

An Antarctic Year

An isolated year of Covid is not too different from an isolated year in Antarctica.

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Months without seeing the sun. Repetitive canned, frozen, and dehydrated food. The same faces every day. Almost no privacy.

At the South Pole, the sun sets in late March and won't rise again till late September. It's so cold that airplanes can't fly from February till November. A fifty-person skeleton crew mans the station for those nine months. No one joins them or leaves. The group will venture outside for minutes at a time; in the depths of winter, temperatures hover at -70°F. The Antarcticans won't see their families for nine months. While together, some will become best friends, others will fight; some will thrive, and others will swear to never undergo winter again. Isolation will affect them all.¹

The constricted environment staff faces in Antarctica is similar to life during COVID-19. 50% of Americans are working at home. Many families grew closer after months together.^{2 3} At the same time, others were stuck in precarious homes.⁴

To the general public, this long stretch of social and physical isolation is new territory. Loneliness and grief are now widespread. These new feelings have created a parallel mental health pandemic. In 2019, 11% of Americans surveyed said they dealt with anxiety or depression. In December 2020, 41% of Americans felt down, a historically large number.⁵

¹ Gro Mjeldheim Sandal, Fons J R van deVijver, and Nathan Smith. "Psychological Hibernation in Antarctica." *Frontiers in psychology*. Frontiers Media S.A., November 20, 2018. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6256132/>.

² Alexis Ditkowsky, "How the Pandemic Is Strengthening Fathers' Relationships with Their Children," *Making Caring Common* (Making Caring Common, November 18, 2020), <https://mcc.gse.harvard.edu/reports/how-the-pandemic-is-strengthening-fathers-relationships-with-their-children>.

³ Subhadra Evans et al., "From 'It Has Stopped Our Lives' to 'Spending More Time Together Has Strengthened Bonds': The Varied Experiences of Australian Families During COVID-19," *Frontiers in Psychology*, October 5, 2020, <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.588667/full>.

⁴ Megan L. Evans, K. G. Blumenthal and Others, and N. Dagan and Others, "A Pandemic within a Pandemic - Intimate Partner Violence during Covid-19," *New England Journal of Medicine*, March 3, 2021, <https://www.nejm.org/doi/full/10.1056/NEJMp2024046>.

⁵ Dr. Amit Grover and Dr. Rahn Kennedy Bailey, "Mental Health and Substance Use Disorders in COVID-19 Pandemic," *Addiction Research* 4, no. 1 (2020), <https://doi.org/10.33425/2639-8451.1016>.

For some of these people, any mental health difficulties are foreign. Mental health is more discussed than it has been in the past. However, stigma persists. Many are ashamed for not being able to cope. It's important to know that sadness caused by solitariness has been seen.

Psychologists have studied people living in close quarters before, although in extreme environments. Antarcticans spend over a year in a pod only seeing each other. They're not the only ones; astronauts, members of the armed forces, some seamen, and others also stay in one location for months. The Antarcticans are the most studied, though, due to their number and sheer length of time alone.⁶

Dr. Lawrence Palinkas, a professor at USC, is one leading researcher studying the Antarctic mentality. He's traveled to Antarctica multiple times since the 1980s to study the psychological consequences. He noticed a myriad of behavioral changes in people who spent winter in Antarctica. Once they left, he found that it took a while for Antarcticans to adjust to life outside the continent. Over time, though, the strenuous experience taught them valuable lessons. All these findings are applicable to isolated life during COVID.⁷

"We're dealing with increased social isolation, vulnerability," Dr. Palinkas said on the phone. "I think there's a lot to be learned from the experience in Antarctica."

Being alone has more effects than expected. No one is surprised when not seeing friends or family results in feeling sadder than usual, or when working where living leads to increased nerves. But even Antarcticans who don't consider themselves depressed or anxious behave in unusual ways.

⁶ Sandal, Gro Mjeldheim, Fons J R van de Vijver, and Nathan Smith. "Psychological Hibernation in Antarctica." *Frontiers in psychology*. Frontiers Media S.A., November 20, 2018. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6256132/>.

⁷ Lawrence A. Palinkas, "The Psychology of Isolated and Confined Environments: Understanding Human Behavior in Antarctica.," *American Psychologist* 58, no. 5 (2003): pp. 353-363, <https://doi.org/10.1037/0003-066x.58.5.353>.

“For about five percent of the people who would be isolated, you could see symptoms that were suggestive of a clinical disorder, usually depression, anxiety,” Palinkas explained about Antarctica. For forty to sixty percent of the population, “you would see periods of depression or anxiety, irritability, sleep problems, eating, overeating, under eating...Some people slow down, tend to be more forgetful.”⁸

In other words, half the Antarcticans who winter are affected by months inside. Ex-U.S. Antarctic Program staff Rachel Javorsek agrees. She spent the winter at South Pole Station from 2010-2011 working in the heavy machinery shop. In her view, memory problems affected everyone. Fewer items were built in the heavy machinery shop by the end of winter.

“It would be more than 50% left,” she said in a slow Coloradan cadence. “Somebody's standing at their toolbox kind of zoned out.”

Forgetfulness has a professional and personal dimension. In the cafeteria, the center of social life in Antarctica, scientists and support staff sat shoulder to shoulder for hours talking about themselves. The chatter faded as summer turned to winter. Scientists and contractors alike stared off into the distance. It made sense that relationships grew strained when everyone felt worse than usual. The mental burden experienced by Antarcticans affected relationships with people back home, too. Javorsek explained that even though she was the only one feeling down, her moodiness was enough to strain her friendships.

“I started getting emails from friends, ‘I haven’t heard from you in a month,’” she said.

When she did manage to write, her mind was foggy from prolonged times indoors.

“I’m rereading what I wrote and halfway through, in the middle of a sentence, I start a completely different thought. And I don’t even notice,” she said.⁹

⁸ Interview with Lawrence Palinkas on February 21, 2021.

⁹ Interview with Rachel Javorsek, March 9, 2021.

Yet despite the challenges, she worked to stay close with those at South Pole Station and at home. She knew the importance of reaching out to others.

Research supports her instinct that friendships improve one's mood. In a 2003 study, Dr. Palinkas found that how individuals got along influenced whether they would have any future depressive symptoms.¹⁰

“A crew of 18 people at the South Pole may have been split into different factions or cliques,” he said. “Whereas other years, they may have been just one big happy family.”¹¹

Living space made a difference as well. Antarcticans felt happier in spacious stations, and worse during the dark sundown months.

Social and physical had the greatest impact on wellbeing. Introverts were also happier than extroverts. But no single other personality trait affected a person's ability to cope with isolation. This finding runs counter to the popular conception that melancholiness is related to strength of character.¹²

Dr. Palinkas noted that group harmony aside, arguments are more common in isolation.

“I know I experienced it myself, the hypersensitivity,” he recalled. “Yeah, I see it, particularly with respect to social interactions.”¹³

Rachel Javorsek said when she was at South Pole, fighting seemed normal. Small events became flash points. The world had narrowed to domesticity and survival. She recalled fighting about who cleaned and what food was cooked.

“People were screaming and cussing each other out” sometimes in all staff meetings, she said, marveling at her past self. “We were going crazy, like literally mentally crazy.”¹⁴

¹⁰ Lawrence A. Palinkas, “The Psychology of Isolated and Confined Environments.”

¹¹ Interview with Lawrence Palinkas on February 21, 2021.

¹² Lawrence A. Palinkas, “The Psychology of Isolated and Confined Environments.”

¹³ Interview with Lawrence Palinkas on February 21, 2021.

¹⁴ Interview with Rachel Javorsek, March 9, 2021.

Antarcticans turn to outside assistance to cope through the long winter. Some binge watch TV shows. Others work out religiously. Individuals also drink more alcohol during the Antarctic winter than in the Antarctic summer.¹⁵

People binge drink to ease social bonding, to fill free time, and to lift their mood when stressed. These problems all grow in seclusion. To cut down, one must notice a dependency and realize alcohol affects work and relationships. However, that perspective is scarce when it's impossible to leave a place where everyone is drinking.¹⁶

Heavy drinking is therefore a predictably large part of Antarctic culture. Out there, the entire crew must never get so drunk they cannot respond to emergencies. As a precaution, alcohol sales are capped.¹⁷

Despite the limits, a few Antarcticans become reliant on alcohol.¹⁸ At the end of the Earth, no one can be fired, including people drinking on the job. U.S. Antarctic Program leaders revoke alcohol privileges instead.

Javorsek said she knew someone who found it difficult to accept the station manager's decision to ban them from alcohol. Instead, they tried to convince friends to buy them alcohol. When their friends refused, they stole cooking wine from the kitchen.

"They drank like three boxes of wine. And they went outside to smoke, and they were on night shift and they passed out," she said. Another staff person "looked out the window and saw somebody outside in their big red jacket, but slumped over."

Luckily, the person who lost consciousness recovered.¹⁹

¹⁵ Interview with Lawrence Palinkas on February 21, 2021.

¹⁶ Michael Pollard, "Changes in Adult Alcohol Use and Consequences During the COVID-19 Pandemic in the US," JAMA Network Open (JAMA Network, September 29, 2020), <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2770975>.

¹⁷ Interview with Philip Arndt, February 25, 2021.

¹⁸ Philip Sopher. "How to Survive Winter in Antarctica."

<https://www.theatlantic.com/health/archive/2015/02/how-to-survive-winter-in-antarctica/385509/>

¹⁹ Interview with Rachel Javorsek, March 9, 2021.

Drinking to the point of passing out is an extreme example of passive self-sabotage.²⁰

This harmful behavior seen in Antarctica is now present during COVID-19. Alcohol sales have skyrocketed. Another coping strategy is food; people gained an average of 2 pounds a month while under lockdown orders. Netflix also had a subscriber boom.

Still, no amount of binge watching Netflix will return the world to frequent in person interactions. “Zoom fatigue” is a common complaint, or feelings of grogginess after hours staring at a computer. Days on end inside are shown to make workers more confused and less productive.

Serious mental health problems grew as well. Calls to suicide hotlines jumped by 47% throughout the year. Hospital admissions for mental health reasons increased in 2020. And it can't be forgotten that lockdowns happened because COVID-19 is a deadly disease. About one in ten Americans are grieving a loved one who has died from COVID-19.²¹

Loss is widespread right now. Although herd immunity may be reached by September, uncertainty remains about the post pandemic world. Returning to life in 2019 seems unlikely. Will pandemic-induced depression and anxiety persist into the future?²²

Once again, Antarcticans offer a glimpse at post-isolation life. Leaving the continent wasn't easy. Some felt bewildered and overwhelmed by new faces. Others had difficulty sleeping. After the first initial months, though, the majority had no lingering effects from their time isolated.

²⁰ Michael Pollard, “Changes in Adult Alcohol Use.”

²¹ Subhadra Evans et al., “From ‘It Has Stopped Our Lives.’”

²² Matthew Conlen and Charlie Smart, “When Could the United States Reach Herd Immunity? It's Complicated.,” The New York Times (The New York Times, February 20, 2021), <https://www.nytimes.com/interactive/2021/02/20/us/us-herd-immunity-covid.html>.

In fact, individuals were in a stronger mental position than they were before going to Antarctica. This development is called post traumatic growth. Dr. Palinkas compared Antarcticans who wintered to a control group.

“Because of the stress that they experience, they actually appear to be healthier,” Dr. Palinkas said. For those who left Antarctica, “most people seem to have done quite well.”²³

Dr. Palinkas explained that there are three key characteristics to post traumatic growth. First, when life pauses, people realize what’s important. For example, if someone in isolation learns to love running, they’ll prioritize exercise in the future. Or someone who misses family will value time together later. Second, Antarcticans want to help others more. The last facet is Antarcticans are more confident after leaving. They feel able to handle anything after living at the ends of the Earth for a year.

Therefore, despite the downsides, many are grateful for winter in Antarctica. Christine Smith wintered in Antarctica with Javorsek at the same time and speaks fondly of her time there.

“You figure out how resilient you can be,” she said. “I think you do discover who you are and what you can deal with.”²⁴

While still in Antarctica, contemplating a changed future self is abstract. However, staff attitude does climb about two months before the first plane comes in. And the mood swells when the sun rises in October. Sunlight is a physical reminder that time alone is coming to an end.

In 2010, when Javorsek lived at the South Pole, a storm came in right when the long night had ended. The sky lightened, but the sun remained hidden for two weeks after sunrise. Then one day in November, she was outdoors working on setting up the runway for the first flight into the South Pole after nine months. The sky was cloudy.

²³ Interview with Lawrence Palinkas on February 21, 2021.

²⁴ Interview with Christine Smith on February 26, 2021.

“All of a sudden the clouds parted a little bit, and the sun shone,” she said. “I just was screaming and jumping up and down with elation. It was so exciting to see the sun, it was just amazing.”²⁵

²⁵ Interview with Rachel Javorsek, March 2, 2021.

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