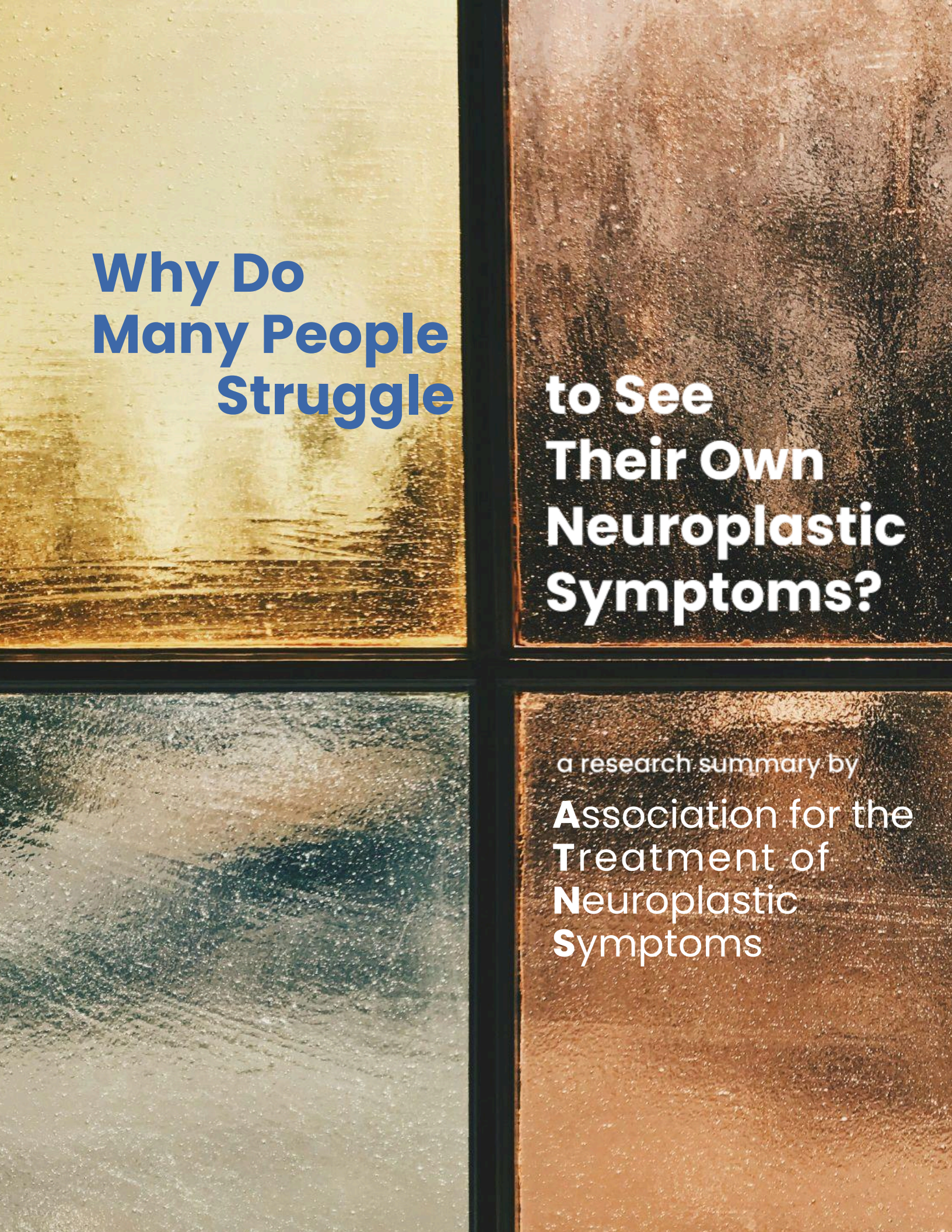

Why Do Many People Struggle to See Their Own Neuroplastic Symptoms?

a research summary by

Association for the **T**reatment of **N**europlastic **S**ymptoms

Table of Contents

About ATNS

The Association for the Treatment of Neuroplastic Symptoms is a 501(c)(3) nonprofit organization with a mission to educate the public, patients, and practitioners about how to diagnose and treat neuroplastic pain and illness. Founded in 2011 and led by volunteer medical and mental health practitioners, researchers, and patient advocates, ATNS provides the information and tools needed to recognize and treat neuroplastic conditions; explains and promotes the latest scientific research; advocates for healthcare policies that support access to quality treatment; and empowers people to advance their own healing.

Citation and Use

This report and the data it presents may be cited as:

> Clarke, D., Gustafson, A., & Goldberg, M. H. (2026). Why Do Many People Struggle to See Their Own Neuroplastic Symptoms? *Association for the Treatment of Neuroplastic Symptoms*. Portland, OR, USA. https://doi.org/10.66323/20260318

A Familiar Story

Recognizing when pain or illness is neuroplastic—stemming from learned neural patterns rather than tissue damage—is a challenge for millions of people. Consider the experience of Samantha Ferris. As an actress, a radio announcer, and now a psychotherapist, she felt confident that she could analyze and understand her own body. Here is her story:

> *"I could have cut 20 years of pain in half* ***if only I had been ready to hear*** *about neuroplastic conditions. My bladder pain and many other symptoms led me from doctor to doctor, with test after test, and treatment after treatment. After years of this, the symptoms only got worse.*
>
> *Then my [general practitioner] of 12 years suggested the pain might not be physical, but "might be in your head," using the words 'stress' and 'trauma'. I was so incensed that I fired him and stormed out. Later someone gave me one of Dr. John Sarno's books on this topic and I threw it across the room. I could not believe my brain could generate this level of real pain.*
>
> *Ultimately, I had thoughts of ending my life. While driving through the mountains, the steep drops to my right looked inviting. But then I thought of Sarno again. In desperation I pulled into a parking lot and listened to his book on my phone. I heard something different and it clicked. By the time I got home, my mental wheels were turning and I started the slow road back to health."*

Samantha's initial resistance is not unusual. Often, when people hear about neuroplastic symptoms and mind-body treatments they struggle to apply this knowledge to themselves. This creates a puzzling situation. If there's a possibility that psychological approaches could resolve chronic suffering, then why wouldn't everyone eagerly explore that option? The answer lies in a web of cognitive biases that social psychology researchers have spent decades documenting.

The Comfort of What We Already Believe

We humans do not approach new information with a blank slate. By the time chronic pain or illness develops, most people have already invested considerable time, money, and mental energy into finding a physical explanation. They've seen specialists, undergone tests, researched conditions online, and rehearsed a coherent narrative about what is wrong with their body. Accepting a neuroplastic explanation would mean acknowledging that this entire framework might be incorrect and that their efforts were misplaced.

This resistance stems from what psychologists call confirmation bias.[1] Once we have formed a belief (e.g., that our pain must have a structural cause) we often filter any new information to support that existing belief. So, a person with chronic back pain who is convinced there must be a structural cause might notice every article and video about herniated discs and surgical repair—which are plentiful due to the giant industries that market physical solutions to back pain. But that same person might blindly scroll past stories about neuroplastic symptoms and mind-body treatments. When they feel worse after physical activity, they might mentally make a note of this as being evidence of a physical cause. But if their symptoms flare up during stressful times, they might assume that it is a coincidence.

Similarly, we all have some degree of "status quo bias," which is a general preference for keeping things as they are rather than making changes.[2] Even when the status quo involves suffering, it can feel safer than venturing into uncharted territory. Many people might think, "Yes, my current approach isn't working, but at least I'm doing something that makes sense to me." The prospect of abandoning familiar treatments (such as physical therapy or medications) for an unfamiliar psychological approach can feel like stepping off a cliff into the unknown.

The Tyranny of the "Normal"

Our opinions and behaviors are also strongly influenced by what we see people around us doing. Imagine being with some friends and someone mentions a new restaurant. To form your opinion about the quality of the food, you probably don't conduct an independent investigation into the restaurant's health inspection records or interview the chef about their training. Instead, you make a quick judgment based on cues like the person's enthusiasm, or that person's reputation as a foodie, or whether others in the group nod in agreement. And if you do look up the restaurant online, you will also make quick judgments based on the quality of the photos, the interior décor, and the prices on the menu.

These mental shortcuts are called *heuristics*.[3] They are quick predictions and assumptions that are based on contextual cues, and they help us navigate a complex world without exhausting our limited cognitive resources by analyzing everything from the ground up.

One of our most powerful heuristics is called "social proof."[4] We assume that if many other people believe or do something, it's probably correct or worthwhile. And often that's true!

---

[1] Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin, 135(*4), 555–588. https://doi.org/10.1037/a0015701

[2] Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty, 1*(1), 7–59. https://doi.org/10.1007/BF00055564

[3] Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, *185*(4157), 1124-1131.

[4] Cialdini, R. B. (1993). *The psychology of persuasion.* New York.

Think about how you choose which line to stand in at the airport, which product to buy when faced with identical options, or which hiking trail to take when you reach a fork. You likely look at what other people are doing or have done. You go straight to the back of the existing line, you buy the product with the highest number of positive reviews, and you take the trail that is most well-trodden. This approach works remarkably well most of the time! Its efficiency and strong record of success is why we have come to rely on this strategy. It allows us to benefit from collective wisdom without reinventing the wheel at every decision point.

But social norms also can lead any of us astray. There are many examples throughout history where even experts and practitioners were steered wrong by following the lead of social norms. Consider, for example, how in the 19th century bacterial infection of the uterus following birth was remarkably common and often fatal. In Vienna in 1847, a physician named Semmelweis demonstrated that the risk of infection could be drastically reduced by requiring healthcare workers to disinfect their hands. His data showed that the maternal mortality rate dropped from 18% (a devastating 1 in 6) to less than 2% (1 in 50), and he published his findings in a 1861 book.

But this conflicted with established medical opinion, and his ideas were widely rejected. Semmelweis could offer no theoretical explanation (germ theory had not been developed) and some doctors were offended at the suggestion they—*the professionals*—could be contributing to maternal infection and death. They mocked him and, in 1865, he allegedly suffered a nervous breakdown and was committed to an asylum. There he was beaten and died two weeks later. It wasn't until decades later that Semmelweis' findings earned widespread acceptance—after the development of the germ theory of disease.

Neuroplastic symptoms face a similar challenge. Most people have never heard the term. They don't know anyone who has successfully treated chronic pain through psychological approaches. When they mention their chronic symptoms to friends and family, they hear familiar responses like "Have you tried this supplement?" "My cousin had surgery for that!" and "You should see a specialist." Most people have never heard anyone they trust say "Have you considered that your nervous system might have *learned* this pain pattern, and that there are evidence-based treatments to *unlearn* it?"

Without any social validation, the neuroplastic explanation for chronic pain and illness feel fringe, "sketchy," or "woo," even though there is substantial scientific evidence supporting it. It is countercultural to suggest that severe, debilitating physical symptoms might have psychological origins and treatments. In a medical system built around physical interventions for physical problems, pursuing a psychological path feels like going against the grain of established wisdom.

The Spiral of Silence

This social dynamic creates what communication researchers call a "spiral of silence."[5] Researchers have found that regarding health issues like smoking[6] and getting a flu vaccine,[7] people's perceptions of what others think about the topic influences their decision to speak up about it. If a specific opinion or behavior seems unpopular, people are more likely to keep it to themselves. This is especially true when the topic seems taboo or controversial, as researchers have found clear instances of this in the issue of abortion.[8]

The same pattern can happen in the context of neuroplastic symptoms. Imagine someone with chronic pain who has privately wondered whether stress or emotions might be contributing to their symptoms. They've noticed that their pain gets worse during difficult periods at work or after arguments with their spouse. But when they float this idea to their doctor, they get a dismissive response. When they mention it to friends, they see confused looks. When they read online forums about their condition, everyone is discussing physical treatments, and nobody mentions mind-body approaches.

This person quickly learns that it is not socially acceptable to voice these ideas to others.[9] So, they stay quiet, which makes the idea seem even more unusual to the next person who might be wondering the same thing. The silence builds on itself. People privately hold opinions they don't express publicly, which reinforces the false perception that nobody thinks this way, which further discourages anyone from speaking up. The result is that neuroplastic approaches seem far less common and accepted than they might actually be if everyone shared their true thoughts.

The Optimism Trap

Humans are also prone to optimism bias.[10] We tend to overestimate the likelihood of positive outcomes and underestimate the likelihood of negative ones.[11] This is why people buy lottery tickets, underestimate how long projects will take, and assume they will not get divorced or get into a car accident after drinking. *A large majority of people* predict that they

---

[5] Noelle-Neumann, E. (1974). The spiral of silence: A theory of public opinion. *Journal of Communication*, *24*(2), 43-51.
[6] Shanahan, J., Scheufele, D., Yang, F., & Hizi, S. (2004). Cultivation and spiral of silence effects: The case of smoking. *Mass Communication & Society*, *7*(4), 413-428.
[7] Kim, H., Han, J. Y., & Seo, Y. (2020). Effects of Facebook comments on attitude toward vaccines: the roles of perceived distributions of public opinion and perceived vaccine efficacy. *Journal of Health Communication*, *25*(2), 159-169.
[8] Salmon, C. T., & Neuwirth, K. (1990). Perceptions of opinion "climates" and willingness to discuss the issue of abortion. *Journalism Quarterly*, *67*(3), 567-577.
[9] Scheufele, D. A. (2008). Spiral of silence theory. *The SAGE Handbook of Public Opinion Research*, 175-183.
[10] Shepperd, J. A., Waters, E. A., Weinstein, N. D., & Klein, W. M. (2015). A primer on unrealistic optimism. *Current Directions in Psychological Science*, *24*(3), 232-237.
[11] Sharot, T. (2011). The optimism bias. *Current Biology*, *21*(23), R941-R945.

will live *longer than the average person*[12] (although it is, of course, a mathematical guarantee that many of them will be wrong).

In the context of chronic symptoms, optimism bias can manifest as the belief that the next doctor, the next test, or the next treatment will finally provide the answer. "Maybe this new specialist will find what everyone else missed." "Maybe that imaging study will show something." "Maybe this procedure will be the one that works." This hope isn't entirely irrational. Sometimes a new approach *does* help. But it can also keep people stuck in a loop of seeking physical solutions while avoiding the possibility that a different framework might be needed. This can delay the difficult work of genuinely reconsidering one's assumptions about the nature of the problem.

As researchers have studied the phenomenon of optimism bias, they found an interesting pattern through a meta-analysis (a study that analyzes all the studies that have been done so far on a given question). This huge study combined the data from 27 individual experiments with over 8,800 total participants.[13] When they analyzed the data, they found that across all the different topics and contexts, people tended to be *most irrationally optimistic* about things that are *socially undesirable*. That is, we might be fairly level-headed when it comes to guessing our chances of getting a flat tire, but we're much more likely to overestimate our good fortune regarding our chances of divorce, getting fired, going broke, or getting sick.

There is strong social value tied to health and, conversely, stigma tied to illness. So it's likely that when people estimate their chances of recovery—either through their current solutions or new ones—many are prone to assume that they will be among the success stories. This positive outlook can be very helpful in many aspects of life, but a downside is that it can sometimes prevent us from changing course toward more productive strategies.

What if We Don't Like the Answer?

Solution aversion is a particularly interesting barrier here. This is our tendency to resist acknowledging a problem when we find the solution unappealing.[14] Researchers have found

[12] Weinstein, N. D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, *39*(5), 806-820.
[13] Sweldens, S., Puntoni, S., Paolacci, G., & Vissers, M. (2014). The bias in the bias: Comparative optimism as a function of event social undesirability. *Organizational Behavior and Human Decision Processes*, *124*(2), 229-244.
[14] Campbell, T. H., & Kay, A. C. (2014). Solution aversion: On the relation between ideology and motivated disbelief. *Journal of Personality and Social Psychology*, *107*(5), 809-824.

that people who are opposed to taking safety precautions regarding floods[15] and COVID-19[16] are then less willing to admit that flooding and COVID-19, respectively, are dangerous risks.

Applied to social contexts, similar patterns also occur. A person might be very resistant to admitting that their romantic relationship is problematic because they know the solutions (difficult conversations, counseling, or ending the relationship) would be unpleasant or challenging to perform.

For neuroplastic symptoms, this solution aversion might have an influence too. If accepting a neuroplastic explanation means you'll need to explore difficult emotions, examine stressful life circumstances, or confront past trauma, part of your mind may simply refuse to go there. The prospect of psychological work (which might involve acknowledging fear, processing grief, or setting boundaries in relationships) can feel overwhelming or threatening. It's easier to keep searching for a physical fix—something external that can be corrected without requiring deep personal change.

This does not necessarily mean people are consciously choosing to suffer rather than doing emotional work. Solution aversion can operate outside of conscious awareness. Someone might genuinely feel certain that their problem is purely physical, never realizing that this certainty is partly motivated by anxiety about what a psychological explanation would demand of them.

The Bias Blind Spot

Perhaps the thorniest aspect of these biases is that people tend to think they don't apply to themselves. This is called the "bias blind spot," a tendency to recognize cognitive biases in others while believing that we ourselves are objective and rational.[17] Above, when you read about confirmation bias or status quo bias or solution aversion, you probably thought of examples from other people's lives. But you're less likely to have identified these patterns in your own thinking.

In fact, researchers find that people who score higher on measures of cognitive abilities and sophisticated thinking suffer from the same problem of the bias blind spot.[18] Further, the

[15] Spaccatini, F., Richetin, J., Riva, P., Pancani, L., Ariccio, S., & Sacchi, S. (2022). Trust in science and solution aversion: Attitudes toward adaptation measures predict flood risk perception. *International Journal of Disaster Risk Reduction*, *76*, 103024.
[16] Chu, H., Yang, J. Z., & Liu, S. (2021). Not my pandemic: Solution aversion and the polarized public perception of COVID-19. *Science Communication*, *43*(4), 508-528.
[17] Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin*, *28*(3), 369-381.
[18] West, R. F., Meserve, R. J., & Stanovich, K. E. (2012). Cognitive sophistication does not attenuate the bias blind spot. *Journal of Personality and Social Psychology*, *103*(3), 506-519.

evidence suggests the effect might be slightly larger for them, perhaps because they are more confident in their current beliefs and in their ability to avoid biases.

This is true in the context of neuroplastic symptoms as well. Many people are familiar with the ideas of confirmation bias, optimism bias, and the influence of social norms. But we're most adept at noticing these phenomena at work in other people. Just *knowing* about them, or having thought about how they apply in other situations, is far from a guarantee that we'll be likely to recognize them and defuse them when we are considering our own approach to handling our chronic pain or illness.

Even when we're skilled at seeing biases, influences, and errors in others, we tend to assume that our own beliefs and judgments are sound, rational, and evidence-based. This makes it especially difficult to recognize when our resistance to neuroplastic explanations might itself be a product of cognitive biases rather than objective evaluation of the evidence.

Moving Beyond Resistance

Given this formidable collection of psychological barriers, how can someone move past them? Social psychology offers some helpful strategies.

One powerful approach is perspective-taking. Research shows that the advice we give to others is often better than what we follow ourselves.[19] Sometimes, we can see other people's situations more clearly because we're not caught up in the emotional investment and cognitive biases that would cloud our judgment.

So if you're struggling to evaluate whether neuroplastic explanations might apply to your symptoms, it can be helpful to imagine a close friend came to you with an identical situation. They've had chronic pain for years, medical tests show nothing that fully explains the severity of symptoms, conventional treatments haven't helped, and they've noticed their symptoms worsen during stress. What would you suggest they explore? What possibilities would you encourage them to consider? The answer you'd give them might reveal the answer you're avoiding for yourself.

This exercise directly combats the bias blind spot by putting you in the position of an outside observer. It creates psychological distance that can make patterns more visible and can reduce the confirmation bias that you would usually apply to yourself. You might notice things about your own situation that you've been unconsciously minimizing or dismissing, such as connections between stress and symptoms, the timing of when pain began, or the life circumstances surrounding your condition.

---

[19] Yaniv, I., & Choshen-Hillel, S. (2012). When guessing what another person would say is better than giving your own opinion: Using perspective-taking to improve advice-taking. *Journal of Experimental Social Psychology*, *48*(5), 1022-1028.

Another crucial strategy is recognizing the power of social norms and actively working to change them. If the silence around neuroplastic symptoms is partly what maintains the stigma and skepticism, then breaking that silence is essential. Talk about these concepts with your doctor, your physical therapist, and your friends and family. Share information about the research. If you've already explored mind-body approaches, then share your experiences. Every conversation helps normalize these ideas and makes it easier for the next person to consider them seriously.[20]

This doesn't mean evangelizing or insisting that everyone's condition is neuroplastic. But it does mean being willing to introduce the possibility in appropriate contexts, to share resources, and to speak openly about the role that the mind and nervous system play in chronic symptoms. As more people do this, the spiral of silence can reverse into a spiral of openness.

It's also worth examining your own solution aversion. Are you avoiding certain explanations because the implied treatment feels too difficult or uncomfortable? There's no shame in this. It is a natural human response. But recognizing it can help you make more conscious choices. You might realize that the emotional work you have been avoiding is actually less daunting than additional years of physical suffering and medical appointments.

The resistance people feel toward neuroplastic explanations isn't a character flaw, and it isn't a sign of ignorance or stubbornness. Instead, it is the predictable result of how human minds work. We defend existing beliefs, rely on social cues, maintain optimism in the face of evidence, and avoid solutions that seem difficult or threatening. These tendencies have served us very well in many contexts, but they can become obstacles when we need to fundamentally reconceptualize our understanding of our own suffering.

Understanding these psychological dynamics doesn't make them disappear, but it does create space for making a conscious choice. When you recognize that your certainty about a physical cause might be confirmation bias or social norms pressure or that your reluctance to try psychological approaches might reflect status quo bias or solution aversion, this is the moment that you gain the ability to step back and question your automatic reactions. That recognition, small as it seems, can be the crack that lets the light in.

---

[20] Schultz, P. W., Dear-Ferguson, S. D., Hernandez, P. R., Bergquist, M., & Hed, A. N. (2025). Changing behavior through normative social influence. In *Research Handbook on Social Influence* (pp. 89-103). Edward Elgar Publishing.

A Closing Note

If you have pain or illness that could be neuroplastic, you can take action. A good starting point is the ATNS website (symptomatic.me), which offers a self-assessment quiz, free educational resources, podcasts, success stories, a directory of trained practitioners, recommended self-help books, and much more. You can also explore other evidence-based programs such as the Pain Psychology Center, the Crushing Doubt website, or apps like Curable, Nervana, Digestible or Freeme which are grounded in the same research discussed in this report. Whichever path you choose, recognizing the barriers described above is itself an important first step that you have already taken.