to share photos and videos with others. Since its start in 2010, it has attracted more than 400 million active users, who upload around 80 million photos a day.[22] Photos and videos are a very direct form of online self-presentation and have become an increasingly powerful form of social online currency.[23] Even though Instagram is the most popular photo sharing application on the Internet, it has received very little academic attention.[24] This is surprising as Instagram has lately been a topic of concern in the public debate, as the main concern involves the possibility to manipulate Instagram photos by using retouching techniques and, consequently, the potentially negative influence that these "perfect pictures" may have on body image of (young) Instagram users. Both critics and fans frequently blame celebrities and models for using photo enhancement and retouching techniques. Hence, they normalize an unrealistic body ideal, which is problematic as they serve as role models for girls and young women.[25]

One imperative characteristic that sets social media apart from other studied media types is the strong focus on peer interactions. Media models, that is, models and celebrities, are often presented as unrealistic standards of beauty in for example media literacy programs and the public debate, because of the well-known editing and retouching techniques used when displaying media models.[26] Less known is that "ordinary" social media users also use these

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[21] Kemeny, Tom, and Michael Storper. "The changing shape of spatial income disparities in the United States." *Economic Geography* (2023): 1-30.

[22] Márquez, Israel, Debora Lanzeni, and Maria-José Masanet. "Teenagers as curators: digitally mediated curation of the self on Instagram." *Journal of Youth Studies* 26, no. 7 (2023): 907-924.

[23] Olu-Egbor, Laurel Otohan, Faith Ozikor Amah, and Hajara Umar Sanda. "CHAPTER NINETEEN CHALLENGES OF BEHAVIOURAL CHANGE COMMUNICATION IN THE AGE OF SOCIAL MEDIA." *Behavioural*: 203.

[24] Nugraha, Akbar, Muhimmatul Hasanah, and Ima Fitri Sholichah. "Pengaruh Social Comparison Terhadap Subjective Well-Being Mahasiswa Pengguna Instagram Di Fakultas Psikologi Universitas Muhammadiyah Gresik." *Psikosains: Jurnal Penelitian dan Pemikiran Psikologi* 18, no. 2 (2023): 126-137.

[25] Woerner, Jacqueline, Tami P. Sullivan, Lauren B. Cattaneo, Bethany L. Backes, and Barbara Bellucci. "Criminal Orders of Protection for Survivors of Intimate Partner Violence, Future System Engagement, and Well-Being: Understanding the Importance of Prior Abusive Relationships." *Victims & Offenders* (2023): 1-20.

[26] Iftikhar, Ifra, Bushra Yasmeen, Mamoor Nadeem, and Numan Ahmad. "Filtered reality: Exploring gender differences in Instagram use, social conformity pressure, and regret among young adults." *Journal of Human Behavior in the Social Environment* (2023): 1-19.

techniques, as a part of impression management in self-presentation.[27] Girls who compare themselves with manipulated photos of peers might think they are comparing themselves with people who are congruent to them, rather than with celebrities whose bodies are seen as unattainable. Consequently, one might conclude that the appearances of these peers might be not realistic at all.[28]

3.1 Brain-mind aspect:

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Albeit in general, famous people have been criticized for manipulating self-images on social media, there are imperative reasons to investigate the effects of edited pictures of "ordinary" Instagram users. Research has indicated that men and women, both youths and adults, compare themselves more often to peers than to models or celebrities for social attributes (i.e., personality, intelligence) and physical features, and has thereby supported the general expectation from the social comparison literature that individuals generally prefer to make social comparisons to congruent others.[29] Furthermore, the comparison with peers might affect their body image in a comparable manner as media images resolve into as this action might be due to the fact that peers are perceived more congruent to themselves than celebrities and therefore are more relevant to compare themselves with. This is in line with the extensive identification literature, combining social cognitive theory. [30]Shortly summarized, these theories state that when people perceive others to be more congruent to themselves, identification and related cognitive and behavioural consequences are more likely to occur.[31] This social influence mechanism might just as well apply to social media networks, as these

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[27] Lee, Jiyoung, Jihyang Choi, and Rebecca K. Britt. "Social media as risk-attenuation and misinformation-amplification station: How social media interaction affects misperceptions about COVID-19." *Health communication* 38, no. 6 (2023): 1232-1242.

[28] Selleck, Charlotte, and Elisabeth Barakos. "A reflexive approach to researching bilingualism in Wales: language, legitimacy and positionality." *Journal of Multilingual and Multicultural Development* 44, no. 8 (2023): 672-688.

[29] Mehmandoost, Soheil, Hamid Sharifi, Mostafa Shokoohi, Mehrdad Khezri, Ali Mirzazadeh, Armita Shahesmaeili, Nima Gahlekhani, Kianoush Kamali, Ali Akbar Haghdoost, and Mohammad Karamouzian. "Sexualized Substance Use among Female Sex Workers in Iran: Findings from a Nationwide Survey." *Substance Use & Misuse* 58, no. 2 (2023): 298-305.

[30] Kim, Sungwha, and Mimi Bong. "Producing Confident Learners Using Specific Tasks, Competent Models, and Credible Messages." *Theory Into Practice* just-accepted (2023).

[31] Jahan, Farhat. "PERCEIVED IMPACT OF MEDIA PORTRAYALS ON ROMANTIC RELATIONSHIPS: EXPLORING THE ROLE OF SOCIAL COGNITION." *Diversified Dimensions of Digital Media* (2023): 102.

are very popular environments for peer interaction. Research revealed that users of social media platforms often manipulate their appearance in the pictures they post online, and that this habit is especially prevalent among young girls.[32] Consequently, the effects of exposure to enhanced social media photos of peers on young girls' body image are still largely unknown. Youth girls are often found to be particularly vulnerable for being influenced by media images because of the psychosocial development that is characteristic for this phase.[33]

3.2   Sleep-heart aspect:

Earlier research focusing on body image has primarily investigated the influence of exposure to idealized thin bodies in advertisements, magazines, television, as well as music videos on young women's body image. These studies often revealed a relation between exposure to the thin ideal and a negative body image among young girls and women[34] This effect can be explained by the negative contrast theory, stating that women experience a contrast between themselves and the thin, idealized models and that this leads to lower body satisfaction. Consequently, some studies found self-enhancing effects of exposure to thin ideal images. Based on these findings, an alternative to the negative contrast theory was formulated by Mills, suggesting that thin media models might cause a "thinness fantasy" by inspiring women for whom thinness is self-relevant.[35] Ample research has studied the effects of media models on body image, but the effects of exposure to images on social media sites are not well established. As traditional media are surpassed in popularity by online social media

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[32] Hastorf, Christine A., Katherine M. Moore, Irene E. Smail, Rachael Penfil, Patrick Ryan Williams, Danielle J. Riebe, and Kelly J. Knudson. "Formative Exchange in the Andean Titicaca Basin: Isotopic Camelid Data and Lithic Sourcing: Evidence From the Taraco Peninsula, Bolivia." *Ñawpa Pacha* 43, no. 1 (2023): 27-53.

[33] Touizer, Emma, Aljawharah Alrubayyi, Rosemarie Ford, Noshin Hussain, Pehuén Pereyra Gerber, Hiu-Long Shum, Chloe Rees-Spear et al. "Attenuated humoral responses in HIV after SARS-CoV-2 vaccination linked to B cell defects and altered immune profiles." *Iscience* 26, no. 1 (2023).

[34] Allen, Keith, Nicholas Pleace, and Daryl Martin. "Home Dissatisfaction, Body Image, and Sociocultural Attitudes: An Exploratory Study." *Housing, Theory and Society* (2023): 1-20.

[35] Kwon, Misu, Mingqi Li, and Olivia D. Chang. "Examining the Role of Body Image Instability in Young Adult Women: Conceptualization, Development, and Psychometric Evaluation of the Vacillating Body Image Scale (VBIS)." *Journal of Personality Assessment* 105, no. 2 (2023): 266-282.

platforms, especially among young people, it becomes imperative to include these nascent forms of media in this line of research as well.[36]

3.3 Psychological aspects:

Returning to our original research, we can definitively state that there is a positive relationship between certain kinds of Facebook use and the maintenance and creation of social capital. Albeit we cannot say which precedes the other, Facebook appears to play an imperative role in the process by which students form and maintain social capital, with application associated with all three kinds of social capital included in our instrument.

Albeit representation of non-users is low in our sample, when we compare members vs. non-members, we see no real difference in demographics, apart from class year and age (which is strongly correlated with class year). This is most likely since Facebook is a relatively recent phenomenon, and we would expect senior students to be less likely to join. The high penetration and lack of any systematic difference between members and non-members suggests that Facebook has broad appeal, does not exclude particular social groups, and has not had a noticeable effect on participants' grades.

4. DISCUSSION

Our participants overwhelmingly used Facebook to keep in touch with old friends and to maintain or intensify relationships characterized by some form of offline connection such as dormitory proximity or a shared class. For many, Facebook provided a way to keep in touch with high school friends and acquaintances. This was demonstrated through the fact that the most included information on users' profiles was likely to be relevant for existing acquaintances trying to find them (e.g., their high school) and that nearly all users felt that

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[36] Vartanian, Lenny R., Kate Nicholls, and Jasmine Fardouly. "Testing the identity disruption model among adolescents: Pathways connecting adverse childhood experiences to body dissatisfaction." *Journal of Youth and Adolescence* 52, no. 1 (2023): 134-148.

their high school friends had viewed their profile, and through respondents' self-reported types of use (connecting with offline contacts as opposed to meeting nascent people). This offline to online movement differs from the patterns observed by early researchers examining computer-mediated communication and virtual communities. Due to the structure of the site, which blocks entry to those without a school email address and then places individuals into communities based on that email address, Facebook serves a geographically bound user base.[37]

Our first dimension of social capital—bridging—assessed the extent to which participants were integrated into the community, their willingness to support the community, and the extent to which these experiences broadened their social horizons or worldview. Our findings suggest that certain kinds of Facebook use (articulated by our Facebook intensity items) can help students accumulate and maintain bridging social capital. This form of social capital—which is closely linked to the notion of "weak ties"—seems well-suited to social software applications, as suggested by the essence of psychological impacts, because it enables users to maintain such ties cheaply and easily. Albeit more research is needed to understand the nature of this trend, we suspect that Facebook serves to lower the barriers to participation so that students who might otherwise shy away from initiating communication with or responding to others are encouraged to do so through Facebook's affordances.

Hay Thornthwaite (2005) discusses the implications of media that "*create latent tie connectivity among group members that provides the technical means for activating weak ties*".[38] Latent ties are those social network ties that are "*technically possible but not activated socially*".[39] Facebook might make it easier to convert latent ties into weak ties, in that the site provides personal information about others, makes visible one's connections to a wide range of individuals, and enables students to identify those who might be useful in some capacity (such as the math major in a required calculus class), hence providing the motivation to activate a latent tie. These weak ties may provide additional information and opportunities, which are expressed as dimensions of bridging social capital that speak to interaction with a wide range of people

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[37] Sutcliffe, Alistair, Robin Dunbar, and Hatana El-Jarn. "Investigating the use of social media in intimate social relationships." *Behaviour & Information Technology* 42, no. 4 (2023): 379-391.

[38] Haythornthwaite, Caroline. "Social networks and Internet connectivity effects." *Information, Community & Society* 8, no. 2 (2005): 125-147.

[39] Ibid, page 137.

and the more tolerant perspective this might encourage. Facebook seems well-suited to facilitate these experiences, in that detailed profiles highlight both commonalities and differences among participants.

We also found an interaction between bridging social capital and subjective well-being measures. For less intense Facebook users, students who reported low satisfaction with UAE life also reported having much lower bridging social capital than those who used Facebook more intensely. The same was true for self-esteem. Conversely, there was little difference in bridging social capital among those who reported high satisfaction with life at UAE and high self-esteem relative to Facebook use intensity. One explanation consistent with these interaction effects is that Facebook use may be helping to overcome barriers faced by students who have low satisfaction and low self-esteem. Because bridging social capital provides benefits such as increased information and opportunities, we suspect that participants who use Facebook in this way can get more out of their high school experience. The suggestion that Facebook use supports a "poor get richer" hypothesis, as opposed to the "rich get richer" findings reported in other contexts, may be of special interest to Internet researchers.[40]

Bonding social capital was also predicted by high self-esteem, satisfaction with university life, and intense Facebook use, Albeit overall, the regression model predicting bonding social capital accounted for less of the variation for this dependent variable than for bridging social capital. Consequently, Facebook appears to be much less useful for maintaining or creating bonding social capital, as indicated by the fact that the bonding model only accounted for 22% of the variance (versus 46% in the bridging social capital models). We might expect Facebook application to have less of an impact on bonding than bridging social capital given the affordances of this service. It can lower barriers to participation and therefore may encourage the formation of weak ties but not necessarily create the close kinds of relationships that are associated with bonding social capital. Yet the strong coefficient for Facebook intensity suggests that Facebook use is imperative for bonding social capital as well. One explanation is that it may help individuals to *maintain* pre-existing close relationships, just as it can be used as a low-maintenance way to keep tabs on distant acquaintances. For instance, in our pilot

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[40] Kraut, Robert, Sara Kiesler, Bonka Boneva, Jonathon Cummings, Vicki Helgeson, and Anne Crawford. "Internet paradox revisited." *Journal of social issues* 58, no. 1 (2002): 49-74.

interviews, students discussed the "birthday" feature of Facebook, which prompted them to send birthday greetings to friends with minimal effort.

Finally, Facebook intensity predicted increased levels of maintained social capital, which assessed the extent to which participants could rely on high school acquaintances to do insignificant favours. For high school students, many of whom have moved away for the first time, the ability to stay in touch with these high school acquaintances may illustrate most clearly the "strength of weak ties" outlined by two notable authors. These potentially useful connections may be valuable sources of nascent information and resources. Additionally, the ability to stay in touch with these networks may offset feelings of "friend sickness," the distress caused by the loss of old friends.[41]

Limitations to this study included the fact that we examined only one community because the high school years are a unique developmental period in the life cycle and because the UAE Facebook community is closely coupled with the geographically bounded UAE community, we are not able to generalize these findings to other kinds of communities or social network tools. It may be that the positive outcomes linked to Facebook use discussed here are limited to this special case in which the offline community is bounded spatially and to the unique nature of the undergraduate experience. Future research could explore Facebook use in other contexts, such as organizations and high schools. Because we used a one-time survey, we cannot establish causality. Additionally, the extremely low incidence of non-members, non-White, or international students in our sample hampered our ability to assess the effects of Facebook membership on these groups. Finally, respondents may have misreported behavioural or demographic information, as we used self-reported rather than direct measures of Facebook use and other variables.

To address these concerns, future research should approach Facebook use and the generation of social capital via multiple methodologies. Profile capture and analysis would allow researchers to marry survey responses with direct behavioural measures. Additionally, experimental interventions would support causal claims; these interventions could be in the form of a survey, with pre- and post-test data collected from the site itself. Collecting

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[41] Greenbaum, Susan D. "Bridging ties at the neighborhood level." *Social Networks* 4, no. 4 (1982): 367-384.

longitudinal data over a series of years, tracking incoming first-year students, and following them after they graduate, is also a necessary next step.

5. THE NEUROSCIENCE PERSPECTIVE

Adolescence is a fascinating and challenging period of self-discovery. From a biological point of view, the beginning of puberty can signal the beginning of adolescence.[42] Socially, Consequently, adolescence is generally characterized by growing independence from parents, the increased influence of the peer group, and other aspects such as frequent mood swings, the impact of people from the same age group, the need to build an identity, and the fear of social rejection, which all play an essential role in determining behaviours, emotional reactions, and the formation of coping strategies.[43]In addition, a more systemic perspective also underlines the remarkable role of individual and cultural variability (i.e., more remarkable than age-related norms) that might influence the developmental tasks achieved during this stage.[44]

Among the challenges of adolescence, the development of a secure and stable sense of identity is critical since it can contribute to the shaping of sexuality (both in terms of identity and orientation), the development of intimacy in various types of relations, strengthening the autonomy and different achievements, particularly associated with the educational path. Moreover, the COVID-19 pandemic has brought substantial challenges to people of all ages, youngsters included, imposing unprecedented, unpredictable changes.[45]

In this context, previous studies highlighted the hardship experienced by youths and their caregivers, with a particular increase in experienced difficulties due to the COVID-19

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[42] Plote, Hailey. "Peter K. Smith: Adolescence: A Very Short Introduction: Oxford University Press, New York, NY, 2016, 144 pp, ISBN: 9780199665563." (2017): 341-344.

[43] ibid

[44] Bell BT. Understanding adolescents. In: Little, L, Fitton, D, Bell, BT, and Toth, N, (eds.) *Perspectives on HCI Research with Teenagers.* (2016). Berlin, Germany: Springer. p. 11–27.

[45] Meherali S, Punjani N, Louie-Poon S, Abdul Rahim K, Das JK, Salam RA, et al. Mental health of children and adolescents amidst COVID-19 and past pandemics: a rapid systematic review. *Int J Environ Res Public Health.* (2021) 18:3432. doi: 10.3390/ijerph18073432

pandemic.[46] At the same time, a growing body of research also emphasized teenagers' variety of coping resources and personal strengths, with technology playing a remarkable role in this regard ([9](#)). Building on this perspective, the present study aimed to explore how social media might be used as a coping mechanism during the COVID-19 pandemic, using a multidimensional perspective on youth well-being.[47]

Adolescence is a fascinating and challenging period of self-discovery. From a biological point of view, the beginning of puberty can signal the beginning of adolescence. Socially, Consequently, adolescence is generally characterized by growing independence from parents, the increased influence of the peer group, and other aspects such as frequent mood swings, the impact of people from the same age group, the need to build an identity, and the fear of social rejection, which all play an essential role in determining behaviours, emotional reactions, and the formation of coping strategies.[48]In addition, a more systemic perspective also underlines the remarkable role of individual and cultural variability (i.e., more remarkable than age-related norms) that might influence the developmental tasks achieved during this stage.[49]

Among the challenges of adolescence, the development of a secure and stable sense of identity is critical since it can contribute to the shaping of sexuality (both in terms of identity and orientation), the development of intimacy in various types of relations, strengthening the autonomy and different achievements, particularly associated with the educational path. Moreover, the COVID-19 pandemic has brought substantial challenges to people of all ages, youngsters included, imposing unprecedented, unpredictable changes.[50]

In this context, previous studies highlighted the hardship experienced by youths and their caregivers, with a particular increase in experienced difficulties due to the COVID-19

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pandemic.[51] At the same time, a growing body of research also emphasized teenagers' variety of coping resources and personal strengths, with technology playing a remarkable role in this regard.[52] Building on this perspective, the present study aimed to explore how social media might be used as a coping mechanism during the COVID-19 pandemic, using a multidimensional perspective on youth well-being.

5.1 Youth well-being: The EPOCH model

Positive psychology devoted increased attention in the last decades to happiness, well-being, or life satisfaction, all of them describing a common feature, i.e., the constant and long-lasting presence of positive feelings, emotions, and outcomes for a person.[53] Some positive psychologists reject hedonistic theories in favour of Aristotelian or eudaemonic views of well-being. For the conceptualization of well-being in the present study, we used the EPOCH paradigm, which understands well-being as a variable structured on five dimensions: *engagement* in activities, *perseverance, optimism, connection* with the people around us, and *happiness*.[54]

5.2 Engagement

The EPOCH model's engagement dimension refers to youth active and voluntary participation in activities in different areas of life (social, professional, and educational).[55] Engagement implies a strong motivation for youths to pursue their goals and passions and to

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take the initiative to start enjoyable or exciting activities. In other words, engagement refers to youth ability to become absorbed in what they do (with its most intense form referring to a sense of flow), a state of complete absorption with the loss of a sense of time and self.[56] Recent studies suggested a remarkable link between engagement and educational mastery goals.[57]

5.3 Perseverance

Within the EPOCH model, perseverance is conceptualized as an youth's ability to accomplish personal goals despite encountering obstacles.[58] Previous studies suggested remarkable associations of persistence in educational contexts with the establishment of harmonious relationships. For example, in the study by Tian et al.,[59] which involved 1,476 youths, social support in the educational context, both from teachers and colleagues, had remarkable associations with the participants' subjective well-being. Also, some studies have suggested a bidirectional relationship between persistence and the other dimensions of well-being and youth school performance.[60]

5.4 Optimism

The EPOCH model's optimism dimension refers to youth orientation toward self-confidence, hope, adopting positive attitudes related to the future, and anticipating positive long-term results. Furthermore, Zeng et al.,[61]suggested that optimism is a central feature of youth well-

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[61] Zeng G, Peng K, Hu CP. The network structure of adolescent well-being traits: results from a large-scale chinese sample. *Front Psychol.* (2019) 10:2783–2783. doi: 10.3389/fpsyg.2019.02783

being, and congruent results were reported in subsequent studies. For example, Zou et al. suggested that optimism seems to be a remarkable predictor of life satisfaction among youths.[62]

5.5 Social connectedness

Within the EPOCH model, social connectedness refers to establishing and maintaining harmonious social relationships with family members and relevant others. Furthermore, these relationships are bidirectional, with youth perceptions of their relationship with other people and those people's perceptions of youths being imperative in establishing social connections. Previous studies suggested social connectedness as a central dimension in determining youth well-being and that the feelings of belonging and integration in the school social environment mediated the relationship between students' academic and social skills and dimensions of social connection, happiness, and optimism within well-being.[63] Furthermore, other studies suggested that youth low social connectedness within middle school social groups is positively associated with depressive and anxiety symptoms.[64]

5.6 Happiness

Of the five dimensions of the EPOCH approach, happiness is a particularly controversial one, as the scientific community is divided between adherents of positivist psychology, which positions happiness as a central concept in the assessment of well-being, and those who oppose this approach, considering happiness as a subjective construct and difficult to measure

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[62] Zou R, Hong X, Wei G, Xu X, Yuan J. Differential effects of optimism and pessimism on adolescents' subjective well-being: mediating roles of reappraisal and acceptance. *Int J Environ Res Public Health.* (2022) 19:7067. doi: 10.3390/ijerph19127067

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and assess.[65] Consequently, the EPOCH approach integrates the concept of happiness alongside other dimensions into the central idea of well-being. The results presented by Lukoševičiute et al.,[66] in which 133 studies on the subjective happiness of youths were included, suggested that most studies used a single item to measure subjective happiness, and only 18 of them had validation procedures. Consequently, youth happiness seems to be positively associated with social connectedness and optimism, highlighting its relevance for the optimal development of youth well-being.[67]

6. CONCLUSION

Our cognitive results contrast with the anecdotal evidence dominating the popular press. Albeit there are clearly some image management problems experienced by students as reported in the press, and the potential does exist for privacy abuses, our findings demonstrate a robust connection between Facebook application and indicators of social capital, especially of the bridging type. Internet use alone did not predict social capital accumulation, but intensive use of Facebook did.

The strong linkage between Facebook use and high school connections suggests how SNSs help maintain relations as people move from one offline community to another. It may facilitate the same when students graduate from high school, with alumni keeping their school email address and using Facebook to stay in touch with the high school community. Such connections could have strong payoffs in terms of jobs, internships, and other opportunities. High schools may want to explore ways to encourage this sort of application.

Online social network sites may play a role different from that described in early literature on virtual communities. Online interactions do not necessarily remove people from their offline world but may indeed be used to support relationships and keep people in contact, even when

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life changes move them away from each other. In addition to helping student populations, this use of technology could support a variety of populations, including professional researchers, neighbourhood and community members, employees of companies, or others who benefit from maintained ties.

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