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ORIGINAL PAPER

Intercultural Ethics for Digital Well-Being: Identifying Problems and Exploring Solutions

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Abstract
Designing social media technologies to promote digital well-being requires designers to face many challenges. In this article, we explore one under-explored challenge, relating to how conceptions of what it means to flourish online show significant cultural variation. We believe that today's design-based approaches to digital well-being are hobbled by a lack of ethical attention towards important cultural variations. To remedy this, we explore the potential for an intercultural approach to digital well-being, one that respects cultural differences while preserving what culturally distinct conceptions of human flourishing have in common.

Keywords Intercultural ethics · Digital technologies · Social media · Digital well-being

1 Introduction

Digital technologies such as social media technologies (SMTs) have the potential to make billions of lives better or worse, spurring reflection on the ways such technologies affect well-being and self-understanding. These reflections are associated with work on digital well-being (DWB) (see Burr, Taddeo, and Floridi 2020b for a recent review). Although digital technologies affect populations across cultures and countries, both academic research and industry guidelines on DWB, value-sensitive design (VSD), and capability-sensitive design (CSD) have originated in and has been dominated by organizations and individuals from mostly Western Educated, Industrialized, Rich, and Democratic (WEIRD) cultures (Puech, 2013). These cultures are outliers

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on various psycho-social constructs, including ethical judgments and self-concepts (Henrich, 2020; Henrich et al., 2010). As a result, it is unclear that the concepts and judgments comprising reflections on and guidelines regarding DWB are representative of/appropriate to addressing global concerns. The field of intercultural digital ethics (IDE)—also known as intercultural information ethics—has attempted to identify and address some such challenges. Despite the need to explore and develop non-WEIRD accounts of DWB, however, we argue IDE currently lacks the conceptual resources to do so.[1]

To support this claim and develop alternatives, this paper is divided into three parts: first, it briefly introduces the natures of DWB, IDE, and why an IDE approach to DWB is necessary. Next, it outlines two broadly representative approaches IDE could take to DWB, problems with these approaches, and how a "bottom-up" case-study method would address such problems. Finally, to demonstrate this method and further motivate the necessity of an IDE approach to DWB, this paper reviews empirical finding about the effects of culture on well-being, as well as raising questions about the normative implications of these findings. Our is neither intended to be comprehensive or exhaustive. Rather, it simply aims to sketch the current landscape regarding IDE, to show how these resources could be applied to DWB, and to identify problems with these approaches to be addressed in future work. Although the focus here is on DWB, the problems identified and solutions explored are not unique to either digital technologies or SMTs. They are important to all emerging technologies that are deployed globally, as well as to IDE in general.

2 The Need for an IDE Approach to DWB

In their 2020 edited volume on this topic, Christopher Burr and Luciano Floridi define DWB as the "impact that digital technologies, such as social media, smartphones, and AI, have on our well-being and our self-understanding of what it means to live a life that is good for us in an increasingly digital society." (2020b: 3. Cf. : 1). Hence, "DWB" concerns the effects of digital technologies on well-being rather than comprising a type or component of well-being—a point stressed by Guy Fletcher. DWB is the "impact of digital technologies upon well-being as opposed to some specific dimension of well-being" (Fletcher 2020: 5). In philosophical terms, well-being is a specific dimension of human flourishing, only indirectly relating to our ethical life but concerning prudential value. Philosopher's regard prudential value as that which is good for the individual in terms of living their own life, rather than moral concerns, which typically concern the obligations, duties, and virtues we have towards others.

[1] There are signs that the resources to articulate a non-WEIRD account of DWB are starting to be developed. See Ayesha Gautam and Deepa Singh's recent article 'Building bridges: Eurocentric to Intercultural Information ethics' (2021), for example. It is also important to consider the tendency in the ethical literature to move away from homogenous moral theories towards integrated and paticularist approaches (Dancy 2004).

Insofar as DWB is concerned with the effects of digital technologies on well-being and self-understanding, DWB likely has a cultural component, since well-being and self-understanding are affected by culture (see Tiberius, 2004 for an overview, as well as section "Empirical Findings on Well-being Across Cultures and Their Implications" below, which gives a fuller account of these effects and their implications for DWB). The effect of SMTs on our ability to live well seems likely to have an intersectional effect on DWB. For example, posting a glamourous selfie in a culture that frowns upon (or bans) certain forms of public exhibitionism will have a different effect on one's DWB than in a culture where this is celebrated or encouraged. It is also important to note intra-cultural differences in this regard. The reception of selfies is often subject to very different evaluative criteria depending on the socio-economic status of the subject, as well as by factors relating to gender and ethnicity.[2] These considerations motivate the importance of considering DWB from an IDE perspective.

Since its inception three decades ago, IDE has articulated several challenges for ethicists of technology, which have become increasingly hard to ignore. These challenges vary in scope and range. Some are concerned about how today's digital technologies are designed according to a skewed set of values, especially those values that have garnered attention from Western philosophers working in the traditions of Aristotle, Kant, and Mill. For instance, many philosophers who regard privacy as fundamentally important in the development of digital technologies would agree that they are working within a Kantian paradigm, in which privacy is regarded as a necessary condition for dignity, autonomy, and free choice (Aizenberg & van den Hoven, 2020; Véliz, 2020). Philosophers who are interested in values tied to human well-being have often regarded themselves as facing an analogous choice (Brey, 2015, 2017; Calvo & Peters, 2013, 2014; Poel 2012; Swierstra & Waelbers, 2012). The conceptual resources from which they draw their conception of human flourishing are typically Western, often deriving from neo-Aristotelianism or utilitarianism and bolstered by positive psychology. Regarding DWB, this is problematic for several reasons.

First, SMTs have a global reach, which presents specific challenges for how they are designed. Next, numerically speaking, the greatest number of persons using SMTs are non-Western, which implies that any conception of DWB should be attentive to the specific cultural makeup of these users. Third, the most quickly growing demographics of SMT users are non-Western. In future decades, the majority of SMT users are predicted to come from India, China, and South American and African countries, rather than Europe or the USA (Arora, 2019).

[2] We would like to thank an anonymous reviewer for encouraging us to say more about this point.

3 Charting a Path Between Homogenisation Versus Balkanisation

Philosophers of IDE have taken issue with Western-centric assumptions in technology ethics in two main ways—one subtractive, one additive. While these have been articulated in different ways, for clarity, these could be described as follows: those adopting (1) a subtractive approach propose that familiarity with non-Western values provides a mandate to contest the value of cherished values in the Western canon, versus (2) an additive approach contends that IDE provides the opportunity to expand the pantheon of Western values, allowing us to design technologies for important new values that may have been previously been neglected (Vallor, 2017; Verbeek, 2011). Although both subtractive and additive approaches are useful in thinking about DWB, both have problems, corresponding to two distinct challenges.

Charles Ess (2020) provides the following articulation of these challenges: IDE must "defend some set of (quasi-) universal ethical norms, principles, frameworks, etc.", while also sustaining "local, culturally variable identities, traditions, practices, norms, and so on" (2020: 551). Ignoring cultural differences leaves us with a homogenised approach to these technologies, whereas giving too much weight to cultural differences can result in Balkanisation. IDE must, therefore, navigate between both extremes. It must recognise the importance of ethical norms that are found across cultural contexts (fairness, for example), while also accounting for how these values are often expressed in a culturally idiosyncratic way. In the case of fairness, the idea that individuals should be treated a schematised set of rights and responsibilities (with the right to appeal and redress when these rights and responsibilities are not respected) is widespread, but how we should understand rights and responsibilities has clear cultural differences. For Ess, the twin dangers of homogenisation and Balkanisation even apply at the level of the topics that scholars of IDE have taken up.[3] Versions of these problems can be found in IDE approaches to artificial intelligence (Cave and Dihal 2020), robotics, IoTs, and self-driving cars. Providing examples of these approaches and their associated problems points towards potential solutions.

3.1 Identifying Core Values: the Danger of Homogenisation

On the one hand, an IDE approach to DWB could include a core set of values that are important irrespective of cultural differences. Prima facie, Google's four "Digital Well-Being Values" seem to illustrate this. According to Sundar Pichai's I/O keynote in 2018, Google's DWB values are (1) "Providing Awareness", (2) "Enabling Control", (3) "Delivering Benefits", and (4) "Ensuring User Trust" (I/O 2018). Thinking of DWB in such terms aims to avoid the charge of Balkanisation. However, in avoiding Balkanisation, this approach faces two problems related to homogenisation, empirical adequacy, and conceptual vagueness. Identifying core sets of values can come at the cost of vagueness. In other words,

[3] As Charles Ess notes, deploying the term "balkanisation" in this context was first done by Rafael Capurro in his article "Towards an Information Ecology" (see Capurro, 1990).

Google's DWB values are not demanding enough because they are overly general. This becomes a problem when values are translated into specific tools, such as Google's suite of DWB tools. If one starts with a vague conception of what values one is trying to design, then many different design solutions can be offered to solve the very same problem.

Google launched a suite of fully functional DWB tools at the same time Pichai announced Google's DWB values, attempting to embed its four "digital well-being values" into specific DWB tools. These included an AppTimer (limits on app use), Shh (silencing of mobile device if orientated downwards), WindDown (greyscale in the hours before sleep), and Dashboard (overview of app use across devices). However, the design of many of these tools assumes that users use their digital devices in a culturally similar way, especially that they have similar attitudes regarding sharing. Ishtiaque et al. (2017) found that "people in marginalised communities frequently share a single device among multiple individuals" (2017: 1). As the authors of this study note, while "people share devices out of economic need", they also do so because "sharing is a social and cultural practice" (2017: 1). In this case, although Google claims that its DWB tools aim to promote its DWB values, in embedding its values in its tools, it makes assumptions about how its products will be used that seem to have cultural overtones. In addition to cultural factors influencing the implementation of values, the centrality of certain values needs to be questioned, the empirical adequacy of identifying core values.

It would be necessary to ensure that supposedly core values (1) genuinely capture universal human concerns and (2) do not overlook other concerns that are as important—if not more—as those articulated in core sets. In the case of Google's DWB values, one might find it difficult to object that DWB tools should "provide awareness" or "enable control". These seem to be valuable attributes regardless of the culture of which they are part. Given the outsized influence of Western companies and cultures on the development of technologies, this is a grave mistake. Recent empirical work on moral and cultural psychology shows why.

Despite comprising most of all social scientific samples—as mentioned in the introduction—those from WEIRD cultures are outliers on various socio-psycho constructs, including self-concepts, perceptions, and ethical judgments (Henrich, 2020; Henrich et al., 2010). Ethical judgments by individuals from WEIRD cultures give overwhelming importance to issues of fairness and freedom, although individuals from non-WEIRD cultures typically have broader moral concerns, including loyalty and adherence to authority (Graham et al., 2011; Haidt, 2012; Shwederet al., 1997). Historically speaking, authority and loyalty have been global ethical concerns. The burgeoning field of experimental philosophy has yielded similarly counterintuitive (from a WEIRD perspective) results, where the intuitions of philosophers against which various theories are tested might not be representative. In fact, these studies routinely show that ethical intuitions are deeply affected by culture (Machery, 2017).

Although professed cultural values should not be allowed to ride roughshod over human rights in the digital sphere—a point to which we return below—accounts of digital well-being must not overlook cultural differences concerning ethical judgments and self-concepts, which affect conceptions and experiences of well-being.

3.2 Respecting Cultural Differences: the Danger of Balkanisation

An IDE approach to DWB must also show how providers of SMTs can respond positively to cultural differences, avoiding problems associated with homogenisation.[4] Prima facie, Meta (née Facebook) seems to take this approach: discussing the development of technologies to proactively remove harmful contents from Facebook, Mark Zuckerberg refers to the importance of cultural differences: "over time, these controls may also enable us to have more flexible standards in categories like nudity, where cultural norms are very different around the world and personal preferences vary" (Zuckerberg, 2021). Such technologies would respect cultural differences, allowing people from different cultures and countries to choose the levels of nudity they find appropriate based on personal preferences, thereby avoiding homogenisation. However, in avoiding homogenisation, this approach faces two problems related to Balkanisation: implicit homogenisation and nefarious intentionality.

The latter consists of cultural differences being used to justify various kinds of moral misdemeanours by disguising morally nefarious practices as cultural ones. As Pak-Hang Wong notes, Balkanisation is serious, as it can result in IDE disguising deliberate wrongdoing:

> Cultural differences may enable malignant actors to disregard the demand of important ethical values or even to justify the violation of them through deference to the local culture, either by affirming the local culture lacks specific ethical values, e.g., privacy or by asserting the local culture upholds conflicting values, e.g., state intervention is good (Wong, 2020: 705).

Wong provides two examples of this: first, the Indian government's 2010 edict that "India is not a particularly private nation. Personal information is often shared freely and without thinking twice. Public life is organised without much thought to safeguarding personal data" (Wong, 2020: 706; citing Marda & Acharya, 2014). Robin Li (李彦宏), the co-founder of Chinese tech giant Baidu adopted a similar tactic when he declared that concerns with personal privacy were alien to Chinese consumers—although Chinese netizens swiftly and severely rebuked him (Sun, 2018). Second, Wong notes, regarding state intervention in China, "there are different cultural expectations of the government in China than in other countries. China's governance tradition of promoting good moral behaviour goes back thousands of years" (Wong, 2020: 706; citing Bing Song, 2018). Similar cultural expectations have been invoked to justify bid rigging in Japan when private firms collude with local governments to ensure higher returns on construction projects. Collusion between local firms and governments supposedly reflects Japanese cultural values related to cooperation and community, despite being illegal, unfair, and opposed

[4] In engineering ethics, to accommodate the increasingly diverse, cross-cultural and international contexts of contemporary technology, additional ethical considerations have been used, for example, Confucian and Islamic frameworks, care ethics, and feminist perspectives (Harris et al., 2018; Van de Poel & Royakkers, 2011). However, these efforts still consist of "applied" approaches to ethics, problematic for reasons considered below.

by citizens (Luegenbiehl & Clancy, 2017). In addition to justifying nefarious intentions, the cultural differences approach can easily fall into implicit homogenisation.

Even when attempting to account for/being responsive to different cultural orientations, this can prove challenging. There is always the danger that attempts to do so are based on cultural orientations, and assumptions about the cultural lives of users that, in turn, affect the DWB of these users (see Dennis 2021 for a comprehensive overview). This is especially true of approaches taken by NGOs, such as Tristan Harris' Center for Humane Technology, and the largest technology companies, such as Facebook, which are based in the USA and founded/run by white, cisgender males from overwhelmingly middle-/upper-class backgrounds. As a result, the customs, values, and assumptions of a small percentage of the (WEIRD) global population have come to dominate considerations within digital ethics.[5] Facebook's attempts to address cultural differences mentioned above is particularly striking example of this tendency.

The importance to Mark Zuckerberg and Facebook of allowing/empowering people to make decisions for themselves makes sense from a Western cultural perspective, where respecting and promoting personal autonomy and control would be a prime ethical obligation. Although an emphasis on autonomy and individuality is characteristic of Western ethical orientations, these orientations are not only historically recent but also somewhat unique to these traditions (Haidt, 2012; Henrich, 2020). More fundamentally, any IDE approach to DWB based primarily on values is problematic, both normatively and empirically.

Values are typically conceived as long-standing beliefs or ideas about which kinds of states are worth pursuing, that guide behaviours (Kulich & Zhang, 2012). Value differences are often thought to underlie cultural differences (and explain them), where behavioural variations are based on the kinds of states individuals and groups prefer. Normatively, the fact that some states *are* preferred says nothing about which kinds of states should be preferred, priorities within values (Rachels, 2011). Empirically, values differentially predict behaviours within different cultures—values better predict behaviours in WEIRD than non-WEIRD cultures—and poorly predict membership in culture groups—there are significant differences between the values of individuals from mainland China, Hong Kong, Taiwan, and Singapore (Knafo et al., 2009; Smith, 2010). Furthermore, technology shapes the social and cultural environments in which it is developed, just as these environments shape the development of technology. This means that technology is part of a circle of influence; it at once

[5] This characterization is not meant to oversimplify the broader cultural contexts in which a concern with DWB has emerged in Silicon Valley specifically and the tech industry in general. These concerns are undoubted—at least in part—disingenuous, insofar as they are a public relations effort meant to address "tech lash." There is a difference between understandings of and approaches to DWB understood in this manner (tech industry PR), and material practices concerning digital technologies and conceptions of DWB from the fields of ethics and technology studies. One could argue efforts by the likes of Tristian Harris, Mark Zuckerburg, and Sundar Pichai is counterproductive since they fail to properly conceive and address issues at the heart of DWB. Although these connections deserve a much fuller treatment, doing so would lead beyond the scope of the current article. We are grateful to an anonymous reviewer for bringing this point to our attention.

influences culture, but the design of the technology itself is subject to strong cultural pressures. As a result of cultural fluctuation, preferences associated with technology are likely to be transient—unlikely to be long-standing and, therefore, falling outside the purview of what could be characterised as value frameworks. Rather than approaches that consist of either identifying core values or respecting cultural differences alone, an adequate IDE account of DWB would have to both include the benefits and address the drawbacks of these two approaches.

3.3 An Empirical, Normative, and Case-study Approach

Like general approaches to technology ethics, identifying core values and respecting cultural differences is "top-down", "applied" approaches to ethics, beginning with principles associated with value frameworks, which are then brought to bear on situations and dilemmas concerning technology (Davis, 1995; Hess & Fore, 2018; Luegenbiehl & Clancy, 2017; Martin & Schinzinger, 2009). In the Western philosophical tradition, these have included deontology, consequentialism, and virtue ethics, as well as professional codes/guidelines. The problem with this top-down, applied approach—and, therefore, those of core values and cultural differences—is that it is psychologically irrealist.

Neither ethical judgments nor behaviours are exclusively or primarily the result of ethical reasoning/the application of principles (Greene, 2014; Haidt, 2012; Roeser, 2018). These approaches mistake how and why people think about issues of right and wrong and behave—from implicit homogenisation and nefarious intentionality to empirical adequacy and conceptual vagueness—and, therefore, fail to adequately consider the interplay between moral psychological facts and normative ethical concerns. To address these problems, any IDE approach to DWB would have to be empirically informed and attentive to the interplay between empirical facts and normative concerns. Such an approach to global technology ethics has been proposed by Heinz Luegenbiehl and Rockwell Clancy.

These scholars have suggested a "bottom-up", iterative method for identifying, resolving, and avoiding ethical problems related to global technologies, a case-study procedure (Clancy, 2021; Luegenbiehl & Clancy, 2017). This method starts with case studies that capture situations or dilemmas involving technology and, on this basis, particularising relevant frameworks or principles to the technologies and situations under consideration, thereby refining general ethical principles in the process—for example, what "privacy" would mean on a personal computer in the USA versus a smartphone in China. It can address problems associated with identifying values and respecting differences.

First, since it begins with case studies rather than principles, it starts with a common basis for understanding or consideration between peoples from different cultures and countries, addressing problems of cultural differences. For example, although disagreements might well exist concerning what went wrong in the case of the Challenger space shuttle disaster or who is to blame, no one would disagree that something wrong occurred. Similarly, IDE considerations of DWB might begin with cases touching on digital technologies and understandings of well-being common

across cultures, based on empirical work in cultural and moral psychology. Next, this method begins with intuitions rather than reasons for ethical judgments. Reasons are central to this process but proposed later, in dialogue with others, to justify ethical judgements, realistically reflecting the ways that people think and talk about ethics (Greene, 2014; Haidt, 2001, 2012). Third, principles used in this procedure reflect not only the judgments of professionals working with technologies but also intuitions identified in empirically informed, pluralist theories of ethical reasoning, such as moral foundations theory and morality as cooperation (Curry et al., 2019; Graham et al., 2011). In that way, this method addresses problems associated with both homogenisation and Balkanisation, capable of accurately identifying points of cultural convergence and divergence since it is empirically informed and culturally representative. Finally, this approach is pragmatic in nature. Rather than simply identifying ethical issues that arise with the development and implementation of technology, using the same ethically pluralistic framework, it aims at making recommendations about how technology should be developed and implemented, to make sure it is done ethically.

In sum, this process would be both subtractive and additive, capable of identify cultural similarities and respecting relevant differences since it (1) begins with a broad basis on which various stakeholders are able to agree—namely, common situations, dilemmas, and shared intuitions and principles—and (2) moves on to the refinement and differentiation of shared principles and intuitions relative to specific situations and dilemmas. To demonstrate how empirical findings would be relevant to normative concerns and further motivate the importance of an IDE account of DWB, research on the effects of culture on happiness is instructive—cultural similarities and differences concerning the nature of happiness, experiences, and causes of happiness.

4 Empirical Findings on Well-Being Across Cultures and Their Implications

Our following account is not meant to be either comprehensive or exhaustive, although any IDE approach to DWB would have to address the concerns we have raised in previous sections. Hence, the goal is simply to introduce work on cultural well-being to those who might otherwise be unfamiliar and who are interested in DWB and IDE, for the sake of further consideration and future work.

4.1 Similarities in Well-being Across Cultures

In terms of similarities across histories and cultures, reflections on happiness have tended to focus on prescriptive rather than descriptive elements—in other words, how to become happy rather than what happiness is. For example, ancient Chinese accounts of well-being make recommendations for "optimal functioning and right living" rather than explaining the nature of happiness as such (Lu, 2010, p. 330). Such accounts have typically involved luck, that only through a degree of luck can one achieve happiness. For instance, ancient Greek accounts of eudaimonia as

flourishing and hedonism as pleasure or the absence of pain depend on a degree of luck for their achievement.

The mainstream of empirical work on happiness has conceived and explored well-being subjectively—subjective well-being (SWB)—in terms of a preponderance of positive over negative emotion, and as a trait—such as ones comprising personality, which are relatively stable over time—rather than a state (Lu, 2010). Classic work on emotions by researchers such as Paul Ekman and colleagues has provided evidence that well-being is a basic emotion, expressed and recognised similarly across cultures and countries (Ekman & Friesen, 1971). Across countries, SWB is positively associated with human rights, equality, and income—up to 40% of US GDP, although not higher—(Heine, 2016) and younger, more educated, and better paid individuals report higher SWB across countries (Diener et al., 1999; Lu, 2010). Stability coefficients of SWB are high across different national groups, implying that levels of happiness within different cultures are relatively stable (Lu, 2008; Veenhoven, 2000). Although different cultures subscribe to different understandings of happiness, understandings of happiness across cultures are related.

Recent, large-scale research using the interdependent happiness scale (IHS) and subjective happiness scale (SHS) across more than 60 countries have revealed positive relations between the SHS and IHS in all countries surveyed; those who reported higher interdependent well-being also reported higher subjective well-being (Gardiner et al., 2020). The best predictor of each instrument's reliability was the human development index (HDI), although it better predicted the reliability of the SHS than the IHS. Additionally, WEIRDness was the best predictor of correlations between IHS and SHS scores, implying that the WEIRDer a culture was, the more closely related were independent and interdependent conceptions of happiness. Despite these similarities, culture affects many differences in happiness.

4.2 Differences in Well-Being Across Cultures

Whereas Westerners associate happiness with positive emotions and greater arousal, East Asians associate happiness with balanced emotions and lower arousal (Grossmann & Kross, 2010; Spencer-Rodgers et al., 2004). Similarly, individualistic cultures associate happiness with life satisfaction and doing what one wants, whereas collectivist cultures associate happiness with respect from others for living up to social expectations (Heine, 2016). As a result, self-esteem is a better predictor of well-being in Western cultures, whereas esteem from family is a better predictor of well-being in Chinese cultures (Gardiner et al., 2020). These dynamics likely contribute to the interesting ways culture affects memories and interpretations of happiness: Westerners remember themselves and interpret their experiences as being happier than they were, whereas East Asians do not (Oishi, 2002). Given these differences, it is unsurprising that culture affects the causes of happiness.

As was mentioned above, happiness throughout history and across cultures has been conceived as involving chance. The idea that persons are responsible for their happiness is a recent cultural innovation, still largely confined to the Western world (Gardiner et al., 2020). In general, whereas Westerners feel better through

disengaging acts (engaging in activities apart from others), East Asians feel better because of engaging acts (engaging in activities with others). Rates of positive emotions are unrelated to rates of depression among Westerners, although this is not the case among East Asians, supporting the claim positive emotions protect Westerners against depression but not East Asians (Leu et al., 2011). Similarly, although self-reflection is positively associated with depression among individuals from the USA, this is not the case among individuals from Russia (Grossmann & Kross, 2010).

Psychological research exploring culture in general and well-being specifically has taken two main tacks, etic and emic approaches. Emic approaches consist in developing and using research protocols in a single culture, whereas etic approaches consist in developing and using them across different cultures. For example, the SHS is a widely used and validated measure of SWB across countries and cultures, although it was first developed and used in the USA (Gardiner et al., 2020; Lyubomirsky & Lepper, 1999). The USA is a relatively individualistic culture, perhaps because of which individualism is a predictor of SWB in work using the SHS across cultures (Gardiner et al., 2020). But cultures conceive of the self in terms other than individualism alone, affecting conceptions of well-being.

Eunkook Suh has described the self as a "hyphen" between culture and well-being, where social and cultural factors shape expectations concerning and conditions fulfilling well-being (Suh, 2000). In East-Asian cultures, for example, the self is conceived in interdependent (rather than independent) terms, as depending on others to a greater extent (Markus & Kitayama, 1991). Conceptions of well-being are similarly situated, depending on others (Markus & Kitayama, 1998). Since it is unclear that cultural groups universally conceive of happiness in terms of SWB, measures other than the SHS have been developed, ones specific to different cultural or national contexts, and etic approaches to well-being. One such measure is the IHS, first developed and used in Japan (Hitokoto & Uchida, 2015).

Mean national temperatures and population growth rates were unrelated to the reliability of the IHS, although both were negatively related to the reliability of the SHS (Gardiner et al., 2020). Similarly, WEIRDness was unrelated to the reliability of the IHS. Unsurprisingly, the conceptions of happiness captured by the IHS and SHS were most coherent in countries closest to those in which they were developed, East Asia and Western Europe, respectively. Neither independent nor interdependent conceptions of happiness seem well suited to either Africa or the Middle East, indicated by low-reliability measures in those places on both the SHS and IHS. Although reliability measures for the SHS were the highest in Western Europe and WEIRD countries, they were also the lowest elsewhere. Consequently, interdependent versus independent conceptions of happiness seem the most coherent cross-culturally and internationally. These findings of the effects of culture on well-being obviously have important implications for IDE considerations of DWB, only two of which are considered here.

4.3 The Implications of Similarities and Differences for an IDE Approach to DWB

First, as the foregoing makes clear, work in DWB must refer to and engage with empirical findings about the nature of happiness. Reflection cannot occur from the armchair and through speculation alone. Although most of the research surveyed above is quantitative in nature—based on questionnaires and the results of quasi-experimental protocols—more, different types of work are needed specific to DWB. Philosophers have noted the importance of inter- and intra-cultural dialogues, demonstrating how this might be done—see, for example, Capurro (2017), Ess (2006), and Ess and Sudweeks (2005). However, the time has come to move beyond this work, contributing to and assisting in empirical and qualitative research on DWB. This could include structured interviews and think-aloud protocols, helping to explain cultural differences identified in quantitative research on happiness. Such research should be assisted by those working within the philosophical traditions of DWB focused on ethics, since philosophers have unique training and expertise different from those typically conducting empirical research, such as sociologists, anthropologists, and psychologists. This highlights another major implication of cultural research for DWB.

Second, work in DWB must actively identify and better consider relations between descriptive findings and normative issues, what is the case versus what should be the case. For instance, simply because reflection is associated with depression among US users does not mean that US social media applications should discourage reflection. Indeed, other considerations might well take precedence in the development and deployment of digital technologies to encourage critical thinking in digital spheres. Such considerations would be especially important to technology companies, many of which are based in the West, since the West prizes happiness in a fashion unrepresentative of the rest of the world. Empirical findings should guide normative guidelines and vice versa.

For example, Facebook's stated mission of improving lives by bringing people together might be incoherent since Westerners experience greater happiness through disengaging acts, not engaging with others. Engaging acts might increase the well-being of East Asians, but social media could cause other problems for individuals from these cultural groups since well-being is tied to meeting social expectations among East Asians. For East Asians, however, SWB is not even a preeminent value. As a result, it would make more sense to position interdependent well-being as a goal of digital technologies since this conception of happiness is more universally coherent than SWB.

Do technology companies have responsibilities to develop and deploy technologies differently depending on the national or cultural markets in which they are used, encouraging or discouraging, facilitating or impeding different kinds of well-being? Answers to such questions are unclear, but adequately answering them is impossible without (1) disentangling their normative and descriptive dimensions and (2) conducting empirical work to address the descriptive dimensions (Clancy, 2021; Luegenbiehl & Clancy, 2017).[6]

[6] Considerable controversy exists concerning how empirical findings should be interpreted and applied. See Greene, 2010, 2014, Kumar & Campbell, 2012, and Rini, 2013 for more on this.

5 Conclusion

Digital technologies are ever more ubiquitous, affecting global populations across both national and cultural borders. Cultures, however, affect well-being, so any account of DWB must consider the cultural dimensions of DWB if it is to be complete. IDE has long considered the cultural dimensions of technologies, taking both subtractive and additive approaches, attempting to identify core values and respect cultural differences. As mentioned in the introduction, we can see this in the case of fairness; while this concept is widely culturally shared, what fairness is and how it is applied shows large cultural variation. However, subtractive and additive approaches both have the potential to result in the twin dangers of homogenisation and Balkanisation: on the one hand, articulating an account of DWB that is suitably informed by IDE involves charting a path between an approach to DWB that pays excessive attention to cultural differences or uses these differences to smuggle in features that are not aligned with the digital well-being of users. On the other hand, it involves articulating an approach to DWB that is responsive to cultural differences. Both approaches are empirically underinformed, failing to adequately appreciate or address the interplay between empirical findings and normative concerns. This article aims to show how difficult this task can be, but we also hope to have shown how conceptual clarity on this topic may help those involved in designing tools that aim to improve the DWB of users. A "bottom-up" case-study method could help do so, addressing problems associated with both homogenisation and Balkanisation through attention to the relation between empirical findings and normative concerns.

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Declarations

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