

Global technological societies and discipline of Psychology: A multidisciplinary approach

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ABSTRACT

The paper broadly touches upon three points namely, (i) the global technological societies and matters of common concern for social sciences; (ii) global technological societies and (iii) the scope for psychology, and multidisciplinary approach for studying the issues of such societies. The observations however, intend to highlight the possibilities for psychology for addressing the concerns related to the global technological societies in particular. Accordingly, these are discussed under the following heads: (i) The overpowering influence of technological gadgets and problems related to technology users, (ii) Changes in personal characteristics and behaviour of the over users of technology, (iii) Psychological observations for linking digital technology and the economic growth of emerging economies, (iv) Psychological insights and technology backed world of marketing and advertisement, (v) Field of education, psychologists, and digital technology and (vi) Technology backed 'global village' and globalization; a new inviting area for psychology. Effort is made to explain that the interest shown by the discipline of psychology towards the concerns of the global technological societies has borne results and further opportunities exist for implication based endeavours of the social scientists. Talking of the multidisciplinary approach, it is argued that the approach offers a suitable methodology for addressing the multi-fibred and multi-dimensional domains of global technological societies whose impact is seen on individuals, their social relationships and at the societal level.

Key words: Global technological societies, overuse of technology, psychology in the era of technology, multidisciplinary approach

Technology has made life convenient and remains the most enviable gift conceived and created by the human mind. However, considering that globally people are choosing to live in the company of digitally powered gadgets such as cell phones, computers, videogames, digital music players and video cams today, and are becoming hopelessly dependent or addicted to them, is a frightening trend. Hence, it remains questionable whether, new technologies are a guarantee to a new life and a promising future to global societies.

Having said this, one may like to know 'why does this happen?' For the answer, let us refer to a video of the famous spiritual teacher, Sadguru entitled, 'How to manifest what you really want' (<https://youtube.be/UwGsgJtufY>). In this video, Sadguru explains that when the four dimensions of our existence namely, body, mind, emotions, and fundamental life energies decide to work together in one direction, innovation or for that matter, things that one wants, will manifest. He observes that innovation in technology seen in the course of last hundred years was aimed to make human life convenient. However, when we begin to use technology 'compulsively' instead of 'consciously,' technology becomes a threat to our very existence. As things stand, the global technological world has largely, become a 'compulsive' repetitive, mindless user of digital technology with pathological consequences. Apparently, our mind, body, emotions and life energies are not steering in the same direction necessary for making a 'conscious' move towards a harmless and functional relationship with technology.

Seemingly, the 'compulsive' use of technology could be associated with certain psychological matters like loneliness, wanting parenting ways, peer pressure, predominance of hedonistic inclinations, inadequate work and family life balance, social comparison, inability to decide priorities in life, confusing guiding principles of life, and inability to understand the difference between 'compulsive' and 'conscious' behaviour, etc.

Global Technological Societies and Issues of Common Concern for Social Sciences

Many issues concerning the new global technological society are listed in the congress preamble. However, it is reasonable to expect that the social sciences will use their respective discipline's perspective and understanding in responding to some broad questions like: 'How has the new technological global society affected the 'earlier social order' or has been crafting 'new social order?' Similarly, 'how the global technological societies have affected the core connection between humans and nature; and between people and their community,' and 'how social sciences ought to look at the good and the negative facets of the intangible 'virtual world' of technology, juxtapositioned against the 'real world' and its mundane concerns?' Hopefully, social scientists can facilitate and find ways for maintaining the right balance between the two worlds between whom the individual keeps switching. Some of these fundamental questions have relevance for individuals' well being and healthy lifestyle.

Global Technological Societies and the Scope for Psychology

Coming to her own discipline namely, psychology, the presenter would like to mention matters that psychologists may find engaging. Perhaps, the first, broad question that needs their attention is: 'How technology is changing the scope of psychology?' There is reason for asking this question. To begin with, let us take note that a whole generation born between 1980 and 1994 in the global world, has been referred as "digital natives" or the "Net generation" by Dr. Pavica Sheldon, (University of Alabama, Huntsville, USA). Psychologists would agree with Sheldon that it is not only important to understand 'how this generation uses these new tools, but also as to how the tools affect them?'

Though, psychologists cannot address all the issues comprehensively in isolation social psychologists in particular, can still ask the following questions. 1. What is the lay people's version of a global technological society and what are the social and psychological implications of their understanding? 2. What are the negative psychological effects of the global technological society? 3. What are the social psychological factors that can pronounce or reduce these negative effects? 4. What are the potential psychological benefits of a global technological society? 5. What are the social psychological factors that can enhance the positive effects of a global technological society plus, what are the limitations of these positive effects? As global technological societies have become a reality, psychologists could be curious about exploring the different facets and features of this society and sharpen their knowledge and skills that are helpful for making human and technology interface worthwhile at individual, family, community and institutional levels. Following are some issues and concerns that psychologists might like to address.

1. Attending to the overpowering influence of technological gadgets and problems related to technology users

Internet has brought the world at our fingertips and most of us cannot live without it but there is no denying that despite such overwhelming benefits, there are side effects and costs of relentless devouring of digital technology. Clinical, social and developmental psychologists, plus practicing psychotherapists, are likely to be drawn towards 'negative psychological effect of digital technology users.

For instance, the concept of 'Fear of missing out' (referred to as FOMO) is identified as a significant problem for users of technology linked to worsened mood states and overall lower life satisfaction (Baker et. al., 2016). Though this concept is generally associated with younger people, researchers consider FOMO as a universal notion that cuts across cultures for technology users. Apparently, the problem did not originate with technology; nevertheless, an increasingly tech-reliant culture is likely to promote values that magnify the effects associated with FOMO. Similarly, as the digital platform brings friends, music, videos, games, shopping, and an abundance of information at a click, for some people getting away from this world or putting down their devices for an extended period of time is almost impossible. Even worse, for one minute of checking an email notification they may spend thirty minutes and doctors are calling it an 'addiction.'

The global technical societies are now realising the need for attending to the physical impact of using technology (possibly in partnership with medical and neurological sciences and physiology) ignored by psychological researches despite the fact that body and brain both are significantly impacted by technology consumption. Urban adolescents and youth in particular, are hugely smitten by the digital revolution and often interact with their

gadgets on their own. Moreover they are not aware as to how the gadgets might influence and shape their interaction with others. The overpowering influence of the command obeying technological gadgets is making people captive of pathological pleasure seeking behaviour, cutting on precious time, turning family and romantic relationships unappealing and work life unproductive. Above all, addiction to technology is adversely affecting mental wellbeing, killing human sensitivity, finer emotions, aesthetic sense, soft skills and respect for relationships. On the other hand, good business relationships and improved productivity also requires limiting nonsensical interaction with technology.

Ironically, the treatment for the technology user's addictive behaviour is often digital too. For example, for the treatment of excessive users of social media particularly the smart phone user's habitual behaviours like scrolling and swiping through messages, memes, and innumerable pointless videos, could be some 'digital de-toxing' App. There are Apps for 'digital detox' with different names (i.e., Moment, Flipd, Good Night Chrome, Anti Social and Forest, etc.), that claim to help the affected users limit their screen time and spend their time more productively. These Apps are well publicised in Western countries. One of the main players of internet business, China has hundreds of internet 'detox centres' that try to help 'web junkies' turn away from their screens. In fact, a film by the name 'Web junkie' focuses on the Chinese government's classification of internet addiction as a clinical disorder and focuses on the treatment used in Chinese rehabilitation centres. Similarly, people may become OTT (media service offered directly to viewers via the internet bypassing cable, broadcast, satellite television platforms) 'addicts' spending massive chunks of time viewing all kinds of stuff.

However, there is the positive side of App base treatment and information too. For instance, one can access plentiful knowledge from the Apps and learn about mental health issues and techniques to get self-help. In that sense, digital technology, i.e., websites, Apps, and teleconferencing, offer plentiful resources for Indian clinical psychologists and psychotherapists for educating themselves. At the same time, psychotherapists must be able to assess the future of digital technology based psychotherapy and carefully judge whether such App based therapies have cultural applicability. Moreover, it is also important to address the logistical concerns like cost and accessibility to internet and computer literacy, etc. especially in rural India when contemplating digital technology based psychotherapy and counselling.

2. Studying changes in personal characteristics and behaviour of technology over users

The facilities and pace with which digital technology gives results is amazing and often welcome. Nevertheless, psychologists would feel concerned about changes in technology users' personality and behaviour. Clinical Professor Aboujaoude (2017), also a Doctor of Medicine, makes detailed observation on the internet's potentially negative effects on personality and apprehends extension of these on the society at large. He also considers internet's potentially negative effect on personality to be investigated further because it is a fundamental part of online psychology. Accordingly, some of the personality traits nurtured by the internet are impulsivity, narcissism, and aggression (Aboujaoude & Starcevic, 2016).

Aboujaoud (2016) adds that impulsivity has been recognized as a risk factor for suicide across diagnoses. Moreover, rise in suicide rates has been linked to an internet effect that makes self harm impulses irresistible via providing an "encouraging" environment that weakens the offline deterrents. Similarly, there is empirical evidence to suggest that online shopping can turn into compulsive buying behaviour in some people whose motivation to buy on line has links to the immediate gratification following an internet purchase, and the ability to shop unobserved and without company (Kukar-Kinney, Ridgway, & Monroe, 2009; Duroy, Gorse, & Lejoyeux, 2014).

Social media gadgets are loved because they hardly object to their commands and do not mind the user turning individualist or even narcissistic. Narcissism is a trait often featured as online behaviour. People look eagerly for their daily doses of 'likes' and 'thumps up' but are hardly interested in genuine sharing and learning from others. In this context, the term 'cultural criticism' (Aboujaoude, 2011) would indeed attract psychologists as it concentrates on websites as vehicles for self-promotion and social networks that imply popularity by the number of 'friends' and 'followers', and emphasis on "I" in naming sites and internet-powered gadgets. The speaker is

reminded of a high profile psychiatrist with obvious narcissistic trait. Each of his Whats App messages (though hardly forwarded) were self promotional statements loaded with cleverly camouflaged mention of his achievements, acquaintances with important people, his international educational background, writings and scholarly pursuits and general knowledge. Apparently, internet can act as a magnet and a magnifier when it comes to narcissistic traits.

Aboujaoude (2011) also has reasons to say that internet users can demonstrate more unwarranted aggression. This is a prominently noticeable in the expressions of anonymous blogging bulletin and chat room. Moreover, online interactions often ignore the standards of ethics and civility and are driven by a base instinct trapped mode of behaviour. Examples of this tendency are evident in online shaming and name-calling, cyber bullying, racist voicing and ideologically radical opinions. On the other hand, social media is cable of instigating communal violence, and blood shedding is well known to terrorism ridden India. Results of a cross cultural study (Anderson, et al., 2010) suggests that exposure to gaming violence was a causal risk factor for offline aggression, aggressive thoughts and emotions, decreased empathy and pro-social behaviour. The point is that violent online discourse may lead to a more hostile and a less cohesive society.

Furthermore, remaining in constant company of technology has done its bit in alienating people and heightened the demand for 'personal space' to be shared preferably with one's gadget. Moreover, spending long hours with different sources of social media is erasing closeness between people and nature, and making people emotionally unavailable to others. This disconnection weakens the possibility of undertaking socially responsible behaviour in real life (individually or with team of close friends) and robs the possibility of having self gratifying experiences and inner contentment. All such changes have implications for 'who we are', 'where are we heading' and 'who do we want to become.' These are also the questions for clinical and social psychologists to take up.

In sum, it seems that internet users feel deceptively immune to the psychological effects of new technologies. However, the global technological societies cannot ignore the subtle effects of the internet on personality or subscribe to the addiction model implying severe pathology. Moreover, at no cost, the global technological societies should limit their understanding of the resulting big cultural shifts that are happening.

3. Making insightful psychological observations for linking digital technology and the economic growth of emerging economies

Social and cross-cultural psychologists can play a constructive role by sharing their understanding of cultural orientation, cultural beliefs, values and preferences especially if they belong to a country known as 'emerging economies.' Their psychological insights could be useful when considering linking digital technology and the economic growth of the said economies. For instance, a global investor, Ruchir Sharma (2020) argues that though digital technology may not generate substantial economic growth for the emerging economies (due to no added boost for export); but they can largely impact the domestic growth of these economies. His observations carry psychological insights and are culturally informed suggesting that being less attached to a "legacy infrastructure" of brick stores and landlines, developing economies are inclined to adopt wireless technology faster than the developed economies. He gives example of China which despite having trouble in its old state run industries, is growing at a faster pace than the United States and catching up in average income because of its fast emerging cashless "new economy."

Similarly, new internet companies are also rising in Russia, Poland, Argentina and Kenya because "With deep knowledge of local tastes and languages, they are expanding access to a wide variety of services such as banking and back office operations, making it easy for start-ups to get going. On average digital revenue is rising and the cost of starting a business is falling, faster in countries with emerging economies than in the countries with developed ones" (Sharma, p.16).

Another observation comes from none other than Ratna Tata (2020). Tata touches upon the core concerns that are important for making things happen. Tata writes, "Technology is transforming the way we eat, live learn and play-let us be brave enough to embrace it and find solutions collectively through collaboration." He suggests that it is important "to have ideas that are creative and relevant coupled with the ability to transform them into

opportunities backed by the right investment and passion.” These words are of a very successful Indian business icon who has made business flourish in one of the ‘emerging economies’ namely, his own country. Here Tata is talking about embracing technology and (a) ‘finding solutions collectively through collaboration,’ (b) taking note of creative and relevant ideas,’ (c) having ability to transform such ideas into opportunities and (d) supporting ‘right investment and passion.’ What better inputs could a psychologist give for making ideas operational and things happen?

4. Psychological insights and technology backed world of marketing and advertisement

It goes without saying that people in the field of advertising and marketing use knowledge and insights of psychology cleverly and in abundance. They learn from psychology as to, ‘what attracts people and what is the average span of their attention,’; ‘how to capture and hold people’s attention’ and ‘whether Indians are receptive to an emotional or a rational argument’ made in favour of a product, etc. On the other hand, the creative heads of the technology driven world of marketing and advertisement are experts in exploiting people’s sentimental world plus their cultural preferences and globalization inspired standards and preferences. They produce, promote, present and sell products and Apps (cars, houses, educational Apps, home service Apps, mobiles, grocery, cosmetics, and countless items) with the means of sophisticated digital gadgets capable of effectively reaching people’s hearts and minds astutely. Psychologists and social psychologists with a creative bend and some business sense can make a niche in this field.

5. The educational field, psychologists and digital technology

In the field of education, digital technology has entered in a big way with the help of supportive infrastructure. Educational Apps for teaching children of different grades are a reality and a money making business. The success of these Apps has to do with the principles of effective teaching and learning and the insights of educational and developmental psychology. On the other hand, professional psychologists can, and have been uploading lectures and teaching material online, teach on-line, hold interdisciplinary webinars, etc. for the benefit of their students and colleagues and keep updating the theoretical and methodological advancements in their field of expertise. There are countless internet journals, publications and libraries that can be accessed on-line. Thinking of India, the main beneficiaries of these facilities are often those who can use technology, have net facilities and gadgets to access them. However, at the front of education, there is endless scope for technologically savvy psychologists to be of practical help to the learners in schools, colleges and Universities and for using technology innovatively, for teaching in village based schools of India. Psychologists, educationists, policy makers and technology innovators, interested in making technology a helpful aid for school education in rural India can associate themselves with this field.

6. Technology backed global village and globalization, a new inviting area for psychology

Another inviting subject for psychologists could be the subject of ‘global village’ a term coined by a media and communication theorist, Marshall McLuhan in early 1960s. According to the Merriam-Webster.com Dictionary, ‘global village’ is a world viewed as a community in which distance and isolation have been dramatically reduced by electronic media such as television and the internet. Interestingly, global village describes the phenomenon of the world’s cultures shrinking and expanding at the same time due to pervasive technological advances that allow for instantaneous sharing of cultures (Johnson 2007, p. 192). It goes without saying that ‘cultural globalization’ has entered our everyday life making the world a ‘global village.’ Internet and instant messengers (i.e., Facebook, Myspace and various online forums) have exploded with a bang making it possible for people from all over the world to connect and communicate instantly.

Dixon (2009) is a good reference for ‘Understanding the implications of global village’ who thinks that cultural globalization is likely to lead to prospective marketplace where countries of all economic opportunities would be represented and the economically weaker ones stand the chance of being aided by the more fortunate ones on humanitarian ground. At the same time however, “The idea of the world’s cultures drawn together in a global village raises questions about equal representation, reciprocal sharing, enriched diversity, and mutual

understanding” (Johnson, 2007, p.192). This becomes a vital question because technology has changed the way people communicate across physical and cultural boundaries at a considerable and accelerated rate. Moreover, often the technologically advanced countries have an advantage over others. For instance, they can leave an over arching influence on others much faster, excel in income generating activities, can readily establish and run research and development facilities, exceed others in manufacturing and selling war weapons and can digitally control and monitor activities of those who could be a threat to their power. These concerns have to be addressed collectively by social sciences.

Nevertheless, social and cross-cultural psychologists and those interested in occidental and oriental cultural values, cultural beliefs and preferences of economically advantaged (may be individualist), and economically disadvantaged societies would like to test these assumptions. Further, they may like to understand the prototype behind the process which decides who is powerful in a thoroughly interconnected world. A related question is what makes the technologically advanced countries capable of enhancing conflicts between cultures, causing fragmentation of cultures, or leading to cultural domination and perhaps creating hybrid cultures (Johnson, 2007, p.191-96).

In this context something equally important ought to draw the attention of social scientists. It has been observed that economically affluent and technologically advanced powerful countries are eventually likely to control the cultural standards by which the rest of the world will have to live because; their influence creates the milieu for ‘culture pollution.’ It is also seen, that the standard choices of the global world are often adopted and copied senselessly. In our own country, part of Delhi is said to have become ‘mini America’ and the youth, a copy of American culture whatever it may mean. This is not only about behaviour change but is often about giving away one’s own cultural values without a need, rhyme or a reason. Indian youth like youth all over the world, is drawn towards music and the global entertainment companies have successfully begun to shape the understandings and dreams of ordinary citizens, irrespective of where they may be located. For example MTV, a pervasive American company is consciously endorsing a global diffusion of diverse music media. MTV is not only a huge player in the technological expansion of cultural boundaries but its permeation of the music market globally supersedes the alleged diffusion of cultures that it claims to inspire.

Similar is the case of the American food chains that have become the ‘taste’ of the global village in a big way even if it means buying costly and processed fast food and having the possibility of falling victim to a global “consumer” culture. In sum, internet, satellites, and cable TV have swept away the old national cultural boundaries and perhaps Indians have to think about saving their own indigenous cultural identity keeping a safe distance from the overwhelming consumer values that could overshadow Indians’ sense of community and social solidarity. However, the optimistic way of looking at things would be to expect that a common culture would pave the way to greater shared values and political unity.

Since the discussion is being made in reference to the technologically global societies, the fascinating area of ‘culture sharing’ waits to be studied by the psychologists. Besides taking note of the good things of ‘culture sharing,’ psychologists should be able to address how, whether and in whom “cultural contact is creating uniformity, standardization, homogenizational global monoculture that is sterile, dull, and artificial” (Johnson, 2007, p.193), and what kind of cultures can handle the unstoppable storm brought about by the process of globalization without getting uprooted. This is indeed an attractive area for investigation for the psychologists.

Furthermore, language loss is a significant issue in the context of loss of cultural boundaries in global village. Dixon (2009) refers to an online language database namely, “Languages of the World” which cautions that the world faces massive challenges in maintaining language diversity as out of more than 6,912 languages, half may be in danger of disappearing in the next several decades. As smaller cultures are nested in their respective languages, losing them is a serious cultural risk. In fact, with the extinction of language, it becomes very difficult to articulate the beliefs and knowledge of some small culture and it is almost like losing that culture. On the other hand, internet is also a major tool for preserving languages that are the repositories of world knowledge. Professor Harrison of linguistics (Swarthmore College, USA), has created a talking dictionary and videos giving global voice to one of the indigenous tribal languages (Karo Aka) of Arunachal Pradesh of India (see Times of India,

January, 23, 2021, Patna Daily, p. 13). These are very challenging subjects for investigation and dedicated linguists, historians, social and cultural psychologists and anthropologists, etc. have to come together to address these concerns.

Dixon (2007) is correct when she observes that in view of all the changes that have come and shall continue to come, hope lies solely with human beings who must take responsibility to look at the implications of the shifting realities like the one of the new global technological societies. Perhaps social scientists can take the lead in defining the 'global village' where cultural boundaries with regards to language, economy, and basic means are acknowledged respectfully.

A Look at the Interdisciplinary and Multidisciplinary Approaches for Studying Concerns of Technological Global Societies

A researcher with good understanding of methodology is likely to choose the most suitable method for pursuing the subject of his/her research. The value of interdisciplinary and multidisciplinary approaches has become a matter of interest and need for psychology for obvious reasons. It may be said that despite the fact that different disciplines have their own special way of looking at a certain phenomenon, they may not always be able to answer the research questions in isolation.

Inter-disciplinarity is best seen as bringing together distinctive components of two or more disciplines. In academic discourse, this typically applies to the realms of knowledge, research, education, and theory. An interdisciplinary study/research would draw knowledge from several other fields like sociology, anthropology, psychology, economics, etc. and combine their understanding, into one activity. Though there are more instances of prevalent isolation, examples like Keyes's 'Social well-being theory (1998) is based on both psychological theories and classical sociological theory and refers to concepts like 'anomie' and 'class consciousness.'

Saraswati and Kaur (1993) consider going beyond singular notions of causality in the context of theory construction and refinement as important. As reality is too complex to be captured by the limited tools available in a single discipline, creating reasonable multi-dimensional causality models are likely to help studying a complex subject like 'global technological societies' too. Going beyond singular notions of causality suggests use of multi-variate techniques in analyzing data and adopting an inter-disciplinary approach.

Later Saraswati (2003) reiterated the need for interdisciplinary and multidisciplinary approaches and recommended communicating with peers from allied disciplines along with the practitioners in one's own discipline. She contends that the peers "should be able to create easily accessible landscape of disciplinary knowledge without the frills of the usual jargon that often obscures rather than enlightens" (p.6). Saraswati laments that we have failed in establishing such interdisciplinary nets like seen in disciplines of science (i.e., physics, chemistry, biology and genetics). For instance, biotechnology, genetics and nutrition, have made great stride in knowledge construction by transcending the disciplinary barriers.

Unfortunately, social and behavioural sciences such as psychology, economics and sociology have remained predominantly insular. Especially in India, we find increasing specialization and compartmentalization even within the social sciences disciplines. Saraswati (2003) outlines the following positive outcomes of concerted efforts of interdisciplinary teams: (a) Broaden perspective of all participants, (b) convergence of expertise leading to meaningful problem solving, (c) a conscious avoidance of ritualistic re-discovering and acceptance of the already available necessary know how in other disciplines and (d) reduction in idiosyncratic, discipline specific jargon in order to facilitate disciplinary communication.

Today, one can find examples of interdisciplinary approach in management and leadership literature with 'spirituality' being acknowledged as a helpful resource for the purpose (Chakraborty, 1993). This was not the case a few years back because due to strong anti-philosophical stance. Similarly, psychology preferred to rely on its own standardized research paradigms in defining its concepts rather than consulting the neighbouring discipline in defining their central ideas. Happily, however, the emerging trend in methodology of social psychological research was ignited after realising the shortcomings of the empiricist approach (which was the

preferred way of doing research in psychology). The now 'catching up' post modernist thinking and research in social psychology is inspired by sociologists from west who believed in de-individualizing' and 're-socializing' of social psychology.

In case of a multidisciplinary approach the researcher draws from multiple academic disciplines for redefining problems across normal boundaries, reaching for solutions based on a new understanding of the complex situations. Multidisciplinary approach is an integrated team approach which is well exemplified in the profession of healthcare. The team in this case is a group of medical and allied health care workers from different professions (e.g. psychiatrists, social workers, etc.), each providing specific services to the patient. The benefits of multidisciplinary teams include improved health outcome for the patients, and more efficient use of resources, plus job satisfaction for the team members.

The caution is that multidisciplinary approach needs to be used wisely as others may just theorize upon or their inputs may not always make sense.

Certain sub-fields of psychology, such as 'environmental psychology' is interdisciplinary as it focuses on the interplay between individuals and their surroundings. It encircles natural environments, social settings, built environments, learning environments, and informational environments. Moreover, the field is committed to give importance to researches aimed at solving complex environmental problems in the pursuit of individual well-being within a larger society and developing the discipline because, both are value oriented and problem oriented. As technology impinges upon human life at numerous levels, addressing, understanding and explaining the impact, dangers and benefits of global technological societies also invites attention of multiple disciplines. At the personal front, technology touches the social life and personal well being of the individuals and has implication for the maintenance of the required equilibrium in people's mental health and use of technology, and also between their personal and work life. At the social level, digital technology influences the way individuals communicate, learn and think, and decide to go about their family and interpersonal relationships. Technology also vastly affects the relationship between human beings and nature. For instance, on the one hand, it has made possible to play outdoor games indoors, and get nonstop entertainment with digital aids within the four walls of one's home and work online, on the other, it has held back the joy derived from the beauty and healing powers of nature and the desire to live close to nature.

Here let us remember that technology acquires the power to influence individuals and societies by innovations in fields like biotechnology, genetic engineering, communication, information technology, social entrepreneurship, biomedical engineering, health, and product development, etc. However, the new sophisticated technological products cannot become profit making business without the efforts of multidisciplinary teams of software experts, technocrats and marketing and consumer behaviour experts. Similarly, economists and social workers have a role as a team in levelling the apparent socio-economic and the digital divide in societies. Moreover, as technology is indispensable for learning and information and information processing organizations, its proper utilization needs guidance and help from different disciplines that have a stake in it and who can make technology people friendly and safe. If not, digital life will continue to outweigh the negative aspects of global technological societies with substantial costs.

The author is not capable enough of detailing how exactly the multiple domains and disciplines would be realistically helpful in making the global technological societies free of its dangers and happy with its achievements. However, she likes to say something on the 'human and technology interaction' which is an inevitable aspect of the global technological societies. At this instance, she envisages different disciplines coming together to arrive at a 'model of human nature' which could predict the limits of human-technology interaction beyond which the interaction is likely to become physically, mentally, emotionally and socially harmful for the individual.

Such a 'model of human nature' can help (a) in designing technology that outlines conditions under which technology can provide efficient and convenient services and (b) facilitate inventing and creating technology for diagnosing problem situations and predicting the consequences when the appropriate conditions are not met. The 'model of human nature' should hopefully be able to envision technology which can outline conditions for

managing, protecting, and restoring human wellbeing and assuring reasonable human behaviour in the human-technology interaction situation. Perhaps arriving at a 'model of human nature' shall not be possible in absence of a broad and inherently multidisciplinary focus.

Furthermore, global technological societies are characterized by loads of easily accessible information which continues to add up. At the same time, people keep competing for acquiring and utilising information as business rivals and aspirants of knowledge power. Furthermore, constant hunt and run for exploiting technology for meeting personal needs and entertainment, etc. also goes on. Thus, the global technological societies seem to be totally preoccupied and rather impatient in their interaction with technology oblivious of the optimal level of technology consumption or having time for enjoying small things of life. This matter needs to be dealt by a multidisciplinary team comprising of technology innovators, psychologists, mental health professionals, developmental specialists, spiritual leaders, parents of young and adolescent children and may be physicians too. There is also concern regarding the absence of social sciences in matters related to technology development and ethics in technology utilization. Recently, in an interview (Times of India, Patna Daily 2021, Tuesday, p.16), Abhishek Gupta (Founder of the Montreal AI Ethics Institute and a machine learning engineer at Microsoft) and Ameen (Vidhi Centre for Legal Policy) were being asked questions on Artificial Intelligence (AI) ethics. In this context, Gupta shared that when discussions were happening last year on AI ethics, all the discussants were sourced from IITs and IIMs with hardly anyone from the background of anthropology or sociology. Similarly, Mr. Ameen emphasized the need to rope in social sciences research for bringing up how technology will interact with people and communities it is deployed for.

Gupta also pointed out that AI falls apart while discussing labour impacts. He argued that labour impact has to be discussed with a proper understanding of the context of labour markets and structure, how people go through the skilling process and the social safety nets. He was trying to say that it is important to consult social scientists while discussing utilization of technology for something like labour impacts. Otherwise, it is like thinking of worker condition sitting in an AC office.

Ameen cited an example from 2008 when the Government of Andhra Pradesh

had entered into an agreement with Microsoft to create an algorithm that was going to predict dropout rates for students. He cautioned that though sounding good, predictive tools have their problems, especially regarding the datasets being put into the programming. For instance, how correct it would be to put a child from a lower income background at a higher dropout risk because, historically the data is askew? Perhaps, social scientists can point out or question the automation bias which was coming into play. AI innovation depends on large database, therefore, the question of 'privacy concerns' could be taken into account too. Ameen observes that though privacy perception differs, if questions are being asked about more personal matters like caste and religion it should be questioned. In fact, they were trying to say that experiences and insights from social sciences could be an aid in attending to matters related to technology ethics.

Conclusion

It may be concluded that social sciences have much scope for attending and investigating some common concerns of the new global technological societies. Focusing on the discipline of psychology, the scope begins right from asking conceptual questions like what is the lay understanding of the global technological societies, what are the social psychological factors that can pronounce or reduce the effects of technology dependent societies, and how such societies have affected the bonding between human beings and their association with the nature, etc. There is no dearth of concerns of applied nature for clinical psychologists, developmental psychologists, psychotherapists and psychiatrists that refer to human and technology interaction i.e., overuse of technology and its consequences on individual personality and demeanour. Other applied issues would include how to use technology innovatively in the fields of education, health and business, etc. A very fascinating field of investigation waits for psychologists in the domain of culture sharing, saving culture identifying features, culture pollution and cultural shifts happening in the era of global village. It is envisaged that interdisciplinary and multidisciplinary approaches could be a methodological option for understanding and explaining the dimensions and complexities of the global technological societies.

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