

No wonder isolation's so tiring. All those extra, tiny decisions are taxing our brains

May 1 2020, by Ben Newell



Credit: CC0 Public Domain



Anxiety, depression, loneliness and stress are <u>affecting</u> our sleep patterns and how tired we feel.

But we may be getting tired for another reason. All those tiny decisions we make every day are multiplying and taking their toll.

Is it safe to nip out for milk? Should I download the COVIDSafe app? Is it OK to wear my pyjamas in a Zoom meeting?

All of these kinds of decisions are in addition to the familiar, everyday ones. What shall I have for breakfast? What shall I wear? Do I hassle the kids to brush their teeth?

So what's going on?

We're increasing our cognitive load

One way to think about these extra decisions we're making in isolation is in terms of "cognitive load". We are trying to think about too many things at once, and our brains can only cope with a finite amount of information.

Researchers have been looking into our limited capacity for cognition or attention for decades.

<u>Early research</u> described a "bottleneck" through which information passes. We are forced to attend selectively to a portion of all the information available to our senses at a given time.

These ideas grew into research on "working memory": there are limits on the number of mental actions or operations we can carry out. Think of remembering a phone or bank account number. Most people find it very hard to remember more than a few at once.



And it can affect how we make decisions

To measure the effects of cognitive load on <u>decision</u>-making, researchers vary the amount of information people are given, then look at the effects.

In one <u>study</u>, we asked participants to predict a sequence of simple events (whether a green or red square would appear at the top or bottom of a screen) while keeping track of a stream of numbers between the squares.

Think of this increase in cognitive load as a bit like trying to remember a phone number while compiling your shopping list.

When the cognitive load is not too great, people can successfully "divide and conquer" (by paying attention to one task first).

In our study, participants who had to learn the sequence and monitor the numbers made just as many successful predictions, on average, as those who only had to learn the sequence.

Presumably they divided their attention between keeping track of the simple sequence, and rehearing the numbers.

More and more decisions take their toll

But when tasks become more taxing, <u>decision making</u> can start to deteriorate.

In another <u>study</u>, Swiss researchers used the monitoring task to examine the impact of cognitive load on risky choices. They asked participants to choose between pairs of gambles, such as:



- A) 42% chance of \$14 and 58% chance of \$85, or
- B) 8% chance of \$24 or 92% chance of \$44.

Participants made these choices both with their attention focused solely on the gambles, and, in another part of the experiment, while also keeping track of sequences of letters played to them via headphones.

The key finding was not that increasing cognitive load made people inherently more risk-seeking (tending to choose A) or risk-averse (B), but that it simply made them more inconsistent in their choices. Increased cognitive load made them switch.

It is a bit like choosing the fruit salad over the cake under normal circumstances, but switching to the cake when you are <u>cognitively</u> overloaded.

It is not because a higher cognitive load causes a genuine change in your preference for unhealthy food. Your decisions just get "noisier" or inconsistent when you have more on your mind.

'To do two things at once is to do neither'

This proverbial wisdom (attributed to the Roman slave <u>Publilius Syrus</u>) rings true—with the caveat that we sometimes can do more than one thing if they are familiar, well-practised decisions.

But in the current business-not-as-usual context there are many new decisions we never thought we'd need to make (is it safe to walk in the park when it is busy?).

This unfamiliar territory means we need to take the time to adapt and recognise our cognitive limitations.



Although it might seem as though all those tiny decisions are mounting up, it perhaps isn't just their number. The root cause of this additional cognitive load could be the undercurrent of additional uncertainty surrounding these novel decisions.

For some of us, the pandemic has displaced a bunch of decisions (do I have time to get to the bus stop?). But the ones that have replaced them are tinged with the <u>anxiety</u> surrounding the ultimate cost that we, or <u>family members</u>, might pay if we make the wrong decision.

So, it is no wonder these new decisions are taking their toll.

So what can I do?

Unless you have had ample experience with the situation, or the tasks you are trying to do are simple, then adding load is likely to leader to poorer, inconsistent or "noisier" decisions.

The pandemic has thrown us into highly unfamiliar territory, with a raft of new, emotionally tinged decisions to face.

The simple advice is to recognise this new complexity, and not feel you have to do everything at once. And "divide and conquer" by separating your decisions and giving each one the attention it—and you—deserve.

This article is republished from <u>The Conversation</u> under a Creative Commons license. Read the <u>original article</u>.

Provided by The Conversation

Citation: No wonder isolation's so tiring. All those extra, tiny decisions are taxing our brains (2020, May 1) retrieved 25 April 2024 from https://medicalxpress.com/news/2020-05-isolation-



extra-tiny-decisions-taxing.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.