

Internet and wellbeing

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ABSTRACT

The Internet has created a unique psychological space. This is a mainly a result of the following factors: 1 The Feeling of anonymity found on many websites; 2. Control over levels of physical exposure; 3. High control over communications; 4. Ease of locating like-minded people; 5. Accessibility and availability at all times and places; 6. Feelings of equality; 7. Fun of web surfing. This psychological environment is one in which the online user feels protected and empowered. This has been shown to help people to bring out the best of themselves, as is demonstrated in many forms of altruism, such as participating in a support group to help people and initiating online volunteering projects. Conversely, however the same empowerment, conferred by the online, can also lead to extremely hostile and vicious behavior, expressed in many different forms from aggressive language, frequently under the protection of anonymity, to terror organizations that use the net to spread their message and organize brutal campaigns of violence. Altogether this creates a startling complexity, with varied influences on the individual, the group and the community. We will demonstrate and discuss the impact of this complexity on four specific areas :
Personality, Relationships, E-therapy and online intergroup contact.

Internet and Wellbeing

You are sitting at the office, reading e-mails, listening to songs from YouTube. Now you've left work, you are using a navigation application to avoid traffic, and back at home you watch a new Netflix series, while participating in a heated discussion via WhatsApp. Wherever you look, the internet plays a crucial part in our lives and has a major influence on us: It effects our work environment, our leisure time and the way we communicate with others. As such, we will claim in this chapter that it also impacts on our psychological processes. The chapter will open by examining the seven unique psychological components of the internet environment. Then, we will move on to describe the way these factors impact on our well-being. This influence will be assessed in four different domains: Personality; Intimate relationships; E□ therapy and online intergroup contact.

The Unique Components of the Internet Environment

There is no dispute that the online world is different from the offline world (Amichai-Hamburger, 2005; 2008; 2012; Hamburger & Ben-Artzi, 2000; Amichai-Hamburger & Hayat, 2013; McKenna, Green & Gleason, 2002). These differences can be summarized into seven factors, each of which has a psychological effect that distinguishes it from the offline world:

Anonymity

Our offline life is full of visual cues that can easily lead to social labels and stereotypes. Offline, people cannot hide, for example, their race, gender or their accent; nor even their social status, as there are numerous social cues, from one's car

key to dress code, that can supply a myriad of pieces of social information. On the online world, these visual and social cues can easily disappear. In a lot of online environments, such as blogs, chats, talkbacks or online gaming, people can decide how much they choose to disclose. Much of this type of anonymous interaction occurs by text (Riordan & Kreuz, 2010), which reduces to a minimum the social and the visual cues. Surprising as it might sound, anonymity on the online world can be beneficial for well-being. First, anonymity helps people to feel protected and confident. Thus, they tend to feel a greater freedom to express themselves and disclose more personal information (Amichai-Hamburger, 2005; Joinson, 2001; Turkle, 1995). Second, this secure feeling may well encourage people to allow themselves to take part in activities or learning environments that they would find much harder to join in the offline world. Thus, anonymity can lead individuals to explore aspects of their identity they would not dare, or feel capable of exploring offline. Moreover, they can also validate these newly – revealed aspects of themselves in the online world (Turkle, 1995). Third, this exploration of their identity might be especially important to people from a group or community, which has a negative stigma. In this case, anonymity is critical as it allows participants safely, to investigate their identity, without any social stigma. Such investigation may result in increasing self-esteem. (Amichai-Hamburger & Hayat, 2013).

We are identified in many of our online activities. For example, many people use Facebook, Instagram, Twitter or LinkedIn accounts, in their own names, in which they disclose information about themselves. People frequently use email addresses that identify them fully, writing blogs with their full signature, and so on. It should be taken into account, however, these forms of identification may be partially or wholly false. As in fact are many profiles found on social network sites, (Bumgarner,

2007; Grimmelmann, 2009). As we will discuss below, even when our given identity is genuine, the online world enables us to have a greater amount of control over the way it will be appear.

Control over physical appearance

In the offline world, people are being constantly appraised according to their physical appearance. People are judged differently, due to their skin color, weight, visible disabilities or degree of attractiveness. For example, the more attractive an individual is perceived, the greater his or her chances of being liked, receiving help and even of being regarded as possessing superior personality traits, (Horai, Naccari, Fattoullah, 1974; Nisbett & Wilson, 1977; Wilson, 1978). People who do not measure up to perceived beauty standards may well internalize these judgments and tend to suffer from a negative body image, (Annis, Cash, Hrabosky, 2004; Schwartz & Brownell, 2004; Taleporos & McCabe, 2002), which, in turn, is related to lower self-esteem (McCaulay, Mintz, & Glenn, 1998) and to eating disorders (Cash & Deagle, 1997). The online world is very different, since on the internet, people are free to expose as much of their physical appearance as they want. Even on social network sites, when a photo is required, participants can choose to represent themselves in any way they choose. Some choose to show themselves as a baby, a pet or another figure, such as a super-hero. Even in a case when people choose to display a photograph of themselves, it is still very different from the offline reality. This is due to the ability to maintain and control their impression management. In fact, people work very hard to create and sustain their online impression through their online photos, even when this impression is actually directed at people whom they already know and may frequently meet offline, (Amichai-Hamburger & Vintizky, 2010; McAndrew and

Jeong, 2012). In terms of physical appearance, people often work to ensure they only produce and upload only their most flattering photos, thus, overweight people will choose to display pictures that make them look thinner (Amichai-Hamburger & Hayat, 2013). Another method is to upload only carefully chosen photos, in which the subjects are happy, good-looking, and taking part in hugely enjoyable activities. (Amichai-Hamburger & Hayat, 2013). In fact, this type of behavior has become norm, so much so, that a study of kids between the ages 11 to 16, carried out in the UK, Italy, and Spain, showed that across all three countries, the youth believed that they must look "perfect" in photos uploaded to social network sites (Mascheroni, Vincent & Jimenez, 2015)

One interesting phenomenon that has emerged from the need to have control over one's physical impression, is the selfie. A Selfie is a photograph of oneself, taken by oneself, usually using a cellphone or webcam, and usually, with the intention of uploading it to a social network site (Weiser, 2015). One of the motivations to take a selfie, instead of a regular photo, is due the ease with which one can control all the photo's environment (Mehdizadeh, 2010; Qiu, Lu, Yang, Qu & Zhu, 2015). In a survey of youth from the USA, UK and China, it was found that between 96%- 100% of the participants take and upload selfies to social network sites. However, all of the participants reported that due to concerns as to their appearance, they take far more selfies than the number they actually upload to such sites (Katz & Crocker, 2015). It seems that one of the great advantages of the selfie, is that it grants the protagonist the ability to perform as many attempts as he or she believes is necessary, under his or her total control, until the "perfect" photo is achieved.

Greater control over interaction

The online world also grants people a high degree of control over their social interactions, far greater than that that exists offline. Offline, during any social interaction, we are obliged to keep focused, and to give an immediate response to the other side, whereas online the social norms are very different. Online, we are not committed immediately to respond to a communication and should a chat reach an uncomfortable topic, it is possible to simply to leave. The feeling that an online interaction can be stopped whenever one chooses, was found to enhance feelings of security (McKenna, Green & Gleason, 2002). Since, online many interactions are asynchronous, this allows for time to think, rewrite, and revise our comments. This delayed communication gives us greater sense of control over the interaction (Riva, 2002). Another aspect of control flows from the location in which the interaction takes place. Online, this is wherever we choose; and being able to interact from a secure place can, even of itself, increase the participant's sense of security (Amichai-Hamburger, 2005).

This improved feeling of security provides great benefits, as was suggested by a study by Ben Ze'ev (2005). Ben Ze'ev examined participants in online versus offline dating situations. His results showed that participants felt less anxious, and were more open to disclosure, when the interaction was online rather than offline. This was because online, participants' felt more secure, since they had the ability to finish the interaction whenever they will chose.

Finding similar others

One of the basic needs in Maslow's (1971) pyramid, is the need to belong. Tajfel and Turner (1986) suggested that being part of a group that shares an individual's own interests can have positive influence on his or her self-esteem. It is highly important

for people to feel validated, and sharing interests and goals with others is a way to achieve such a confirmation. However, the offline world is very limited, we know and interact with a finite number of people who may well not share our points of view, or our interests, particularly if they are unusual. Conversely, the online world, contains infinite numbers of people, with an inestimable number of interests and hobbies. Moreover, it is easy to find those who have similar pursuits, simply by "googling" or searching on social network sites. It is unsurprising that "belonging" was cited a leading motivator for using Facebook (Seidman, 2013) and Instagram (Oh, Lee, Kim, Park, Suh, 2016; Sheldon & Bryant, 2016).

The validation found due to finding similar others on the net has many benefits. One of them is that, people from stigmatized groups can find similar others, and thus be strengthened. For example, in a research by Cserni and Talmud (2015) about LGBT (lesbian, gay, bisexual, and transgender) youths', it was found that locating an online group for LGBT youth helped them to cope more easily with the challenges of validating their sexual identity. The research found that higher participation in LGBT online groups was related to greater social capital. This was found to be true, even when the participation was passive, suggesting that sometimes just knowing that there are similar others can be a powerful enough reinforcement. In another study, McKenna and Bargh (1998) compared people from a stereotyped group and from a non-stereotyped group. They found that those from the stereotyped group were more likely to belong to an online group that was related to their main offline group identity, and that those who actively participated, considered their belonging to the online group as much more important to their identity, as compared with those who actively participated, from a non-stereotyped group. All of this would suggest that the internet can be an intensifying tool for individuals from stigmatized groups. It is

important to note, that such benefits are not just limited to stigmatized groups. Another interesting advantage of the ease of finding similar others, is that by being able to find similar others for most of the components of our identities, it is much more easy for us to explore the many domains of our identity. In this way, the internet may serve as a tool to enrich people's identities (Amichai-Hamburger & Hayat, 2013).

High accessibility

We can surf the internet from everywhere, at any time. Those times in which we had reach the computer are a distant memory, thanks to the appearance of smartphones (Adler & Benbunan-Fich, 2012; Amichai- Hamburger, 2009; Ames, 2013). With smartphones, we feel as we really have got the whole world in our hands, as we can stay connected anytime from anywhere. In fact, in 2013, college students reported that they use smartphones for almost every purpose: learning, working, entertaining and socializing (Ames, 2013). And younger people already perceive their smartphones as "everything" in their own lives, and use them constantly (Turner, 2015). We are so highly connected, that we are used to engage with our smartphone even when we are taking part in other activities (David, Kim, Brickman, Ran & Curtis, 2014). In contrast, offline, we are not always connected, we don't have constant access to all information, and our friends are not omnipresent. Online, we do have unlimited access to information, as well as to social support. For many people, this results in feeling strong and capable, as they feel that they are no longer alone and that their social group is ubiquitously accessible. Therefore, it is of little that higher amount of smartphone use was found to be related to increased feelings of social support, which lead to higher self-esteem and to a decrease in feelings of loneliness and depression (Park & Lee, 2012). Similarly, smartphone apps that are

specifically used for communication with others were found to help build and enhance social capital, which in turn leads to a reduction in the feelings of social isolation (Cho, 2015). All of this may be even more important to people belonging to stereotyped groups. As mentioned earlier, stereotyped groups receive a lot of social capital from finding similar others on the web (Cserni & Talmud, 2015; McKenna & Bargh, 1998). Now, these similar others and the feelings of empowerment they promote are their constant companions, with them, in their pocket.

Fun

The internet is exciting, interactive, colorful, and enjoyable, and so naturally people want more of it (Wiggins, 2007). The enjoyment we receive from the internet is no small part due to the effort and thought on the part of web designers to create a net in which our needs will be fulfilled, and we will continuously like to remain on their websites (Ehmke & Wilson, 2007). The internet environment provides a leisure time that involves entertainment, play and sociability (Nimrod, 2010), and engaging in fun, leisure activities, has a positive connection to subjective well-being (Kuykendall, Tay & Ng, 2015; Newman, Tay & Diener, 2014),

Equality

The internet is deeply rooted in the value of equality, and this value comes from the numerous people who helped to create it, mostly on a voluntary basis. (Amichai-Hamburger, 2008). As the previous six components testify, the internet is an environment that decreases status symbols, is open to anyone, and is accessible from most places. This promotes feelings of equality, and makes people feel that they are

significant and that their opinions count. This emphasis on equality is strongly expressed in the marketing world. Nowadays, it is common to use ordinary people or community experiences, shared in social network sites to create positive attitudes, customer engagement, and higher incomes for a product (Le Roux & Maree, 2016; Mir, 2014). And it is not just marketing: on today's online world, anyone can upload their own unique content, that they have created and it is all valid. From uploading entry to Wikipedia, to playing in a fantasy web game, on the internet, anyone can find a way to express themselves (Amichai-Hamburger & Hayat, 2013). Sometimes, this expression can even upgrade your social status, as happened with the young singer Justin Bieber, who first found fame by uploading his own material to Youtube. (Khrabrov & Cybenko, 2010). This kind of success story induces feelings of equality in many people, suggesting to them that the internet has the ability to make anyone a star.

A brief summation

As mentioned earlier, the internet provides a readily available, protected environment, full of like-minded people world, which meets people's needs, and allows them to explore many aspects of their identity (Turkle, 1995), all of this while they experience excitement and fun. So it is really not surprising that many people to prefer the online world over the offline. (Amichai-Hamburger & Hayat, 2013).

The dark side of the seven factors: When the online environment can hurt:

From the description of the seven components, one can get the impression that the internet is a perfect world, that can only empower individuals and make them happier.

Unfortunately, not all the ways in which the internet impacts on our well-being are positive. Below we briefly contrast some of these disadvantages with the positive aspects of the internet described earlier.

First the anonymity: Anonymity certainly decreases inhibitions (Suler, 2004). This lowering of reticence, can easily lead to non-normative behavior and online anonymity has been clearly shown to be linked to internet harassment and cyberbullying (for example, Ševčíková & Šmahel, 2009; Tsikerdekis, 2012). Moreover, in one study, participants were asked to use a sexual harassment hashtag on twitter, either anonymously or with identifiable details. Results showed that in a subsequent assignment taken offline, those who had shared the anonymous tweet, received sexist messages, that more hostile than those who had shared an identified tweet, (Fox, Cruz, Lee, 2015). This research indicates that the impact of online anonymity can be harsher than expected and extend beyond the online world.

Another disadvantage flows from the high degree of control over physical appearance. One of the major risks attached to this component is an obsessive preoccupation about personal appearance online. One major example is that use of social network sites is related to higher social comparison in terms of appearance (Chae, 2017). This comes to fruition in the gap, that we mentioned earlier, between the amount of selfie taking and actual posting, suggesting that people take many more selfies than they are uploading (Katz & Crocker, 2015). It can also be seen in a new phenomenon of selfie-editing, which is "a virtual makeover for online self-presentation", (Chae, 2017).

Control over the interaction may also have some negative outcomes. The ability to control the interaction makes it perceived as slower, harder and less convincing as

compared to face to face interactions. While evidence suggests that online communication is much more effective for easy and simple tasks, it may not be that valuable when it comes to more complicated assignments, such as difficult learning tasks (An & Frick, 2006), or tasks that require long and collaborative dialogues (Groenke, 2007).

As for finding similar others, while of great benefit when it comes to positive similar others, however, it is also empowering groups such as terror operatives or neo-Nazi cells, that can easily locate and meet up with similar others online. ISIS is an example of terror organization that has become more familiar and more powerful by using online media to distribute its beliefs (Farewell, 2014).

Accessibility is another benefit of the online world that can easily backfire and many people pay a heavy price for their permanent online status. A major part of this is a pressure to multi-task, which stems from the need to be available all the time (Ames, 2013; Oulasvirta, Rattenbury, Ma & Raita, 2012). Evidence suggested that multitasking, and especially multitasking with multimedia, such as with a computer or a smartphone, damages attention span and decreases performance (David et al., 2014; Oulasvirta, Tamminen, Roto & Kuorelahti, 2005; Rosen, Lim, Carrier & Cheever, 2011). Another psychological price is the fear of missing out, often labelled according to its acronym, FOMO. This has been defined as a "pervasive apprehension that others might be having rewarding experiences from which one is absent. FOMO is characterized by the desire to stay continually connected with what others are doing" (Przybylski, Murayama, DeHaan & Gladwell, 2013, p. 1841). This phenomenon, the intense feeling that one is simply missing out on things, relates to the need to be highly connected, and is positively correlated to engagement in social

media activities (Alt, 2015) It can be destructive for the individual, as it is known to lower mood and lessen life satisfaction (Przybylski et al.,2013). Multitasking and fear of missing out both demonstrate that permanent online connectivity can have a negative side. And what about the fun factor? Can there be any "dark sides" when it comes to fun? It seems that there might. The fun factor of the internet is also one of the reasons that people become addicted to it, (Turel & Serenko, 2012; Young, 1998).

In fact, even equality can be problematic. Since, in a world of equality, people have to produce inordinate amounts of content in order to be "unique" and to receive attention. This leads to high levels of disclosure online, and that even these levels need to increase constantly in order to have an effect, since the bar of what is stimulating is continuously being raised. Such self-disclosure online, together with the high use social network sites, has been shown to be linked to higher stress levels and to decreased well-being (Bevan, Gomez & Sparks, 2014; Chen & Lee, 2013).

The unique impact of the internet environment

The first part of this chapter was devoted to demonstrating the qualities that together make the internet into a unique psychological environment. In the second part, we will move on to discuss the way this unique environment may influence a number of domains in our lives: personality, romantic relationships, group contact, and E-therapy.

Personality

Does personality, the basic building block of psychology, relate to our behavior on the Internet? Hamburger and Ben-Artzi (2000) demonstrated that the personality of the

online user is relevant to their online behavior. A later study showed that people with introverted personalities are more likely to use the net for socializing than extroverts (Amichai-Hamburger Wainapel & Fox, 2002). It seems that the protection people feel, provides a compensative environment which allows such people, who frequently find socializing in a face to face challenging, to do so online. These findings were later confirmed in many online environments, such as Wikipedia community, Chat, and Online Fantasy games (for review see Amichai-Hamburger and Hayat, 2013). It is however, important to point out that the internet milieu has undergone major changes since these initial studies. The internet, which started as a mainly anonymous environment has changed dramatically with the advent of social networks, which are becoming increasingly dominant on the net. Amichai-Hamburger Kaplan and Dorpatcheon (2008) showed that social network use gives an advantage to extroverts. Extroverts who used social networks were frequently more active socially on the net than introverts using the social networks. This appears to stem from the fact that extroverts simply moved their offline social network onto the online and so gained a significant numerical advantage. In addition, they replicated the psychological dominance they enjoyed offline, to the online. In line with these studies, Amichai-Hamburger and Vinintzki (2010) found that Extroverts have more social ties and more social interaction on Facebook, than do introverts. However, interestingly, it was found that introverts invest more time in the construction of their profile page than extraverts do. The introverted users tend to supply quantities of information relating to various personal spheres, such as activities, interests, favorites in music, television and literature. It seems that for introverts working on the profile is a sheltered activity, with little of the tension related to real-time interactions.

Thus, although the social networks do tend to strengthen those with an extroverted personality, introverts have found opportunities for compensation,

It is important to stress that although the social networks seem to have become more dominant than the anonymous online environments, the anonymous environments are still powerful and play a significant role in the online lives of many people. People who are shy are still more likely to utilize the anonymous online environments. However, there are also some extroverts who feel that they cannot express themselves freely on identified websites, and so do on anonymous websites. The Internet and especially the anonymous environment seem to serve the introverts well. However, whether this ability to remain anonymous serves the introverts well in the long term, still remains an open question, and longitudinal studies in this area are required to provide answers. Presently, it appears that while the online, especially the anonymous parts, might serve as a compensative environment that will allow introverts to express themselves, and may even help this population to develop their social skills and encourage them to socialize offline, there may be a danger that their online success might preoccupy the introverts and may even be responsible for a weakening in their offline social activities.

The extroversion-introversion personality theory is an important demonstration of the relevance of personality to the Internet. This theory received a lot of interest from researchers, who saw it as being particularly relevant to online behavior. Amichai-Hamburger (2002) suggested that a number of personality theories are also relevant when considering the reasons for online behavior. (For review see Amichai-Hamburger, 2017).

The internet and romantic relationships

A Romantic relationship is based on romantic intimacy, which is defined as positive affect and feelings of commitment towards a person, accompanied by tendencies for self-disclosure from both partners (Laurenceau, Barrett & Pietromonaco, 1998; Moss & Schwebel, 1993; Prager, 1989; Reis & Shaver, 1988). Romantic intimacy has been shown to be very beneficial for humans, it leads to an increase in well-being, (Gable & Reis, 2010), a decrease in negative feelings (Otto, Laurenceau, Siegel & Belcher, 2015), and helps to cope with difficult life events (Manne & Badr, 2008). The influence of the internet in our lives has changed our patterns of romantic intimacy. In one study, that examined the way that the form of interaction influences relationship satisfaction. It was found that within the immediate family, only face-to-face interaction, and not any other type of communication (email, text messages, social network sites, video calls, etc.) is positively related to relationship satisfaction (Goodman-Deane, Mieczakowski, Johnson, Goldhaber & Clarkson, 2016). A more direct examination of the influence of the internet on romantic intimacy, examined 190 new married couples, first during the year of their marriage, and subsequently one year, and two years afterwards. The researchers reported that if one partner was found to be a heavy internet user during the first data collection, this will lead to lower intimacy and less passionate feeling, and to greater conflicts between the partners, as reported in the second and third data collections (Kerkhof, Finkenauer & Muusses, 2011). Other studies that were focused specifically on social networks, showed that the time spent on social networks has a negative effect on romantic relationships (Hand, Thomas, Buboltz, Deemer, & Buyanjargal, 2013). More specifically, Facebook use is negatively related to relationship satisfaction and positively related to jealousy (Elphinston & Noller, 2011), and that higher amount of

Facebook use is even related to breakups and divorce, (Clayton, Nagurney & Smith, 2013). And it is not just about Facebook: greater amounts of Twitter and Instagram use also leads to increased romantic conflict, which leads to breakups and divorce (Clayton, 2014; Ridgway & Clayton, 2016).

Today's pervasive smartphone use has also led to diminished intimacy levels. In this case, when partners were together, each reported that it was the partner's, rather than their own smartphone use, that was negatively connected to intimacy. However, when smartphones are used for shared reasons, smartphone use was not connected to intimacy levels (Amichai-Hamburger & Etgar, 2016).

We would speculate that internet use arouses all these negative feelings due to the unique qualities of the online environment. When using the internet each partner now has their own individual fun place, that is not necessarily shared with the other partner. Moreover, the internet can easily fulfill the need for self-disclosure, as each partner can disclose in front of other people, and so lessening the intimacy which comes from self-disclosure to a partner. They can also find similarities with other people, and those people can provide immediate feelings of comfort and belonging. Moreover, unlike partners, such internet contacts are less likely to say the wrong thing, and differently from any other relationship, this comfort, support and belonging is always accessible, from anywhere, at any time, a demand that any specific individual,, however loving would not be able to accomplish.

Practically, it means that most of what is defined as romantic intimacy can be fulfilled, or at least give a sense that it is fulfilled, on the online world, and all of this without the partner's involvement. Thus, we suggest that it is not the internet use by itself that impacts on romantic intimacy, but the needs that can be accomplished by

the internet, instead of by a romantic partner. Therefore, it is of little wonder that intimacy levels are hurt when the internet is not used for shared purposes (Amichai-Hamburger & Etgar, 2016).

Online group contact

This is a harnessing of the unique components of the internet environment to promote an improvement in intergroup relations. The original group contact theory (Allport, 1954) suggests that in order to decrease prejudice and discrimination, a real positive acquaintance between the two oppositional groups must be formed. Allport stipulated a number of conditions that must be in place in order to make such a meeting effective: First, both groups should feel they have equal status during the contact; Second, they have to agree on a common goal; Third, this goal can be achieved only through the cooperation of the two groups; fourth, both sides should be supported by their own authority or institution.

These conditions are challenging to fulfill. First, it is difficult, as well as costly to organize several meetings between two conflicted groups which may well have issues in even agreeing where to hold the meetings (Amichai-Hamburger, Hasler & Shani-Sherman, 2015). Secondly, face-to-face meetings tend to provoke a lot of anxiety on the part of participants, and such anxiety may well hinder their ability to be patient and cognitively available to the contact (Islam & Hewstone, 1993; Wilder, 1993). As a solution for these challenges, Amichai-Hamburger and McKenna (2006) recommended using the online as a location in which to hold the contact meetings. Online intergroup contact use the unique online environment as an advantage to maintain a contact that meets with all of Allports' conditions. First, it is practical, as the internet is accessible, free to use, and does not demand any physical place in

order to take part in group meetings. Therefore, online meetings are much easier to arrange as compared with face-to-face meetings (Amichai-Hamburger, 2013). Moreover, contrary to face-to-face encounters, this ease of producing the meetings supports the continuity of the contact, as most of the practical barriers that prevented face-to-face meetings are diminished in the online world. Second, as seen earlier, status differences are also reduced in the online world (Amichai-Hamburger & McKenna, 2006; Spears, Postmes, Lea & Wolbert, 2002). It means that naturally, a more equal-status contact will take place via the web, where physical and social cues can be straightforwardly controlled. The need to cooperate towards a superordinate goal can also be fulfilled online by performing a joint online task that is important to both groups (Amichai-Hamburger 2008). Online contact can also raise feelings of control and belonging, which will decrease anxiety from both groups. As shown earlier, this can be achieved through a number of components: First, in online meetings, each participant attends the meeting from their own secure place. In this way, there is both a physical distance between the group members, and the sense of security is much higher compared to face-to-face interactions (Amichai-Hamburger, 2005). Second, the greater degree of control that participants feel during the session may well serve to reduce anxiety and this promotes a secure online contact (Amichai-Hamburger et al., 2015).

In addition to these benefits, that meet Allport's conditions, there are other advantages to the online as a contact environment. The anonymity it provides, for example, can encourage people to participate in a group, without experiencing shame or embarrassment before and during the process. Anonymity is especially important when the rival groups come from an area of violent conflict, and group members afraid to reveal any personal information (Amichai-Hamburger et al., 2015). The ease

of finding similar others can also be a benefit. Finding similarities with other group members, regardless of their group identity, will probably happen spontaneously. And this will encourage them to sustain the dialogue, both before and after the formal contact is over (Amichai- Hamburger et al., 2015). The fact that the online contact takes part on the web, will for some people serve as a factor in making it more fun and exciting. Moreover meeting the outgroup online may also help the intergroup contact indirectly, as it decreases negative feelings, which form the basis of any discrimination (Neuberg & Cottrell, 2002).

Implementation of the online contact theory. It is important to note that the online contact theory is not just a theoretical framework, it has in fact been implemented successfully in several leading intergroup projects. Below we briefly describe two of them: "Dissolving boundaries" is a project that aims to use the online group contact as a basis to bridge the gap between pupils from the Republic of Ireland and Northern Ireland. In this project, small groups of children from Catholic and Protestant schools, each in their own schools, collaborated using online interaction, in order to work together on a long term mutual project. (Amichai- Hamburger, 2015; Austin, Abbott, Mulkeen & Metcalfe, 2003). The results showed that children from both groups experienced higher levels of similarity with the other group, and that each group's understanding of the other group's identity increased (Austin, 2006).

Another project is the "good neighbors" project (McKenna, Samuel-Azran & Sutton-Balaban, 2009). Good neighbors is a blog in which bloggers from all around the Middle East wrote about their experiences living in this area. Visitors to the blogs were encouraged to comment and discuss the articles. In order to preserve the feelings of equality and anonymity, the actual identities of the project -writers and

respondents remained hidden, but in order to maintain feelings of closeness, writers were encouraged to introduce themselves and share some personal attitudes. This platform ran for about 3 years and received about 100 responses per day. Overall, the researchers found that either writing or responding, decreased participants' negative attitudes toward the outgroups. Sadly, during the third year war broke out, and participants' opinions hardened and sometimes seemed to revert to their initial positions, suggesting that this attitude changes are not as robust as we would like to believe (Hasler & Amichai- Hamburger, 2013).

E-therapy

One of the most amazing psychological developments on the net is online therapy. This refers to “a licensed mental health care professional providing mental health services via email, video conferencing, virtual reality technology, chat technology, or any combination of these” (Manhal-Baugus, 2001, p 551). Online therapy has major advantages: In the offline world, the stigma surrounding mental health issues causes many people to feel anxious about starting a course of therapy. In the online world, there is no such fear, there is no danger of bumping into someone you know, on your way in or out of your therapy session. Moreover, for many people the internet is perceived as a safer, more secure environment than the offline world (Amichai-Hamburger and Hayat, 2013 and Hamburger and Ben-Artzi, 2000). The Internet also solves the logistical issues involved in reaching the therapist. This is frequently a concern for people who live in outlying areas or who have issues with mobility, in such cases the possibility of receiving therapy in their own home can be a pivotal factor in their ability to obtain therapy (Rochlen, A. B., Zack, J. S., & Speyer, W.

(2004).). There is also the cost; therapy itself may well be expensive on and offline, but for some, the cost of traveling may make it prohibitively expensive. As well, online therapy may also reduce waiting times and solve the problem of relocation (Wright et al., 2005).

Online therapy has proved successful in treating a variety of problems, ranging from eating disorders, depression, and addictions (e.g., nicotine, alcohol, gambling) to various forms of anxiety that harm a person's functioning by generating tension and unease (Amichai-Hamburger et al. 2014). E-therapy is constantly evolving. Initially, it was a text only concept, but now many E-therapists are using Skype and similar technologies that allow both parties to see and hear one another. Amichai-Hamburger, et al. (2014), suggested some technological directions that in the future, could assist therapists in providing a more comprehensive service. First, sophisticated software that will analyze the therapy session more fully and come up with some directions for the therapist to explore. For example, such software might detect a repetition of metaphors and words used, or of specific body movements made in association with specific words. This might lead in turn to directions that the therapist would be able to explore and examine with the patient. A second suggestion was that, in the future, therapists will be able to utilize applications that will help them to follow and assess the behavior of their patients outside of the therapy sessions, and so help to build a more comprehensive diagnosis of the patient and a greater understanding his or her state. In addition the therapist will be able to utilize technology to provide the patients with tools that can help them cope with their own specific challenges. For example, the utilization of a combination smart watch with pulse measurements and GPS abilities and a smartphone, will be able to record the context in which the patient becomes anxious and nervous. Such a device may well

enable the therapist to work with the patient to assess when certain reactions occur, and this knowledge could be employed in the sessions to further help the patient in finding more healthy reactions to certain stimuli. This ability to continue therapeutic work outside of the confines of session may well lead to much more successful outcomes.

Virtual reality (VR) environments may serve as another tool for the modern therapist to put together a better therapeutic process. VR refers to a "computer generated three dimensional landscape in which we would experience an expansion of our physical and sensory powers (Ryan, p.1) VR CBT refers to cognitive behavior therapy that uses virtual reality technology to help people with a variety of psychological disorders. Amichai-Hamburger et al (2014) suggested that using VR components, patients may be able to revisit and repeat different cognitive and/or behavioral skills learned in different virtual situations. In addition, VR may be used to practice adaptive interpersonal skills. As a component of e-therapy, VR may increase motivation by allowing patients to witness changes in their behavior, emotion, and cognition. Moreover, patients may well experience feelings of empowerment as they observe changes in their behavior and reach their conclusions based on their experiences. For example, patients who suffer from difficulties or anxieties in interpersonal communication may well benefit from an opportunity to enhance their skills through virtual exposure to a social environment, such as a dinner party. Such settings have been studied using VR (e.g. [Pan, Gillies, Barker, Clark, & Slater, 2012](#)). In these VR studies, subjects interacted with virtual characters who were controlled either autonomously or semi-autonomously by confederates. Recent studies have established that participants can be virtually embodied in virtual bodies that are radically different from their own, including a strong sense of gender swapping

(Slater, Spanlang, Sanchez-Vives, & Blanke, 2010). Virtual embodiment was suggested as a tool for reducing erroneous body perception and the treatment of obesity and eating disorders (Riva, 2011), and it has indeed been shown that virtual embodiment can affect individuals' assessment of the size of their belly (Normand, Giannopoulos, Spanlang, & Slater, 2011). All these tools can now be integrated into a much more comprehensive therapeutic intervention

Last word

In its first stages, the psychological impact of the internet, was unclear. We now know that the Internet creates a unique psychological environment which provides many of its users with feeling of protection and empowerment. The impact on us is very complex, with extremes of both positive and negative, and it is especially interesting to study the generation that was born into a world replete with the internet and developed its most basic concepts in the internet era. Research of the internet is challenging since the internet is perpetually changing in all kinds of different directions. One of these amazing changes happening currently, is the integration of virtual reality into the internet – the additional abilities to smell and touch will clearly increase the psychological impact of the Internet and will behoove scholars to carry out in-depth research.

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