

The mismatch between modern business contexts and human nature

By Norman Li

An interesting phenomenon that pervades all areas of life may underlie many problems that we encounter in the modern world as humans and in organisations. In this article, I introduce the concept and illustrate how it works.

As my colleagues and I recently described in a paper published in the journal *Current Directions in Psychological Science*, there is a pervasive phenomenon called evolutionary mismatch. The idea is that much of human psychology – our behaviours, thoughts, and feelings – reflects adaptations that have evolved in response to challenges to survival and reproduction recurrently encountered over the last two million years.

Behaviours, thoughts, and feelings (which are largely influenced by genes and thus, heritable) that led our ancestors to solve these challenges were passed down through thousands of generations. As such, human psychology consists of numerous mechanisms that take specific environmental inputs and process them into cognitive, affective, and behavioral outputs that enhance survival or reproduction prospects.

The problem is that we are now living and working in contexts that vastly differ from the natural environments in which our psychological mechanisms evolved. Technology has changed the environment much more quickly than our minds can evolve so that our minds are now processing inputs that they weren't designed to process.

Accordingly, we often get behavioral, cognitive, and affective output that is maladaptive. Additionally, these outputs may not be desirable in modern contexts. At the individual level, mismatch is why, for instance, modern people (but not those from traditional societies) get diabetes – we evolved a sweet tooth to guide us to eat nutritious natural sources of energy (like fruit), but this ancient preference

now leads us to eat things manufactured with unnaturally high levels of sugar (like soda), which our bodies did not evolve to process.

For SMEs and other organisations, the work environment has become vastly different from what existed throughout human evolutionary history. Whereas men traditionally hunted animals and women gathered plants using simple handmade tools, both sexes now work alongside each other in offices and factories using computers to obtain electronically deposited paychecks.

People used to work together with their friends and relatives, focusing somewhat single-mindedly on their activities during daylight hours, but now incessantly multitask in a 24-hour virtual workplace, dealing increasingly with strangers, online entities, globalised competition, and multicultural contexts, all for paychecks electronically deposited at monthly intervals.

Chronic stress and burnout

To be sure, humans are capable of pushing and expanding their boundaries and thriving in new environments. However, this may all come at a price: due to extensive evolutionary mismatch induced by rapid progress, significant problems – in this case, chronic stress and burnout – have arisen or have become more severe because our minds weren't designed for these conditions.

We can also observe the persistence of corruption and nepotism, managers focusing on short-term profit versus what's best for long-term growth, environmental destruction, and the promotion and selection of individuals into leadership positions despite not being the best qualified, to name a few more negative mismatch consequences. Corruption and nepotism exist and are hard to extinguish because humans have evolved to exchange resources with individuals with whom they have a relationship, and to help their rel-

atives. Sustainability issues and a short-term focus partly arise as humans are designed to consume resources at their disposal without concern for the future because, throughout evolutionary history, doing so was adaptive – human tribes were relatively small and if they exhausted an area's resources, they could simply move to another fresh patch.

Leaders are often selected on the basis of being male, tall, and dominant – traits that correlated with being a good hunter or warrior and hence, a good leader in the past, but may be less able to manage the new and varied demands of the modern world.

Can anything be done about this? Yes – take the physical environment for instance. Humans evolved to live and work in environments characterised by grass, trees, water, animals, and other natural elements. In such environments, we perceive an abundance of resources that, for millions of years, we depended on to sustain life and raise families. Even though technology allows us to live and work in crowded environments largely devoid of natural elements, our brains may still be assessing the natural sustainability of our environment.

These assessments turn up short and likely lead us to feel more stressed in modern work contexts. Indeed, various studies show that we feel more relaxed, recover quicker from illness, increase our time horizons, are more creative, feel more satisfied with our jobs, and are more committed to our organisations when we are immersed in or have a view of nature. As such, companies may benefit from increasing employee's exposure to real or perceived natural elements. In fact, farmers, fishermen, and forestry workers are much happier than office workers.

Likewise, there may be many other ways to reduce mismatch and thus, enhance the well-being of employees and functioning of SMEs and other businesses. For instance, leaders are often tasked with leading steeply hier-

archical organisations (where the top individuals may earn up to 1,000 times more than those at the bottom); yet, most social groups were flatter throughout the ancestral past. Accordingly, more distributed versus hierarchical forms of leadership may be more natural and thus, more effective in organisational contexts.

Research focusing on evolutionary mismatch and how to address it in organisational contexts is relatively new, but the emerging message is clear: mismatch is happening and

may underlie many of the problems we face in the modern world. A better understanding of its principles and how it applies in different contexts may provide key insights into numerous mounting difficulties and how we might best address them.

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