

## Research Paper: The Effect of Cell Phones

Obviously as cell phones have evolved and become increasingly versatile people have become ever more dependent on them. They are easy to carry and keep close at hand while being extremely useful for a wide variety of different purposes. People use them for social connectivity by way of calls, texting, emails, internet access and social media. People use them for entertainment such as reading books, listening to music, video streaming and playing games. And people use them for practical purposes such as looking up information, shopping, banking, GPS, finding transportation (Uber and Lyft) and household security. At this point they have encroached on nearly every aspect of our lives. It's no wonder that a lot of people find their cell phone to be indispensable. People have become very attached to cell phones, to the point where they feel they can't be without one.

How do we categorize our dependence on cell phones? Are cell phones simply useful tools and sources of entertainment? Do they serve as vital links to our social connections? Are they an essential element to functioning in the modern world? Or have they come to be an absolutely indispensable extension of ourselves? Part of the answer to this question is determining how this dependence on cell phones develops. Why do we find ourselves spending more and more time using them? What are the factors contributing to, and maintaining this?

Psychology needs to consider this unprecedented connection to technology. Parents are now giving small children cell phones to placate them so they don't whine, cry or misbehave. There is evidence that this may delay the normal course of development. Does having a cell phone, with its constant flow of incoming data and immediate access to resources, affect one's ability to pay attention and concentrate, one's ability to learn and remember information, one's ability to effectively interact with others in real world face-to-face situations? Are cell phones really enhancing our lives or diminishing them? It has been argued that cell phone use adversely affects academic performance and in conjunction with social media has ultimately had the paradoxical effect of creating social isolation for many.

Psychologists and others have adopted a number of different positions on these questions. The research paper assignment is for you to adopt and defend one of these positions. You will need to find and cite relevant scientific research in support of your arguments. You can also use anecdotal accounts from your own observations and experience. You could even perform your own personal experiment, such as going a full day without using your cell phone or other social media connection like a computer, and elaborating on the experience.

Position A: Cell phones really aren't a problem. People spend a lot of time using them simply as a matter of their utility. They provide a quick and easy way to get things done. And once people have accomplished what they need to do, cell phones also provide quick and easy access to entertainment. Without cell phones people would simply be spending more time on computers, video games and watching television. (Note: This position may seem easy to defend, but articles that don't find an effect or a problem seldom get published. So you may have to take the approach of finding flaws in research that indicates cell phones are problematic.)

Position B: Cell phone use is simply a matter of social conformity. As more and more people have cell phones there is more pressure to have one yourself, lest you be that one person that doesn't have a cell phone. People want to belong, to be part of a group. That engenders a strong tendency to conform. Nowadays, it's hard to part of the group if you're not connected to the group. And that means having a cell phone and being available at all times, like everybody else.

Position C: Cell phone use is governed by principles of operant conditioning. They give us information when we need it, messages from friends, fun pictures from social media, the great deals from online shopping and the satisfaction of getting to the next level of that video game. All of these things provide strong behavioral reinforcement leading to continued use. In addition, there are also punishments. There are negative punishments, which usually involve missing out on opportunities. Examples include not getting the invite to that party because you didn't check your email, missing the flash sale at a favorite store because you didn't get the text notice or simply being bored because you don't have your cell phone to watch a video or play a game. More importantly, there are positive punishments producing aversive consequences if you aren't carrying your cell phone and accessible at all times. Examples include getting chastised by family or friends for missing some event because you didn't get the notification or being reprimanded because your boss couldn't contact you to cover another employee's shift or provide some piece of information. And regarding employment, your degree of connectivity could play a role in your being passed over for promotion or even lead to dismissal.

Position D: Taking it one step further, where punishment is involved there is always the desire to avoid punishment. And that is often coupled with actual fear of punishment. The latter depending on the individual's perception of the severity of the punishment. And for some the punishments tied to not having one's cell phone and the connectivity it provides could evoke responses of fear and anxiety when they don't have access to their device. To avoid this, they always have it with them. They never leave it behind, for fear of the consequences. And this is what psychologists are referring to when they discuss cell phone dependence as a phobia. Nomophobia is the term for the fear of being without a mobile device and the connectivity it provides. It is considered an anxiety disorder and there are diagnostic criteria for determining if an individual is affected.

Position E: Finally, the most extreme view of cell phone dependence sees it as actual dependence, as a form of addiction. This view takes the idea of cell phones providing reinforcement and being without one leading to punishment to another level. Simply put, the intense attachment to cell phones that some people have goes way beyond the idea of people liking the rewards they provide to the idea that they need them. And being without one's cell phone results in not simply missing those rewards, but craving them. On this view, the anxiety and discomfort generated when one doesn't have their cell phone are not manifestations of a phobia, they are signs of withdrawal. Our modern understanding of addictions has gone beyond the idea of substance abuse to a number of behaviors that trigger the same reward centers in the brain. So much like a gambling addiction or a shopping addiction, the same principles apply to cell phone addiction.