DOI: 10.36657/ihcd.2025.143

Muslim Youth and Modern Technology: A Comparative Study

Müslüman Gençlik ve Modern Teknoloji: Karşılaştırmalı Bir Çalışma

D Halilibrahim Alegöz(1)*, D Zulkarnain Mohammed(2)

(2) Ibn Haldun University, Türkiye
(1) ibrahim_alegoz@hotmail.com, (2) zulkarnain.mohammed@stu.ihu.edu.tr

Received: 04 March 2025 Accepted: 02 April 2025 Published: 25 August 2025

Abstract: This article explores the utilization of the digital space by Muslim youth through a comparative analysis of Turkish youth and their counterparts in selected Muslim-majority countries globally. The study culminating into this article forms part of a broader inquiry to delineate a global Muslim youth profile in terms of their association and encounter with the modernization process, specifically undertaking to understand their perception and the place of modernity in their lives. Utilizing a survey methodology, we collected data from 15,832 Muslim youths aged 18–28 across 22 Muslim majority countries, with a subsample of 2000 youth from Türkiye. The comparative analysis of our data reveals that the Turkish youth average 1–2 hours less daily engagement with the digital space than the global average of 5 hours among the sampled youth in other Muslim-majority countries. Crucially, our findings align with the hypothesized probabilistic relationship of the digital space's degree or rate of utilization and shifts in the behavior and perception of the youth regarding their engagement with their offline space or environment. Nonetheless, we acknowledge the need for further research to establish better and explain the causality in this relationship.

Keywords: Digital Space, Internet, Modernization, Muslim Youth, Türkiye

Öz: Bu çalışma, Türkiye'deki ve dünya genelindeki Müslüman gençliğim dijital alanla etkileşimleri açısından karşılaştırmalı bir çalışma yaklaşımını temsil etmektedir. Bu çalışma, modernleşme ile ilişkisel bir karşılaşma olarak küresel Müslüman Gençlik profilini tanımlamaya yönelik daha geniş bir araştırmanın bir parçasını oluşturmakta ve Müslüman gençliğin yaşamlarında modernite algısını ve yerini anlamaya çalışmaktadır. Çalışmada, nüfusunun çoğunluğu Müslüman olan 22 ülkeden 18–28 yaş aralığındaki 15.832 Müslüman genci kapsayan bir anket tekniği kullanılmıştır. Bu rakamdan 2000 genç ise Türkiye'den seçilen örneklemi oluşturmuştur. Türkiye'deki gençleri örnekleme alınan diğer ülkelerdeki gençlerle karşılaştırdığımızda, Türkiye'deki gençlerin internette

^{*} Sorumlu Yazar: Halilibrahim Alegöz, *İbrahim_alegoz@hotmail.com* ORC-ID: H. İ. Alegöz 0000-0001-8035-8261; Z. Mohammed 0000-0002-7043-1629

geçirdikleri ortalama sürenin, dünyada örnekleme alınan Müslüman gençlerin ortalaması olan 5 saatten 1–2 saat daha az olduğunu gözlemledik. En önemlisi de bulgularımız, dijital alanın kullanım süresi ile gençlerin çevrimdışı alanla olan ilişkilerine kıyasla davranışsal ve algısal değişimleri arasında bir ilişki olması ihtimalini doğrulamaktadır. Bununla birlikte, bu olasılığın boyutlarını ortaya çıkarmak için bu alanda çok daha fazla araştırmaya ihtiyaç olduğunu düşünmekteyiz.

Anahtar Kelimeler. Dijital Alan, İnternet, Modernleşme, Müslüman Gençlik, Türkiye

1. Introduction

Technology, broadly themed, has been associated with human evolution in various ways and contexts. As a component of modern technology, the invention of the internet and its proliferation in recent decades have revolutionized the debate over humanity and modern technology (Santoso, Dudhat, Sukmana, Mardiansyah, & Hardini, 2021). This could even be seen in the confusion and the ambiguity associated with defining what constitutes modern technology beyond its objective self. The recent debate regarding the youth and modern technology (mostly conjectured on the internet) highlights this intriguingly and engagingly. Broadly anchored on the distinction between online and offline culture, we are made to consider a utopia constituted in a limitless localization far beyond the contemporary and often contested spaces of social reality (aligned with face-to-face interactions). Critically, this endeavor fits into the often-exhausted framework of the tradition vs modernity debate (which emerged before the proliferation of the internet) in quite a postmodernist frame (Goode, 2010). While admittedly this spark remains simply an attempt to understand a relationship between an emerging sphere (the internet and its derivatives such as the social media among others) and the already accustomed sphere of the traditional offline social reality of community, further studies have excited new thinking and theorization far beyond this simple and narrow framework.

Central to this expanded framework lies the myriad inquiries into how modern technology impacts the lives of the youth. Far from simply establishing a causality or relationship, we observe that these inquiries focus on exploring the mutual interaction or interrelationality between the utilization of modern technological tools and the lives of the youth. As Herbert Marcuse rightly observed, "we do not ask for the influence or effects of technology on the human individuals. They are an integral part and factor of technology, not only as men who invent or attend to machinery but also as the social group which directs its application and utilization" (Marcuse, 1941). In other words, technology impacts the lives of the youth, and the lives of the youth impact it. However, while at it, it is equally crucial that we resist the temptation to limit the discourse to a

cyberspace or internet question, which will likely draw us into the first-level studies that Kevin Robbins brilliantly advised against. Among others, this enables us to advance the discourse into arenas involving exploring the issue of identity making, meaning, and behavior, including the cultural currents aligned with the globalization of the space and place presented by modern technology, with the power relations implicitly and explicitly sanctioned in these relations. We attempt to achieve this in the following sections of this essay.

This study investigates the relationship between Muslim youth and modern technology within the comparative context of Türkiye and global Muslim youth from a Muslimmajority country. It forms part of a broader inquiry to delineate a profile of global Muslim youth as an associational encounter with modernization: understanding the perception and place of modernity in the lives of Muslim youths. Specifically, we attempted a general assessment of the debate between modern technology and the youth. Our focus was to move the discussion beyond the objectification of the former by granting it some agency that was not limited to outings. This case relates to the view that technological development is but an interest-driven phenomenon cast in the current international capitalist systems and structures. This grants technological tools life and agency, eliciting some subjectivity in terms of how technological tools operate and are situated within the borders of the environment. In a way, this attempt is to drive the point that the whole relationship between the youth and modern technology is a complex and complicated issue deeply buried in a historical framework pinned on power relations of various kinds. In doing this, our interest was neither to ingratiate nor to criticize modern technology and its relations with the youth. Instead, we attempted to avoid the idea of excessive objectification of the relationship between the two realms. This paper is in three parts. The first part is dedicated to a brief literature review on the relationship between the youth and modern technology. This is undertaken to expose existing gaps to establish our study's strengths and limitations. With this, we can delineate how our study was undertaken, which occupies our focus in the second part. With that covered, we are now equipped with the right tools and framework to discuss our findings and conclude.

2. Beyond the Hours: A Brief Tour of the Literature

The online activities of the youth, given the sheer amount of time they spend on the internet, have generated remarkable interest in recent times by scholars and policymakers alike. Many of these interests are borne out of relentless efforts to understand the impact of the online space on the well-being, identity and self-formation

of the youth. That said, studies on the relationship between youth's social relations and modern technology (particularly SNs) have assumed various forms across diverse scholarly fields. Generally, the focus has been held under the rubrics of the utilization of social media and youth well-being, championed mainly by media psychologists and cultural and behavioral scientists. At the core lies a hypothesis based on the cognitive dimension of the consumption of modern technology. Critically, the existing literature has been chained to a conceptualization of social relations in terms of loneliness and companionship, as it is argued that loneliness stems from deficiencies in social relations and companionship and vice versa. Unfortunately, they are primarily skewed towards a focus on the youth's use of social media.

Interestingly, findings in this arena, like general technology utilization, paint a mixed picture. That notwithstanding, the focus has been on the activities of the youth on social network sites. While some studies have pointed to the potential of these sites to affect the self-esteem and well-being of the youth negatively despite increasing connection (Cingel, Carter, & Krause, 2022; Abi-Jaoude, Naylor, & Pignatiello, 2020; Reid, & Reid, 2007; Valkenburg, Peter, & Schouten, 2006), others have argued them as simply an extension of the traditional social network space since the initial connections established on social media platforms are with traditional friends and families, hence cannot be utilized to explain variations in the well-being of the youth (Twenge, Joiner, Rogers, & Martin, 2018; Boyd, & Ellison, 2007; Kim, & Lee, 2011). Indeed, this points to the often complicated and multilayered form modern technology has taken beyond the limited space of labor and production associated with traditional technological currents: one heavily pushed by Marxists. Even in social network sites, Robert E. Wilson and his colleagues remind us of the heterogeneity at play, hence the necessity to find a fitting framework accordingly (Wilson, Gosling, & Graham, 2012). We argue that despite the advantages this presents, limiting online activities of the youth to social media hinders efforts towards unearthing the complex and complicated relationship between the wellbeing of the youth and the utilisation of the internet. Indeed, our data further exposes this flaw; we observed a very complex picture unlikely to be fully portrayed by reliance on social media. In both Türkiye and other Muslim countries sampled, the youths' online activities go beyond social media to surfing online for information relating to varied issues.

These mixed traits reveal that more work must be done to establish the link between internet use and youth social relations. To clarify this, we need a better definition of social relations that reflects the composite and often dynamic scope of modern technology and traditional social relations outside the strictly technological space

(mostly held as the virtual space). To be sure, in whatever setting technology holds, it produces and reproduces various forms of social relations which drive its essence. Thus, we are confused about whether we are looking at social relations from an external derivative drawn into the fold of modern technology, a production of modern technology or both. Moreover, if it is both, how do we anchor each separately? How do we establish the complementarity or conflict between the social relations produced by modern technology and existing social relations outside it? How do we codify them, and what are their composite parts? Is it even necessary or expedient to undertake such exercises? These questions, while germane in specifying the sphere, also pose complexities. We see this at play even in the sphere coded more as a derivative of social relations and identity, which we will discuss in the following section.

3. Brief Methodology

This research data was extracted from the universal data collected from the global Muslim Youth Study between 2020 and 2021 in 22 Muslim majority countries, including Türkiye, with 15,832 people aged 18–28. Significantly, the data on the Turkish Youth were collected through face–to–face administration of the questionnaire by researchers. For the remaining 21 countries, the data collection was outsourced to Syno Answers, a global data company in Syno International's division. The organization ensured the survey administration met the ISO quality standards and Esomar ethical guidelines. As is the case with all research works, participation was voluntary. Therefore, the survey was administered to those who explicitly consented to their involvement in the study.

Specifically, the survey was conducted online, drawing on a sample of participants who agreed to be contacted to share their views. Participants were selected to match the country distribution in terms of age, gender and region to ensure a balanced representation of the opinions of the total population. Syno Answers International Omnibus is a product where individual questions from different companies and organizations are brought together for surveys of ideal length (approximately 4–8 minutes) and asked as online interviews to qualified participants worldwide. With the help of quantitative tools such as SPSS, we analyzed the data to generate needed patterns and trends, which enabled us to draw on the comparative framework of this study. While the survey tool is more convenient for reaching a wide range of participants and enables efforts towards generalisation, the failure of the method to generate deep answers due to the closed-ended structure of the questionnaire employed deflates our ability to establish concrete causality and explanations for novel findings. The sections that follow present our analyses thereof.

4. Muslim Youth and Internet Usage

Modern technology has instituted significant changes in how the world is ordered. The internet today has become the centerpiece of the contemporary technological drive. The speed, time efficiency, and utilization of space it provides in terms of communication is matched by none. Deployed as an ardent enabler, it has become the primary tool spearheading global capitalism far beyond the immediate comprehension of man. Accompanying this are its effects in shaping and reshaping people's perception of the world and, consequently, people's behavior. That being said, we are called upon by recent scholarship to consider these effects, especially in terms of internet use across different groups. Indeed, in several studies, age has been identified as one of the main definers of the differences in the effect of modern technology on people. Accordingly, existing studies have held that the youth are the most impacted by the technological wave, especially the internet. Compared to the older generation, the internet has been identified as ordering virtually every aspect of the live of the youth. As observed by Jonathan Rallings (2015) in his Youth and the Internet: A Guide for Policymakers, constructively, the internet "provides unparalleled opportunities for learning, global connection, and innovation as never before. However, alongside the numerous benefits bestowed by the internet, it is increasingly clear that the potential for relentless and allconsuming contact with the virtual world also presents new and unpredictable challenges for young people" (Rallings, 2015). This observation is cast in the light of a contradictory sphere as vulnerable and creative beings.

Drawing on this, we see in our study that the utilization of the Internet in the Muslim context is no different from what has been established in other contexts. About 90% of the youth in the Muslim world registered internet usage in Türkiye and across the other Muslim countries sampled. Interestingly, the utilization hinges on differences in social demographics, especially education. In the Turkish context, we observed that internet use increases with educational attainment to a peak (95%) at the university level. Curiously, the utilization declines to 84% with further education at the master's and doctorate levels, even below middle school (approximately 87%). Juxtaposing this finding to those in previous studies in different contexts, we realized some convergence (See Adorjan, Langgartner, Maywald, Karch, & Pogarell, 2021; Šmahel, & Blinka, 2012). The implication is that the formative stages of the youth (adolescent bracket), covering the upper primary to first degree levels, show higher internet utilization than the adult ages (see Valkenburg & Peter, 2011; Valkenburg, Peter, & Walther, 2016). This striking difference conscribes the raging debate regarding the impacts of internet use on the youth self-formation going into adulthood. It gives some credence to the youth/adult

divide in internet use. Notwithstanding this, our result provides insights into the transition period from youth to adulthood. Unlike the studies highlighted, which point to a simple divide between youth and adults, our results expose a peak period in the transformation of the youth's engagements with modern technology.

At the base of this debate rests the fact that the adolescent age is the riskiest since adolescents are more vulnerable to manipulation. We must underscore that while there is rarely any divergence on whether the exposure to the internet and its unrestricted contents and platforms affects the experience and behavior of the youth, particularly the adolescent, there remains unending confusion relative to the nature and extent of these impacts. This is what has produced the divide between "cyberoptimism" and cyberpessimism" (Pollet, Roberts, & Dunbar, 2011). While the cyberpessimists have advanced an inverse and deteriorating relationship between the utilization of technology (particularly the internet) and social relations (see Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, & Scherlis, 1998; Arnd-Caddigan, 2015), the cyberoptimists relate somewhat a complementarity between the two entities. Indeed, to cyberoptimists, the relationship is more reinforcing than replacing. There is no competition at play between the offline and online spheres. What pertains are enrichments (see Wellman, Haase, Witte, & Hampton, 2001; Valkenburg & Peter, 2009). In this case, we should consider a horizontal power relation that produces more compromises than conflicts. These streams imply that the space bounding them transforms self-making and culture as derivatives of social relations. Nonetheless, there appears to be a convergence among scholars that the internet harbors both risks and opportunities which shape and reshape the lives of young people in both positive and negative ways.

However, simply accessing the internet tells us very little about the extent of these extremes. To inquire more would mean we delve into the online activities of the youth (covered in the next section). This has primarily been the focus of social media–focused studies, a study area which focuses on how the utilization of social media platforms shapes the lives of the youth (Tully, 2003). Before that, however, we could trace some frames from the emerging studies on internet addiction among the youth across the globe. Although, measuring the effects of the internet addiction among the youth was out of the scope of this study as has been the focus of others (see, Doan et al., 2022; Choudhury & Ali, 2020; Hassan, Mahmud, & Hasan, 2024), our data do agree with the probability of a relationship between the time online and changes in behavior and perception of the youth. This notwithstanding, such establishment requires some freshening regarding differentiation between online and offline effects. Thus, is the impact of the internet on the youth's perception and behavior reinforcing offline

traditional currents or nouvelle? That being said, the sheer usage of the internet among the youth implies both novel and reinforcing prisms. Unfortunately, like many surveys on this subject, our data could not establish the extent of these effects.

Comparing the youth in Türkiye to those in other Muslim countries sampled, we observed that the average time spent by Turkish youth online is between 1 and 2 hours less than the global average of Muslim youth. Thus, most youth in Türkiye spend between 3-4 hours online daily compared to the average of 5 hours among their counterparts in the sampled Muslim majority countries. Nonetheless, a disaggregation of the data on the former shows that utilization by Turkish youth is comparable to that of Muslim youth in Pakistan, Mali, Ethiopia, and India, which stands at an estimated 4 hours daily. However, it is 2 hours below utilization by Malaysians, Jordanians, Lebanese, Kuwaitis, and Egyptians. Curiously, we realized in the Turkish case that school dropouts spend more time online than their educated counterparts. Indeed, about 60% of them spend 7 hours or more on the internet daily. These utilization differences pinned on the level of education reveal a fascinating spectacle compared to settings like the US (see Johnson, 2021; Pew Research Center, 2017) and the EU (see Eurostat, 2013), where a linear relationship exists between educational background and internet use. However, the fact that all uneducated respondents (100%) in the Turkish case especially indicated that they do not use the internet aligns with some consistency with global studies.

Furthermore, comparing the data on the utilization of traditional technologies such as television with internet use, we realized that the youth with lower internet spending have high time spent watching television and vice versa. The same applies to the Turkish case, where the time spent online is about 1-2 hours more than watching television. The picture becomes more interesting with the observation that the uneducated Turkish youth who reported not using the internet spend 5-7 hours daily watching television. One way or the other, the utilization of technology implies a trade-off between mainstream and modern avenues. Thus, despite this picture, we could not firmly conclude whether access to and time expended daily online is a class-based issue, as most Marxist scholars have indicated. Several factors could account for this variation, including the nature and scope of the technology in question. For example, the complicated nature of the online space requires some skills to navigate, making it quite unattractive to the uneducated compared to their educated counterparts. Indeed, this also questions the view of modern technology based on a divide between the older and the new generation (Prensky, 2001). If the hypothesis of a relationship between the utilization of a particular technology and ease of use is sustained, we could no longer hold an inter-generational technology or digital divide argument.

This tells us that a lot could be at play in internet utilization. For example, although a large body of literature have documented cost of internet as a critical factor in internet usage (see Busselle, Reagan, Pinkleton, & Jackson, 1999; Deloitte, 2014; West, 2015), it is interesting to find that despite the low cost of internet in Türkiye compared to the other Muslim countries sampled, the time spent online among the Turkish youth is relatively lower. Accordingly, we tend to agree with Chiara Pattaro that, unlike the older generation, "for the so-called Generation Y2 (the Millennial Generation) - digital natives, rather than digital immigrants - the media environment is more different and complex than it has ever been before" (Pattaro, 2015). Hence, extrapolating the factors underpinning differences in online time should be situated within this complexity. Indeed, we could stress an earlier point about the clarity in deciphering the real impact of online time on the youth. As stressed by Erika Smith, "examining digital native notions with a critical eye does not necessarily mean rejecting all Net gen claims outright. Rather, it involves careful examination of the complexities associated with such claims and an awareness of assumptions and values that may need further questioning or revisiting" (Smith, 2012). While we advance some methodological frames, such as experimental studies mainly utilized by clinical psychologists and behavioral scientists to hold some breakthroughs, we assert a more robust framework capable of providing more concrete insights into separate spheres of the offline and online settings.

Again, outside the online/offline divide, we further advance the penchant of existing studies to conscribe the digital natives as a homogenous group, blurring the effort to unearth the complexities therein. As succinctly observed by Neil Selwyn (2009), "young people's engagements with digital technologies are varied and often unspectacular –in stark contrast to popular portrayals of the digital native" (Selwyn, 2009). In sum, our job in this endeavor is more than simply pushing to establish how the exposure of the youth to modern technology accounts for changes in attitudes, behavior and perception of the younger generation. We need to unearth the several interfaces and discursive dimensions at play between the individual and the technology space as agency–driven.

5. Utilization of Social Network Sites (SNSs)

The effort in this section was not to measure social media addiction among the youth, which appears as a quasi-natural consequence of the amount of time spent and the reasons for utilization. Although the latter consequence is a primary concern in this study, we take it as simply understanding how the platforms are used and not conflagration in well-being. Social network sites have become integral to youth's lives today, and it is impossible to comprehend life outside of them. The affordance of social

network sites' access to significant contacts allows the youth to safely meander between the offline and online social space by migrating familiar social networks onto the online space, which affords them some safety and security online. Thus, while social network sites can potentially affect the self-esteem and well-being of the youth owing to the potency of meeting new people and establishing new circle of social networks with varied behavioral demands, the fact that they extend the traditional social network space configured on the migration of offline social relations onto the online space complicates the utilization of the social media space to explain variations in social behavior and well-being (Pittman, & Reich, 2016; Prensky, 2001).

Against this background, we set out to understand which social media platforms are more utilized by Muslim youth in Türkiye and selected Muslim countries and how they are utilized. We realized that the foremost platform Turkish youth utilize is WhatsApp, followed by Instagram, YouTube and Facebook. On the other hand, Muslim youth in other contexts favored Facebook, WhatsApp, YouTube and Instagram accordingly. Despite these variations, what is clear is that youth in the Muslim world, including Türkiye, use at least four social media platforms. We are, however, unsure what the share of the utilization of these platforms is in terms of the general internet use and online activities of the youth. Thus, we cannot precisely tell how much of the 4 hours utilized by the Turkish youth, for example, is dedicated to social media platforms. However, utilizing these platforms points to the centrality of social networking in the youth's internet use.

We realized from our data that the potential of social network sites for establishing new social networks and the opportunity to facilitate and maintain already established relations appear to be more potent drivers for the Muslim youth's utilization of social media networks. Indeed, many of the Turkish youth (about 62%) and the sampled Muslim countries across the globe (approximately 37%) utilize social media to communicate with friends. Significantly, this communication is more about maintaining existing social relationships than establishing new ones. Interestingly, in both cases, establishing new social networks (new friends) comes as the third reason below consumerism (for Turkish youth) and content creation (global Muslim context). This finding provides more information on the difference between the social media networks utilized by the Turkish compared to their counterparts in the other selected Muslim majority countries. The prioritization of communication with friends by the Turkish youth reflects the popularity of WhatsApp among them. The ease and speak of communication provided by WhatsApp is unmatched by the other three sites. On the other hand, despite the primacy of communication in the response of the Muslim youth in the other selected Muslim

majority countries, we realized the primacy of Facebook aligns with their preference for content creation.

Concretely, this finding points to the significant sway of the capitalist drive of social media networks on utilization. Indeed, it would not be an exaggeration to claim that social media networks are now one of the main drivers of consumerism. Capitalizing on role modelling, social media's capacity to connect consumers directly with their role models in the sense of celebrity endorsements has been instrumental in erasing some of the skepticism with traditional advertisements, earning more trust in products and services. In addition, by offering new income streams through content creation, social media networks have become avenues for job creation, what Chang and his colleagues termed as cyber-entrepreneurship (Chang, Shu, Wang, Chen, & Ho, 2020). The uniqueness of these networks in terms of their flexibility and the fun environment they create makes them more attractive to the youth today than before. Indeed, many youths today use social media networks for passive income to complement their traditional income streams and cope with the economic pressures of contemporary times. While this appears positive on the surface, Todd L. Sandel and Bei "Jenny" Ju caution us against forgetting what they refer to as today's increasingly deteriorating social and natural milieu in which the youth operate (Sandel & Ju, 2019). Thus, the operations of social media networks and the stronger bond it has established with the youth are constituted in a social milieu, without which we are unable to understand the dynamics of the social media space and the relationships it creates across various diversity markers, such as age, gender, education, among others, comprehensively.

While we cannot deny the potential of social media to impact and shape the well-being of the youth, we nonetheless understand a relationality between social network sites and the youth. As Sonia Livingston (2008) observed, "... more than ever, using media means creating as well as receiving, with user-control extending far beyond selecting readymade, mass-produced content. The very language of social relationships is being reframed; today, people construct their 'profile', make it 'public' or 'private', they 'comment' or 'message' their 'top friends' on their 'wall', they 'block' or 'add' people to their network, and so forth" (Livingstone, 2008). However, these experiments occur in the prism of self-presentation, discovery and validation. Understandably, this trait underlines both the creativity and the vulnerability of the youth in terms of the various influences in the virtual space and without it. Jim Rubin succinctly explores this complementary relationship between traditional physical face-to-face networks and social media in his assessment of the relationship between the use of creative and higher-order thinking and modern technology. He concluded that although traditional

tools such as reading hard texts were indirectly related to creativity, they nonetheless provided "the foundation on which creative thoughts flourished" (Rubin, 2012). In other words, without these traditional tools, creativity loses its essence and direction.

Crucially, using social media sites, irrespective of ends (establishing new social networks of friends or maintaining and facilitating existing ones), is essential in youth identity formation based on social learning (Bates, Hobman, & Bell, 2020; Berger, Taba, Marino, Lim, & Skinner, 2022; Stokes & Price, 2017). By this, we mean a spiral of impression managements of the initial identity the individual first approaches the virtual space with, followed by series of adaptation resulting from the interactions with other multi-sited entities which sets in motion subsequent adjustments in the prior identity and the birth of new identity which begins the cycle anew (see Bandura for more on social learning theory). Thus, youth identity formation in the virtual space occurs in a discursive and interactive framework that goes beyond fellow beings to encapsulate inanimate fairy tales and animated objects made possible by artificial intelligence. This anchors identity and self-making as a reflexive process (See Giddens, 1991).

Nonetheless, social psychologists remind us of the psychological pressures these processes have on the youth. In many cases, the youth are not even prepared for the rapid adjustments and reordering in social media. In a study on the relationship between the rate of social media use and university students' sense of self, Chou and Edge (2012) noted that the utilization of social media (Facebook for their study) affected the students' perception of others. In their words, "the longer people have used Facebook, the stronger was their belief that others were happier than themselves, and the less they agreed that life is fair ... In other words, they are more likely to be affected by the easily recalled content and tend to have the correspondence bias, whether consciously or unconsciously" (Chou & Edge, 2012). This process is likely to create a sense of envy and low self-esteem among the youth, which is termed "Fear of Missing Out", "a pervasive apprehension that others might be having rewarding experiences from which one is absent... characterized by the desire to stay continually connected with what others are doing" (Przybylsk, Murayama, DeHaan, & Gladwell, 2013). The implication of this has underpinned studies linking the rise in mental health and suicide among the youth to the rate of social media utilization (See Swedo et al., 2021; Massing-Schaffer & Nesi, 2020; Donati, Durante, Sobbrio, & Zejcirovic, 2025). We must also stress the gendered nature of these mental health issues as succinctly captured in the study by Holland and Tiggemann (2016) in which the authors found that social media utilization triggered body dissatisfaction and eating disorders in girls more than boys.

From the discussion, we arrive at a juncture where several questions must be posed. First, how do the youth synthesize their virtual and authentic identity in their everyday life? While efforts have been directed at understanding how the youth create virtual identity, it remains a puzzle relative to how the process evolves. To be sure, the youth's relation with the virtual space is not simply a transition from one space to another. Instead, it involves a continuous interplay with a transformative effect between the offline or real and online or virtual space. Therefore, understanding how this transformative process proceeds is as important as finding the youth's adjustments to fit the virtual space. Second, given the complex and rapid changes of technology that transform virtual space, it becomes expedient to explore the phenomenon of youth and identity making as a continuous process involving complex networks of purses.

6. Conclusion

On the one hand, we could not comprehend our life today without the currents of technology in its various forms. On the other, the speed at which technology changes and the effects these changes have on our lives and environment further complicate our lives in unimaginable ways. Against this background, we have attempted in this essay to explore some of the significant debates surrounding the relationship between the youth and modern technology by asking some critical questions along the way. By this, our effort was not to cover the exhaustive framework of the phenomenon. Our frame of reference is that the youth and modern technology are locked up in a mutually ordering sphere that allows each to impact and shape the other. This flows from the very construction of modernity. As Talal Asad rightly noted in his assessment of modernity, the core of contemporary society lies with the fact that "it employs proliferating technologies (of production, warfare, travel, entertainment, medicine) that generate new experiences of space and time, of cruelty and health, of consumption and knowledge." (Asad, 2003). This notion exhausts modern technology as constituting a stream of interactivity bounded in a constant interactive and discursive sphere. Behind this lies the broader framework which adjudges the phenomenon as a microcosm of the tension between tradition and modernity, perhaps a reconfigured stream of virtual vs real. However, recent developments have revealed the relationship to be more complicated than that. We argue that these complexities bring the utility of interdisciplinary and multidisciplinary approaches to the fore. While it has been the fashion to either glorify or criticize the overwhelming influence of modern technology on the youth, our study takes a more cautious approach as it advances the need to view the divide between the offline and online space in complementary rather than competitive terms. Significantly, although our study did not explore the causalities in the relationship between the Muslim

youth and modern technology, our comparative framework points to crucial nuances between Turkish youth and their counterparts in other selected Muslim majority countries. This suggests that several factors (political, economic and social) mediate differences in Muslim youth's engagements with modern technology. Further research could explore the extent of these mediated factors. This could prove crucial in launching a comparative study between Muslim youth and their counterparts in other religions.

References

- Abi-Jaoude, E., Naylor, K. T., & Pignatiello, A. (2020). Smartphones, social media use and youth mental health. *Cmaj*, 192(6), E136-E141.
- Adorjan, K., Langgartner, S., Maywald, M., Karch, S., & Pogarell, O. (2021). A cross-sectional survey of internet use among university students. *European archives of psychiatry and clinical neuroscience*, 271, 975-986.
- Arnd-Caddigan, M. (2015). Sherry Turkle: Alone together: Why do we expect more from technology and less from each other. *Clinical Social Work Journal*, 43, 247-248.
- Asad, T. (2003). Formations of the secular: Christianity, Islam, modernity. Stanford University Press.
- Bandura, A. (1977). Social learning theory. New York: General Learning Press.
- Bates, A., Hobman, T., & Bell, B. T. (2020). "Let me do what I please with it... don't decide my identity for me": LGBTQ+ youth experiences of social media in narrative identity development. *Journal of Adolescent Research*, 35(1), 51–83.
- Berger, M. N., Taba, M., Marino, J. L., Lim, M. S., & Skinner, S. R. (2022). Social media use and health and well-being of lesbian, gay, bisexual, transgender, and queer youth: Systematic review. *Journal of medical Internet research*, 24(9), e38449.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer–Mediated Communication*, 13(1), 210–230.
- Busselle, R., Reagan, J., Pinkleton, B., & Jackson, K. (1999). Factors affecting Internet use in a saturated-access population. *Telematics and Informatics*, 16(1-2), 45-58.
- Chang, S. H., Shu, Y., Wang, C. L., Chen, M. Y., & Ho, W. S. (2020). Cyber-entrepreneurship as an innovative orientation: Does positive thinking moderate the relationship between cyber-entrepreneurial self-efficacy and cyber-entrepreneurial intentions in Non-IT students? *Computers in Human Behavior*, 107, 105975.
- Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, behavior, and social networking*, 15(2), 117–121.
- Choudhury, M., & Ali, A. (2020). Social media addiction among youth: A gender comparison. *International Journal of Indian Psychology*, 8(3), 740–748.
- Cingel, D. P., Carter, M. C., & Krause, H. V. (2022). Social media and self-esteem. *Current opinion in psychology*, 45, 101304.

- Deloitte. (February, 2014). Value of connectivity: Economic and social benefits of expanding internet available on https://fbcdn-dragon-a.akamaihd.net/hphotos-ak-ash3/t39.2365/851546_1398036020459876_1878998841_n.pdf
- Doan, L. P., Le, L. K., Nguyen, T. T., Nguyen, T. T. P., Le, M. N. V., Vu, G. T. ... & Zhang, M. W. (2022). Social media addiction among Vietnam youths: Patterns and correlated factors. *International journal of environmental research and public health*, 19(21), 14416.
- Donati, D., Durante, R., Sobbrio, F., & Zejcirovic, D. (2025). Lost in the net? broadband internet and youth mental health. *Journal of Health Economics*, 103017.
- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational technology research and development*, 59, 309–326.
- Eurostat (2013). Internet use statistics individuals. https://ec.europa.eu/eurostat/statisticsex plained/index.php?title=Archive:Internet_use_statistics_-_individuals&oldid=163612
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age.* Stanford University Press.
- Goode, L. (2010). Cultural citizenship online: The Internet and digital culture. *Citizenship Studies*, 14(5), 527–542.
- Hassan, M. R., Mahmud, M. S., & Hasan, M. K. (2024). Social media addiction and its consequences among youth: A developing country perspective. *Global Business Review*, 09721509241276720.
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, 17, 100–110.
- Johnson, J. (2021). Share of adults in the United States who use the internet in 2021 by educational background. *Statista online*. https://www.statista.com/statistics/327138/internet-penetration-usa-education/
- Johansson, A., & Götestam, K. G. (2004). Internet addiction: Characteristics of a questionnaire and prevalence in Norwegian youth (12–18 years). *Scandinavian Journal of Psychology*, 45(3), 223–229.
- Kim, J., & Lee, J. E. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *CyberPsychology, Behavior, and Social Networking*, 14(6), 359–364.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American psychologist*, 53(9), 1017.
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers use social networking sites for intimacy, privacy and self-expression. *New Media & Society,* 10(3), 393-411.
- Marcuse, H. (1941). Some social implications of modern technology. *Zeitschrift für Sozialforschung*, 9(3), 414–439.
- Massing-Schaffer, M., & Nesi, J. (2020). Cybervictimization and suicide risk in adolescence: An integrative model of social media and suicide theories. *Adolescent Research Review*, 5(1), 49–65.

- Moreno, M. A., Jelenchick, L., Cox, E., Young, H., & Christakis, D. A. (2011). Problematic internet use among US youth: a systematic review. *Archives of Paediatrics & Adolescent Medicine*, 165(9), 797-805.
- Pattaro, C. (2015). New media & youth identity. Issues and research pathways. *Italian Journal of Sociology of Education*, 7(1), 297–327.
- Pew Research Center (2017). Internet use by education. Washington.
- Pittman, M., & Reich, B. (2016). Social media and loneliness: An Instagram picture may be worth over a thousand Twitter words. *Computers in Human Behavior*, 62, 155–167.
- Pollet, T. V., Roberts, S. G., & Dunbar, R. I. (2011). The use of social network sites and instant messaging does not lead to increased offline social network size or emotionally closer relationships with offline network members. *Cyberpsychology, Behavior, and Social Networking*, 14(4), 253–258.
- Prensky, M. (2001). Digital natives, digital immigrants part 2: Do they think differently? *On the Horizon*, 9(6), 1-6. https://doi.org/10.1108/10748120110424843
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848.
- Rallings, J. (2015). Youth and the internet: A guide for policy makers. Barnador's. Ilford UK.
- Reid, D. J., & Reid, F. J. (2007). Text or talk? Social anxiety, loneliness, and divergent preferences for cell phone use. *CyberPsychology & Behavior*, 10(3), 424–435.
- Rubin, J. (2012). Technology's impact on the creative potential of youth. *Creativity Research Journal*, 24(2–3), 252–256.
- Sandel, T., & Ju, B. (2019). *Social media, culture, and communication*. Oxford Research Encyclopedia of Communication. Retrieved 19 Apr. 2025, from https://oxfordre.com/communication/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-758.
- Santoso, N. P. L., Dudhat, A., Sukmana, H. T., Mardiansyah, A., & Hardini, M. (2021). Modern technology advances with benefits for humanity to demonstrate design with conventional sources Islamic. *International Journal of Cyber and IT Service Management*, 1(1), 14–36.
- Selwyn, N. (2009). *The digital native-myth and reality*. In Aslib proceedings. Emerald Group Publishing Limited.
- Smith, E. (2012). The digital native debate in higher education: A comparative analysis of recent literature/le débat sur les natifs du numérique dans l'enseignement supérieur: Une analyse comparative de la littérature récente. *Canadian Journal of Learning and Technology*, 38(3).
- Stokes, J., & Price, B. (2017). *Social media, visual culture and contemporary identity.* In 11th International Multi-conference on society, cybernetics and informatics. IMSCI: https://www.iiis.org/CDs2017/CD2017Summer/papers/EA876TF.pdf
- Šmahel, D., & Blinka, L. (2012). Excessive internet use among European children. S. Livingstone, L. Haddon, & A. Gorzig (Ed.), In Children, risk and safety on the internet: Research and policy challenges in comparative perspective (pp. 191–204). Policy Press.
- Best, S., & Kellner, D. (2003). Contemporary youth and the postmodern adventure. *Review of Education, Pedagogy, and Cultural Studies*, 25(2), 75–93. http://doi.org/10.1080/10714410 390198949

- Swedo, E. A., Beauregard, J. L., de Fijter, S., Werhan, L., Norris, K., Montgomery, M. P. ... Sumner, S. A. (2021). Associations between social media and suicidal behaviors during a youth suicide cluster in Ohio. *Journal of Adolescent Health*, 68(2), 308–316.
- Thayer, S. E., & Ray, S. (2006). Online communication preferences across age, gender, and duration of Internet use. *CyberPsychology & Behavior*, 9(4), 432-440. http://dx.doi.org/10.1089/cpb.2006.9.432.
- Tully, C. J. (2003). Growing up in technological worlds: How modern technologies shape young people's everyday lives. *Bulletin of Science, Technology & Society,* 23(6), 444-456.
- Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among US adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3–17.
- Valkenburg, P. M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health*, 48(2), 121–127.
- Valkenburg, P. M., & Peter, J. (2009). Social consequences of the Internet for adolescents: A decade of research. *Current Directions in Psychological Science*, 18(1), 1–5.
- Valkenburg, P. M., & Peter, J. (2008). Adolescents' identity experiments on the Internet: Consequences for social competence and self-concept unity. *Communication Research*, 35(2), 208–231. https://doi.org/10.1177/0093650207313164
- Valkenburg, P. M., Peter, J., & Walther, J. B. (2016). Media effects: Theory and research. *Annual Review of Psychology*, 67(1), 315–338.
- Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology & Behavior*, 9(5), 584-590.
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 436-455.
- West, D. M. (2015). Digital divide: Improving Internet access in the developing world through affordable services and diverse content. *Center for Technology Innovation at Brookings*, 1-30.
- Wilson, R. E., Gosling, S. D., & Graham, L. T. (2012). A review of Facebook research in the social sciences. *Perspectives on Psychological Science*, 7(3), 203-220.