A Summary of Cyberpsychology

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In the late 1990s, as internet use began to soar around the globe, a new need emerged for psychologists to evaluate and understand the effects of internet use on human behavior and mental processes. From the time we wake up until we go to bed, the internet has permeated nearly every aspect of our lives. We rely on the internet to work, complete school assignments, interact socially, entertain ourselves, conduct research, learn about our health, receive news, make purchases, pay bills, and so on. Our use and reliance on technology and the internet has had a profound impact on the ways we think, feel, behave, and interact with each other. As one of the newest specialized disciplines in the field of psychology, Cyberpsychology, which has also been referred to as Internet Psychology, seeks to understand the implications of technology and internet use in our lives. In this paper, I will provide an overview of Cyberpsychology explaining what it is, the education required to work as a cyberpsychologist, the kind of employment opportunities one might expect to find, and its major areas of focus.

Long before the advent of the internet, psychologists were already heavily involved in trying to understand the effects of technology on our health and well-being. In 1935, *The Psychology of Radio* was published, detailing topics like radio's influence on social and mental health and the habits and attitudes of listeners (Cantril & Allport, 1935). Albert Bandura's experiments on observational learning in the 1960s detailed how children imitate violent acts seen on television. (Bandura et al., 1963). In the 80s, concerns about video game addictions emerged. Later on, as mobile phones became more popular, their increasing use also became a major topic of psychological research (Ferguson & Faye, 2018). So, by the time computers and the Internet made their way into the lives of now over 62% of the global population

(Datareportal, 2022), the application of psychology towards understanding the many ways in which technology affects our mental states and behavior was well underway.

By the mid-1990s, researchers studying the behaviors of people using the internet were referring to their work as *cyberpsychology*. In 1998, *Cyberpsychology & Behavior* is credited with being the first scientific journal to use the term, and later in 2010, the journal was renamed *Cyberpsychology: Behavior and Social Networking*. Though cyberpsychology does not have its own division, it is a multidisciplinary field of study that falls mostly under the American Psychological Association's Division 46: Society for Media Psychology and Technology. Another journal, *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, was first published in 2007 (Widman, 2018). The International Association of Cyberpsychology, Training, and Rehabilitation is a major association for this niche and there are multiple societies and research groups around the world dedicated to understanding the many ways our psychological well-being and mental processes are influenced by computer and internet use.

Since psychology applied to human-computer interactions is a concern that branches through many disciplines, there are multiple fields of study one could choose to focus on in order to work under the umbrella of cyberpsychology. Besides a concentration in psychology, one could seek degrees in related fields such as computer science, data science, cyber analytics, political science, ergonomics, media studies, criminal justice, information science, sociology, neuroscience, or software engineering and take coursework that could include qualitative and quantitative research, statistics, consumer and media studies, communications, digital behavioral design, or security studies. Those with a bachelor's degree could find work as a computer systems analyst, search marketing strategist, social media marketer, social media manager, user experience designer, game developer, cyber security analyst, or other entry-level work relating to

computers and psychology. Earning a master's degree in psychology or science related to computers or behavior opens up positions that require more in-depth knowledge and training such as intelligence analyst, advertising account executive, corporate consultant, educational program designer, software developer, healthcare technology designer, entertainment industry consultant, or licensed therapist. After earning a Ph.D. or Psy.D., one could work as a professor, research scientist, psychologist with varying titles depending on the focus of study, or engineer. Most cyberpsychologists work at universities, private practices, private firms, social media companies, advertising agencies, corporations, large or small businesses, schools, healthcare facilities, the military, law enforcement, or the government.

Though the field of cyberpsychology is broad, most research is centered on perceptual processes, emotional functioning, behavioral responses, and personality variables. There are five major areas of focus that includes social media use and psychological functioning, online behavior and personality, telepsychology, games and gaming, and applications of virtual reality and artificial intelligence (Ancis, 2020). A large portion of online use is participation in social media. By looking at social media use, cyberpsychologists can gauge if online experiences contribute positively to a person's well-being or if they cause issues like stress, depression, or anxiety. While some studies show the positive effects of social media use which allows users the ability to stay in touch with people they choose to connect with like family, friends, or followers and allows them able to maintain support systems where they can share life events or memories (Crolic et al., 2020), there are known downsides to social media use as well. So by looking at patterns of use, preferred platforms, sociodemographics, media use motives, problematic social use, user self-esteem, as well as positive and negative affect (Schivinski et al., 2020), researchers can get a more clear idea of the benefits but also problems associated with social media use that

affect biological functions, cognitive, psychological, and affective mechanisms, and social functioning (Cataldo et al., 2021).

When people go online, they tend to behave differently than they do in person (The Marketing Society, n.d.). In studies of online behavior and personality, cyberpsychologists look at the behaviors people engage in while they are online as opposed to face to face and how personality characteristics relate to online dating, criminal activity, bullying, social media preferences, or cybersecurity measures. Changes in online versus real world personality can be largely attributed to the online disinhibition effect that explains when people are online they are more likely to self-disclose or act out more intensely because of lowered psychological restraint and reduced behavioral inhibitions which could be due to lack of eye contact, anonymity, distance, lack of perceived boundaries, or minimization of authority (Ancis, 2020). When making comparisons between online and in person self-presentations, researchers might look at the *Big Five Model of Personality* to determine if traits like neuroticism, conscientiousness, emotional stability, openness, extraversion, openness, agreeableness, and conscientiousness contribute to how they behave online.

Telepsychology is the use of technology like the telephone, internet, video, chat, text, or specialized apps to provide therapeutic services. Since services using an online format can be in real time or asynchronous, many people who would not be able to access in-person services can choose from a range of platforms to seek professional psychological help. Though telehealth is useful in that sense, psychologists have to account for the environments people are in when they use telepsychology services to determine if factors like noise, animals, children, other people, work, or other duties will interfere with a patient's ability to meaningfully participate through those platforms. In therapy, psychologists look for non-verbal clues and examine body language

which can be difficult to do online or over the phone. Cyberpsychology research into the efficacy of distance treatment has shown to be of benefit to people with the most common mental health issues (Wiederhold, 2020). Cyberpsychologists also aid in the development of online tools and apps and examine the usefulness of those already available as well. Some apps using a smart phone's sensory values are able to read or predict patient moods, depression levels, cognitive and motivational states, emotions, activities, environmental contexts, or social contexts, which can then be used to evaluate behavior and encourage changes that could improve their mental health (Ancis, 2020).

The study of games and gaming delves into the psychosocial and behavioral impact of gaming and the motivators that drive their use. Besides personal entertainment, gaming is utilized in educational and sometimes health settings. By studying user demographics paired with the context and purpose of the games, cyberpsychologists can gain an understanding of how games and gaming affects the people that play them. Many people play games as a social activity which helps some users find relief from issues like depression, PTSD, or stress. Gaming has been found to improve cognitive functioning (Reynaldo et al., 2021) and improve moods, but there are also problems with gaming addiction, so cyberpsychologists seek to understand the mechanisms and mental processes that drive both helpful and problematic behavior.

Ongoing advances in computer technology and the importance of understanding how people interact with computers have continued to drive cyberpsychology's interest in evaluating the educational, diagnostic, and clinical applications of artificial intelligence and virtual reality which has been a topic of psychological study since the 1980s. The immersive nature of virtual reality puts users into digital environments where they think and respond as if the events were happening in real life while AI incorporates the use of robots or avatars that

replicate human intelligence. For psychology, these can be used for exposure therapy, online self-care, or assessment tools that can help people develop and practice skills needed to deal with health or psychological issues. The use of AI and virtual reality is not without controversy though, so cyberpsychologists remain focused on helping understand the psychological implications of their use.

In conclusion, Cyberpsychology, or Internet Psychology, is not a branch of psychology with strict parameters, though it is considered a specialization. Its broad attention towards technology, computers, and the internet reaches through many fields pulling in researchers that come from many other areas of study. The education required to work in the field as well as the job opportunities available, are as varied as the implications of technological use it seeks to understand. With technology and the internet penetrating more and more of our lives, the five major areas of cyberpsychology provide for a large scope of research that will continue to expand exponentially in the years ahead.

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