

## SPECIAL ARTICLE

### The Emerging Issue of Digital Empathy

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Empathy can have strong positive effects on patient outcomes, increase patient satisfaction, and reduce malpractice litigation. With modern advances in technology, however, the appropriate expression of empathy in today's age is being threatened, largely as a result of psychological processes that form online disinhibition. The digitization of health care and the corresponding decrease in the expression of empathy may be cause for concern. Because empathy is strongly correlated to positive health outcomes and is an important part of health professions in general, the construct of digital empathy should be considered for integration into health professions curricula.

**Keywords:** communication skills, health communication, pharmacy education

#### INTRODUCTION

The importance of empathy in patient care and in the patient-provider relationship is well documented in the medical literature. As Neuwirth stated, empathy increases both patient satisfaction and compliance and enhances a practitioner's ability to treat patients.<sup>1</sup> In addition, empathy has strong positive effects on patients' health outcomes<sup>2</sup> and reduces the risk of malpractice litigation.<sup>3,4</sup>

As with many other aspects of contemporary culture, rapid adoption of social and mobile technologies has altered society's communication patterns<sup>5</sup> and disrupted the expression of empathy, specifically in digital conversations. Mobile and social media use has transformed when and how individuals interact with others. The ability to instantly share thoughts, feelings, and behaviors with the rest of society via digital channels can occur in mere seconds, often without the empathetic social filter that accompanies traditional communications. Moreover, digital communications are devoid of many of the emotional signals and cues experienced in face-to-face settings, often leading to more impersonal interactions.<sup>6</sup> These changes in modern technology present challenges to the evolving socio-communicative aspects of health care and require an understanding of the emerging construct of "digital empathy." We offer a definition of digital empathy as the "traditional empathic characteristics such as concern and caring for others expressed through computer-mediated communications."

#### DIGITIZATION OF HEALTH CARE

The importance of the digital empathy construct has developed over time as societal communication trends and technology use have intersected with the provision of health care services. According to a national survey of health care and information technology professionals conducted by Intel Corporation, health care delivery in the United States will undergo dramatic changes in the near future with the increase in utilization of technology and telemedicine.<sup>7</sup> Eighty-nine percent of health care executives and IT professionals interviewed via phone expected telemedicine to transform the US health care system in the next decade. Two of every three respondents to the survey stated they used telemedicine services and, of those who did not use telemedicine services at that time, half said they planned to implement the technology within the year.<sup>7</sup>

While telemedicine and other Medicine 2.0<sup>8</sup> services are becoming more popular, research indicates that expression of empathy is reduced in these digital settings. In a crossover study at Gunma University Hospital in Japan, telemedicine consultations via video chat between doctors and patients in two separate rooms communicating through cameras mounted on computer monitors and face-to-face consultations were assessed and compared. Affective behavior patterns, specifically empathy utterances, were less evident in telemedicine consultations.<sup>9</sup> Although only one study, this significant finding suggests a small measure of validity to the anecdotal evidence that expression of empathy is lacking in technology-based settings and warrants an examination and discussion of the issues in a public forum, particularly a conversation about how to appropriately address these concerns.

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## **ONLINE DISINHIBITION EFFECT**

Which personal thoughts and attitudes are communicated to others and the manner in which they are expressed may be different in digital vs traditional face-to-face settings. Some individuals may exhibit unusual acts of compassion in online settings, while others may devolve into sarcasm, harsh language, uncouth criticisms, and even cyber bullying.<sup>10-12</sup> It is not uncommon to read vitriol-filled remarks on social media applications or in the comments section of online news sites. Disrespect and thus a lack of empathetic concern for others is all too evident in contemporary online discussions.<sup>13</sup> In many instances, those unsavory comments are unprovoked and unwarranted.

While there may be other influences, the online disinhibition effect<sup>14</sup> describes several subtle, but powerful underlying factors that contribute to the nature of communication via digital devices. These factors may help explain the sometimes toxic and aggressive nature of online communications.<sup>15</sup> First, the anonymity associated with computer-mediated communication may permit people to possess an alternate online identity and essentially hide behind a nonidentifying pseudonym or username. This form of dissociative anonymity allows people to separate from in-person identity and moral agency, thereby freeing them to express hostility and criticism without any effect to the psyche. Similarly, online users may dissociate those at the other end of the communication by subconsciously viewing them merely as avatars or usernames instead of actual persons.

Second, as online communication can be asynchronous, individuals do not have to manage immediate reactions to online conversations and can remove themselves from the repercussions of online discussions, even avoiding ownership for hostile and intimidating comments. Third, even in a completely nonanonymous environment (ie, computerized medical record, e-mail correspondence, blogs), the nature of online communications is such that individuals are physically invisible to others, permitting them to disregard any type of eye contact or physical reaction of the other person(s). A significant portion of traditional face-to-face communications tends to be nonverbal (eg, body language, tone of voice), and without these cues, online conversations lack an essential element of understanding.<sup>16</sup>

Overt negativity toward others manifested in online communications should not be attributed merely to character flaws. The online disinhibition effect applies to all individuals regardless of ethical and moral character. Even those of high moral judgment and character can subconsciously devolve into a more pernicious state when

they psychologically disconnect their words from their actual being. In essence, the subconscious psychological factors associated with the online disinhibition effect negatively impact the likelihood that empathy will be expressed in digital environments. In fact, a contributor to declining empathy is the “rising prominence of personal technology and media use in everyday life.”<sup>17</sup> Thus, interpersonal dynamics are altered by the use of technology as a communication tool.<sup>17</sup> As the provision of health care services becomes more entwined with a technological world, we must elevate the construct of digital empathy into the collective consciousness of both educators and trainees in the medical community and seek to prepare future health care providers to exhibit empathy in digital venues.

## **TEACHING DIGITAL EMPATHY**

Similar to e-professionalism and electronic health records, the concept of digital empathy is another aspect of a technologically evolving environment that should be addressed within health professions curricula. Because of the growth of computer-mediated communication, the need to make future health care providers aware of digital empathy and teach them how to recognize and avoid harmful online communications is unlikely to recede. From an educational standpoint, one needs to look first at empathy training in general to determine how health professions education might approach issues pertaining to digital empathy. Unfortunately, research by Ahrweiler et al indicated that medical education in general does not promote the development of empathy.<sup>18</sup> Unlike other skills and knowledge-based content, teaching skills from the affective domain is not straightforward and may require creative and focused educational methods.

Although the construct of empathy is multidimensional in nature and difficult to measure, there are effective strategies for teaching empathy that focus specifically on communication skills training,<sup>19</sup> a concept that aligns with other digital communication training. Communication skills training in the form of traditional lectures and small group workshops increases empathy scores for students in all phases of training.<sup>19</sup> If sharpening students’ communication skills leads to an increase in traditional empathy, it may also be an excellent way to address digital empathy.

Self-reflection and reflective writing are also useful methods for addressing empathy in medical education curricula<sup>19</sup> and in developing empathy.<sup>18</sup> In their systematic literature review, Chen and Forbes noted that significant change in student empathy occurred in 100% of the studies in which reflective writing activities were

incorporated.<sup>20</sup> The authors suggested the process of reflective writing should be considered in any curricula, as this approach was successful at developing empathy.<sup>18</sup> Self-reflection activities have been successfully introduced into curricula through a variety of formats, including group peer discussions<sup>21</sup> and mindfulness training.<sup>22</sup>

Because the underlying principles of traditional and digital empathy constructs are the same, both communications training and self-reflection activities could theoretically prompt learners to question and examine their interactions in the online world. This self-examination process may potentially develop heightened online awareness and promote increased digital empathy. A targeted awareness that digital communication is powerful and can often have unintended effects on others is an important element of developing digital empathy. Raising awareness of the importance of digital empathy is the first step in appropriately educating trainees and adequately preparing them for the future of health care in an ever-changing technological world.

Raising awareness alone may not address all issues, however. Several questions still remain, such as whether empathy training specifically addresses the subconscious effects of online disinhibition. These subconscious effects are instrumental and potentially the primary reasons why a general lack of digital empathy is exhibited throughout society as a whole. It is unknown whether traditional empathy training merely applied to digital communications is sufficient. Another question is whether an awareness or understanding of one's online disinhibition is enough to prevent it from occurring or if other psychological interventions are necessary. Moreover, should empathy education incorporate instruction to address the process of online disinhibition? Research is needed to answer these questions. As educators, we should be designing and testing educational models that will increase digital empathy skills of the next generation of health care providers.

## CONCLUSION

Empathy at its core will never change; however, the means by which empathy is expressed is naturally evolving as the world and its forms of communications become increasingly digital. As we continue to adopt technological tools to improve patient communications and outcomes, recognizing and addressing barriers to the expression of digital empathy is important. If trends in technology advancements continue as expected, digital empathy will become an even more critical issue. Efforts to address the emerging issue of digital empathy and its expression should begin now, as relationships remain essential to delivering optimal patient care.<sup>23</sup>

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