Technology, Relationships and Culture: Clinical and Theoretical Implications

Karen Zilberstein

Abstract The increasing popularity of the Internet and social media has generated concerns and disputes about their effects on brain, behavior, and relationships. While many positive outcomes are associated with cybercommunication, some individuals experience negative consequences. This, in turn, has roused theoretical and clinical debates about the impact of technology on psychotherapy and the stances therapists should take in their own work with clients. Understanding the emerging digital culture, which includes how the Internet, social media, video games, reality, identity, relationships, and the self are experienced and managed, is thus important if clinicians are to carefully consider and understand the modern relevancy, patterns, and meanings of clients' communications with and about technology, as well as the possible use of social media as a therapeutic tool. This paper considers those questions by evaluating research on the effects of technology use and the implications of that research for psychotherapeutic practice and theory, with a particular emphasis on how psychoanalytic therapists have approached the topic.

Keywords Psychotherapy · Technology · Relationships · Culture · Theory

The Internet and social media are increasingly used in daily life, changing, in some ways, how people communicate and relate. While Internet use remains high amongst many demographic groups, youth constitute the one most digitally connected. According to the Pew Research Center and The Berkman Center (2013), 78 % of teens have a cell phone and 95 % use the Internet. In contrast, 83 % of young adults aged 18–29 use the internet, 77 % of those aged 30–49, 52 % of those aged 50–62, and only 32 % of older adults (Pew Research Center 2012). As youths' patterns of technology use often persist and stimulate similar changes in adult populations, social media and the Internet are likely to increase in popularity over the coming years (Pew Research Center and The Berkman Center 2013). This has stirred dispute and concern about the impact of those practices on brain, behavior, and relationships, particularly because youth are both most exposed and vulnerable to technology's effects (Small and Vorgan 2008). An abundance of cautionary books and articles now exist about these new media and the possible devolution of relationships through diminishing face-to-face contact, the impact of multitasking on attention and brain development, and the creation of false identities and relationships (Akhtar 2011; Turkle 2011; Small and Vorgan 2008). It has also roused theoretical and clinical debates about the impact on psychotherapy and the stances therapists should take in their own work with clients. Therapists of some orientations have embraced the digital world as a means to augment treatments and increase compliance with interventions, while others worry about the effect on boundaries and traditional modes of interaction. This paper considers those questions by evaluating research on the effects of technology use and the implications of that research for psychotherapeutic practice and theory. It focuses primarily on how psychoanalytic practitioners have addressed these issues, as that sub-discipline has been most involved in exploring this topic, and then provides some contrasts with other approaches.

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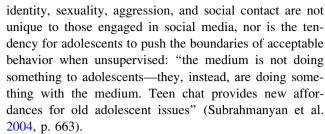e-mail: eKaren@me.com

Research on Technology's Usage

Impact of Technology on Relationships

Researchers from a variety of disciplines now study both social media usage and their effects on relationships with consistent results. According to that research, individuals create personal networks and use media in various ways to enhance social needs and lifestyles (Boase 2008). Texting and other means of briefly connecting may appear to constitute superficial relationships, but in fact act as a means to continue existing friendships (Campbell and Russo 2003; Miyata and Kobayashi 2008). Studies show that social media are generally not used to establish new friendships or romantic associations, but to connect with friends and family members (Gross 2004; Pew 2011a). Nor do they replace closer contact (Szekely and Nagy 2011). Those who text more also call others more (Pew 2011b). Despite high media usage, particularly for young adults, in-person meetings and intimate contacts still dominate closeness in relationships (Boase 2008; Jin and Park 2010). Furthermore, social networking and media based connections tend to parallel and augment real-life interactions rather than replace them (Chen 2011; Gross 2004). Today's youth appear to develop complex and multi-faceted systems of associations based on a mixture of various types of contact (Boase 2008; Szekely and Nagy 2011). Youth engaging in such combinations of online and offline relationships also report an increased sense of wellbeing and enhanced self-esteem (Obst and Starfurik 2010; Chen 2011; Walsh et al. 2010).

Studies of youth's communications through texting and chat rooms, or informal online discussion groups, suggest similar findings. Chat rooms allow for anonymity when conversing about various issues, which has both benefits and drawbacks. On the one hand, anonymity gives teens the space and opportunity to discuss embarrassing topics, at times sexual in nature, and to practice different types of relationships (Subrahmanyan et al. 2004). Teens and youth engaged in chat rooms often show support and sensitivity to each other, which includes allowing free expressions of feelings (Subrahmanyan et al. 2004). On the other hand, when unsupervised, chat rooms can deteriorate into forums for propagating inappropriate and harmful racist, aggressive, and sexual views (Greenfield 2004). A similar finding has emerged in a study looking at the content of youth's text messaging: "Our archive is replete with examples of youths using text messaging to be wonderfully supportive of each other, terribly mean, and surprisingly intimate with parents as well as peers" (Underwood et al. 2012, p. 299). Researchers conclude that the behaviors and sentiments adolescents demonstrate online do not really differ from those conveyed offline (Greenfield 2004). Concerns about

identity, sexuality, aggression, and social contact are not unique to those engaged in social media, nor is the tendency for adolescents to push the boundaries of acceptable behavior when unsupervised: "the medium is not doing something to adolescents—they, instead, are doing something with the medium. Teen chat provides new affordances for old adolescent issues" (Subrahmanyan et al. 2004, p. 663).

The Internet and social media thus do not seem to radically alter or simplify close social bonds or behaviors, although they allow new and different opportunities for their expression. Relationships facilitated by technology appear to provide the same sense of wellbeing as is associated with other types of close associations. The Internet may elicit some changes in how people communicate, but not why they do so (Hartman 2011). Although digital communication does favor brief, frequent contacts, it does not destroy the value put on social associations or discourage people's willingness to communicate deeply in-person. In fact, the evidence suggests that it more likely facilitates both, at least amongst that portion of the population that functions typically.

Effects of Technology on Brain and Behavior

Social media and texting do not work equally well for everyone and they do contain risks. Extroverts and those with better social skills flourish both in person and online (Chen 2011; Nadkarni and Hofmann 2012). Negative psychological effects, including depression and addictive qualities, have been seen in those who play long hours of video games or as time on the Internet or mobile phones increases excessively (Angster et al. 2010; Longman et al. 2009; Lu et al. 2011; Walsh et al. 2010). However, the nature of this association remains unknown. It is not clear whether excessive phone, video, and Internet use leads to difficulties or whether individuals with pre-existing social or other difficulties tend to use such media poorly. Nadkarni and Hofmann (2012) suggest that introverts and narcissists simply exhibit their various offline behavioral and psychological styles online. According to this argument, technology enables and extends pre-existing social, emotional, and behavioral difficulties rather than creating those deficits.

Some argue that the most pervasive, negative impact of technology lies not just in the way it affects relationships, but the very core of our neurological wiring. Because the brain is plastic and changes with experience, digital use strengthens some cognitive abilities while weakening those that are used less. In a recent neuroimaging study, the brains of older subjects were monitored while they conducted Internet searches. Results showed that Internet tasks led to more brain activation, particularly in visual areas,

than did reading (Small et al. 2009). Cognitive gains from digital use have been noted in areas of visual attention, the ability to swiftly sift through and analyze information, and improved aptitude and accuracy when multi-tasking (Small and Vorgan 2008). Studies also indicate that excessive multi-tasking with various media diminishes productivity and leads to inattention (Small and Vorgan 2008; Watson and Strayer 2010), although what constitutes "excessive multi-tasking" may vary according to the individual. Evidence also exists that a small percentage of individuals can multi-task effectively with no negative consequences (Chen 2011). In addition, the research does not definitively answer whether technology, per se, causes either inattention or reduced productivity. It is possible both that efficient multi-taskers engage most in multi-tasking and/or that those with insufficient focus are most susceptible to engaging in that behavior (Chen 2011). Without more data, it is impossible to know whether multi-tasking causes changes and difficulties, attracts those best or least able to cope, or a combination of the two. Pre-existing difficulties or propensities towards inattention and addiction may lure some individuals to overuse media, which may then perpetuate further problems.

The question of digital media's effects on brain and behavior is particularly salient when it comes to children. Younger children's brains are less developed, growing faster, and more vulnerable to various effects than more mature brains (Small and Vorgan 2008). Research shows that sensory and relational, face-to-face experiences are important in shaping young children's brains and providing needed scaffolding for later social and emotional competencies (Beebe and Lachmann 2003; Schore 2009; Small and Vorgan 2008; Stern 2004). Through their impact on brain structures, social experiences play a crucial role in neurologically shaping the child's ability to regulate and understand affects, cognitions, and behaviors and develop a coherent and integrated sense of self (Schore 2009). Excessive media use by children, especially if it diminishes opportunities for in-person interactions, could thus interfere with crucial learning, although studies do not yet exist to confirm or dispute whether or to what extent that may be occurring (Small and Vorgan 2008). In addition, children are more susceptible to other aspects of the Internet because of their inexperience and suggestibility. In particular, they are less able to decipher and resist some of the more commercialized and destructive messages that accompany heavy Internet use in the form of advertisements, pop-ups, links, or contact with unknown people (Greenfield 2004). This has led many to recommend limiting and supervising Internet and social media use by children and teens in terms of time spent on various devices, the Internet sites visited, and messages sent to and received from others (Greenfield 2004). Guidelines on how to approach social media use appear consistent with recommendations for parental monitoring and restriction of youths' behaviors in general (Keijsers et al. 2009; Kerr et al. 2012).

A solid understanding of the opportunities, benefits, limitations, and risks of cybertechnology is important for therapists who need to translate this knowledge into therapeutic practice. The following section will compare, contrast, and evaluate various emerging therapeutic stances towards digital media.

Technology in the Consulting Room: Impact on Psychotherapy

As therapy and therapeutic theories have always been influenced by cultural trends and ideas, it is hardly surprising that technology and social media have slipped into the therapeutic arena. Clinicians debate whether and how to embrace this new cultural artifact and the type of impact it might have on therapeutic practice. Clearly, theoretical orientation influences how therapists frame that debate. Psychoanalytic and relational therapists tend to feel the most uneasy about technology's presence because the idea of digital media conflicts more with underlying theories and trends. The current analytic focus on nonverbal communication that consists of gestures, facial expressions, and important moments of face-to-face affective regulation (Beebe and Lachmann 2003; Fonagy et al. 2002; Schore 2009; Stern 2004) renders cybertechnology a somewhat suspect form of communication. However, the recognition also exists that technology's sheer cultural popularity and widespread use all but guarantees its inevitable creep into the therapist's office (Brottman 2012; Hartman 2011; Mishna et al. 2012). While it is impossible to discuss all of the controversies, questions, and implications of the Internet and social media on therapeutic practice, a few of the most salient will be discussed below.
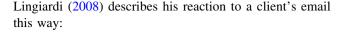
Psychoanalytic Concerns: The Impact on Relationships, the Self and the Therapeutic Endeavor

The psychoanalytic writers who worry most about the effects of digitalization express concerns about the impact on the self and relationships, as well as how to address such issues therapeutically. Those center on the intrapsychic and social reverberations of social media and the culture they create: the ways in which technology alters experience, merges offline reality with online fantasy, discourages thought and reflection, and creates detachment from bodies, feelings, and friends (Akhtar 2011; Goren 2003; Hanlon 2001; Turkle 2004, 2011). According to this argument, relating to others through email, texting, and

online chats provides at best the illusion of a real relationship and at worst an attachment to a machine rather than a person. Digital communication and its lack of prominent face-to-face contact (although Skype and other virtual media do allow some such contact), fast pace of online communication, brief responses, and dangers of information overload discourage fundamental components of close associations. These include deep thought, reflection, and emotional demands (Turkle 2004, 2011). Online communication also allows for playing with altered and false identities at the same time that robots and computers entice with the promise of easy, cyber-based rather than bodily-based connections (Goren 2003; Hanlon 2001; Turkle 2004, 2011). These relationships with inanimate objects lack true intimacy and encourage shallowness and detachment from self, others, and experience (Goren 2003; Turkle 2011). The Internet and emails have also been explored as transference displacements and as transitional objects or spaces that require therapeutic interpretation to dispel (Gibbs 2011; Lingiardi 2008). In this way, a number of psychoanalytic writers suggest that technology allows for defensive and altered perceptions of self, relationships, and reality that are detrimental. In fact, research only partly bears out these associations. As discussed above, digital technology offers many opportunities for intimacy, reflection, and identity formation. However, for more disturbed individuals, perhaps those more often seen in therapeutic settings, misuse of technology can also result from and subsequently exacerbate pre-existing difficulties. However, it likely also confers many of the same benefits and opportunities for relationships and connection to that population and, as will be discussed later, even holds some advantages for therapeutic work with some types of difficulties (Brottman 2012; Nadkarni and Hofmann 2012; Roy and Gillett 2008).

Essig (2012) warns against the propensity for psychoanalysts to formulate negative judgments about digital usage and worries that such assumptions block deeper understanding of the relevance of technology to modern culture and the positive meanings and experiences digital media can provide: "Information technologies are finally growing up, so we can interact with them in our world, instead of theirs…. Ours is a culture fully remade by information technologies" (p. 441). Hartman (2011) concurs: "We need to rethink certain concepts that hedged bets on reality so that we don't make the mistake that a number of psychoanalytic writers have already made of rushing to judge the new reality on old terms" (p. 474). Part of the difficulty may lie in what could be characterized as a newly created digital culture gap. Youth, as the largest consumers of the Internet and social media, are creating cyber cultures that may be less well understood by older therapists (Akhtar 2011; Essig 2012; Greenfield 2004). For instance,

Lingiardi (2008) describes his reaction to a client's email this way:

> I had never before got an e-mail from a patient in analysis, and I confess that my first reaction was a sense that I had been "tracked down" and ambushed in my own private place…. This unexpected e-mail seemed exotic, erotic and hazardous. A phone call from a patient is different: it's more urgent and there's usually a question involved. The patient is physically there, with the tone of his real voice. But an e-mail pops onto your screen, flashing there amid the other thousand things in your life (pp. 112–113).

One can imagine that today's youth might have an opposite response, finding phone calls more exotic, demanding, intrusive, and less private than the use of email or texting, in that voice messages and phone calls can potentially be overheard. In addition, while the outlines of this new digital culture are still being formed, they have, to some extent, altered traditional notions of boundaries and accessibility and with them, perhaps, client expectations. Hartman (2011) characterizes it this way:

> The person inhabiting this reality doesn't become a subject through the ambivalent acceptance of others' reality. This is a reality of ultimate access and dizzying multiplicity where a person becomes a subject regardless of others' reality…. In Reality 2.0, access trumps the need to accept limits as a tool to self discovery. Networking replaces containment as the bulwark of meaning (p. 474).

A better understanding of that emerging culture, which includes how the Internet, social media, video games, reality, identity, relationships, and the self are experienced and managed, is important if clinicians are to carefully consider and understand the modern relevancy, patterns, and meanings of clients' communications with and about technology (Dini 2012; Essig 2012; Hartman 2011).

Another important question concerns whether or to what extent to interpret and manage technological phenomena and themes via pre-existing theories and techniques. The new technological terrain, which has emerged from contemporary ways of thinking and relating, may require adaptations of thought and methods, which includes considering whether technology can serve a legitimate and beneficial role in psychotherapeutic practice. As will be illustrated below, this could not be characterized as a novel situation. Psychoanalytic practices and concepts have regularly shifted over time in accordance with changing scientific, philosophical, and cultural landscapes (Curtis 2012; Mitchell and Harris 2004; Wachtel 2008).

The Historical Perspective

The evolution of psychoanalytic practice can be briefly traced from its Freudian beginnings to current intersubjective and relational theories. Freudian and early psychoanalytic theories posited that instinctual drives and the ego and superego's ability to cope with them determined the structure of the self and the extent of neuroticism or pathology (Freud 1949). Therapy thus worked primarily with individuals and strove to uncover underlying unconscious mechanisms. The therapist functioned as an impartial observer and authority figure, an interpreter of material, rather than a shaper of experience (Geller 2011; Gelso 2010). However, as early as the 1920s, American psychoanalysts began to look more closely at the interchange between a person, others, and the environment, in part due to the influence of Progressive Era ideologies about modernizing and improving the self, the political system, and society (Cushman 1995). Harry Stack Sullivan (1953), who began working as a psychiatrist in 1917, emphasized interpersonal relationships over instinctual drives as organizing mechanisms for the self. Ego psychology, prevalent in the 1940s, and self psychology, popularized in the 1970s, further developed in response to growing American ideals of individualism that placed treatment and growth of the "self" on center stage (Cushman 1995; Goren 2003; Kohut 1977). Scientific interest in parent–child relationships and attachment also helped shape self psychology through explicating how individuals are influenced and formed by relationships and empathic attunement (Ainsworth et al. 1978; Bowlby 1988; Winnicott 1960). These new conceptions about the origin of psychic difficulties also lead to alterations in therapeutic techniques. The therapeutic relationship acquired more scrutiny and importance as it began to be characterized as a real relationship that provided the antidote to crucial, missed, early relational experiences (Greenson 1967; Kohut 1977; Winnicott 1960).

In the 1960s, a cultural revolution began (spurred by feelings of discontent around civil rights and anti-war issues) that also influenced beliefs about relationships. As "question authority" became the dominant mantra of the young and a profound distaste for the powers and inequities that society engendered grew, interest in intimacy rocketed (Jamieson 1998). Intimacy became associated with genuineness, mutuality, equality, and closeness that included deep and privileged knowledge and understanding of another and emotional connection (Hatfield and Rapson 1993; Jamieson 1998). These ideas also found their way into therapeutic techniques and theories. By the end of the twentieth century, therapists tapped into postmodern and social constructivist philosophies that reflected a growing interest in the democratization of relationships and an increasing distrust of authoritative theories of knowledge. Relational and intersubjective theories gained ground. According to those theories, knowledge, reality, and the self are relative and multiple and become co-created through various unique interactions (Curtis 2012; Wachtel 2008). Each therapist and client dyad creates a singular pairing that allows them to work in an inimitable, distinct way (Geller 2011; Stern 2004; Wachtel 2008). Moments of change occur through deeply emotional experiences with another, not merely through insight or interpretation, although making meaning of those experiences remains important (Curtis 2012; Stern 2004). While Freud's ideal analyst acted as a blank screen and authority figure on which the patient grew dependent upon and then independent of, the modern therapist allows the client more space in joint decision making, provides less authoritative comment on the meanings of a client's communications, gives wider berth to individual beliefs and values, and favors interdependence over autonomy (Freud 1912; Wachtel 2008).

These newer ways of characterizing the self, relationships, and intimacy had already entered both society and the consulting room when cybertechnology burst upon the cultural scene. In fact, social media arose within and perhaps best exemplify the ethos of less authoritative and more democratic and accessible relationships and the existence of multiply constructed selves. In this respect, the pertinent question is not whether or not technology erodes the self or close relationships, but how the self and relationships are expressed in a technological society and in what ways psychotherapy can respond so as to be relevant to and understanding of that cultural shift. This has begun to occur as some psychoanalytic therapists look at the context and content of cybercommunications in the same way that other types of verbal and nonverbal communications are evaluated, to determine the function, purpose, and proper reaction to such messages in any given therapeutic interaction (including guidelines and boundaries on those communications) and to help clients think through their own online goals and behavior (Akhtar 2011; Brottman 2012; Hartman 2011; Lingiardi 2008). In fact, the psychoanalytic world has much to offer in this respect, as not all sub-disciplines of therapy ask those compelling questions.
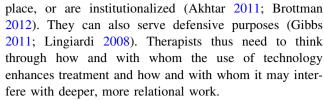
Use of Technology in Psychotherapy

Some therapists and researchers seem less prone to questioning technology's possible adverse effects and instead view it as a resource that can be actively incorporated into treatments. These clinicians base their opinions both on the unique capabilities of technology and also on its cultural fit: "Future widespread use of smartphone technology in

the behavioral health field can be expected. Our increasingly mobile, tech-savvy, and health conscious society will demand care delivery systems that expand beyond traditional office-based requirements to better fit diverse needs and lifestyles" (Luxton et al. 2011, p. 6). As a consequence, they recommend that clinicians stay educated about such issues: "Given the central role of mobile, social, and wearable computing in people's lives, clinicians should stay abreast of developments and look for ways to make use of these technologies" (Morris and Aguilera 2012). As suggested previously, those technologies are less often a part of psychoanalytic work and more often integrated into cognitive-behavioral therapies. Examples of digital media in therapeutic use include phone apps that help clients track symptoms and moods and reduce retrospective inaccuracies in reporting (Luxton et al. 2011; Morris and Aguilera 2012); text messaging clients to insure homework compliance between sessions and to strengthen the therapeutic alliance by showing clients that their therapists are concerned about them (Aguilera and Muñoz 2011); using smartphones to record coping skills that clients need to practice and generalize outside of the office (Eonta et al. 2010); and the use of skype or video-conferencing to conduct sessions (Luxton et al. 2011). In each of these cases, these authors see technology as an important adjunct to therapy that furthers specific goals. While they do note possible concerns about privacy and boundaries, they handle these rather matter-of-factly through informed consent and clear policies about how and when they will respond to text messages and/or email (Eonta et al. 2010; Luxton et al. 2011). In keeping with their orientations, they approach technology primarily as a tool rather than asking how its use may affect or illuminate a client's underlying conflicts, desires, relationships, or sense of self. In fact, the two are not mutually exclusive and contemporary therapeutic practice may need to consider many different aspects of the digital world: the benefits technology can provide, its meaning to clients, and its various effects on therapy and the therapeutic relationship.

Technology may prove especially useful for those unable or not ready to engage in deeper, more intimate psychoanalytic treatment. Case studies suggest that email communication can be helpful for severely anxious and relationally limited clients (Brottman 2012; Roy and Gillett 2008; Lingiardi 2008). Email allows time and space for sorting out thoughts and feelings, which may be beneficial for those who are overwhelmed by the immediacy of relational and emotional demands (Roy and Gillett 2008). It sometimes also enables clients to share thoughts that they view as too shameful or secretive to relate in person (Brottman 2012; Roy and Gillett 2008). Skype and email may also provide important therapeutic access to clients who are disabled, out of town, live in a distant or remote

place, or are institutionalized (Akhtar 2011; Brottman 2012). They can also serve defensive purposes (Gibbs 2011; Lingiardi 2008). Therapists thus need to think through how and with whom the use of technology enhances treatment and how and with whom it may interfere with deeper, more relational work.

Before using any form of cybercommunication, however, therapists need to be informed and thoughtful about the ethical and professional boundaries inherent in the use of this new media, and for which guidelines now exist (Luxton et al. 2011; Mishna et al. 2012; The international society for mental health online 2000). While considering the new challenges social media introduce may seem daunting for those unaccustomed to or inexperienced with the digital world, it is not clear that negotiating those boundaries and privacy issues are any more complex than navigating other common therapeutic issues such as payment, scheduling, emergency access, and phone calls (Brottman 2012). As Brottman (2012) notes:

> Many anxieties surround this question, including the worry that other computer users may obtain access to e-mail conversations, or that text messages may accidently get sent to the wrong person. While such things are certainly possible, they are no more likely than the risk of therapy notes falling into the wrong hands, or voices being overheard in the waiting room. Similar fears, no doubt, surrounded the possibility of speaking to one's analyst on the telephone in the early years of the twentieth century. Although such anxieties may seem absurd today, the telephone was in fact once the locus of all kinds of apprehensions— around loss of hearing, the electric current, and the instrument's erasure of class boundaries (pp. 21–22).

In thinking about the impact and use of technology on therapeutic practice, it is important to distinguish between unfamiliarity and anxiety with the tools and the real strengths and weaknesses that they offer so as to be able to use them in the most effective and ethical ways. That is likely to be an evolving debate in the field and guidelines are likely to become more explicit as therapeutic experiences with this new media grow.

Conclusion

There is little scientific evidence that supports the view that technology, per se, frays social bonds or decisively incubates new conceptions of our selves. While social media certainly alter how people relate in some areas, research suggests that it has not revolutionized the value placed on intimate relationships and people's willingness to pursue such affiliations, nor has it radically eroded a generation's

sense of self (Chen 2011; Hartman 2011; Nadkarni and Hofmann 2012; Subrahmanyan et al. 2004). The argument that technology causes fundamental changes in who we are omits an important other side: people do not simply live passively at the mercy of powerful commercial and technological forces, but play a seminal and purposeful role in fashioning and using digital objects (Boase 2008; Campbell and Russo 2003). After all, humans create technology and decide how to use it. Many of the trends and changes in self, culture, and relationships impacted and perhaps accelerated by technology predate its entry into daily life. Cybertechnology's attraction and rapid growth may in part be due to the fact that it so easily fit into dominant cultural ideas and norms about relationships and communication. Yet there is no doubt that shifts have occurred, in part enabled by digitalization, to which psychotherapy must continue to respond (Essig 2012; Hartman 2011). This includes the democratization of relationships by enhancing connections to larger and more diverse social groups, increased openness to considering the realities of others, and more nimble and less hierarchical exchanges of ideas (Hatfield and Rapson 1993; Jamieson 1998; Wachtel 2008). It also includes new and diverse online forums and opportunities for individuals to explore identities, find new realities, seek meaning, and establish intimate relationships (Essig 2012; Greenfield 2004; Hartman, 2011; Subrahmanyan et al. 2004). Since psychotherapies always develop within a cultural context, they must remain sensitive to these changing norms and adapt expectations, understandings, and techniques accordingly.

The final chapter on technology and ourselves has not yet been written. Rather, our relationship to technology and its impact upon us will continue to evolve. Hopefully, as this occurs, our theories will keep pace. Ideas, theories, technologies, and the way we use them as well as the way we practice psychotherapy will inevitably influence and transform each other, requiring us to alter those theories, ideas, and practices to reflect these new circumstances. Such changes are not lamentable or a sign of decline. Rather, they represent the natural progression of science, culture, and ideas. As Morawski (2001) notes about the spread of anorexia nervosa, "Theory entered practice, altered practice, and left needs for further theorizing" (p. 438).

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