Yerkes-Dodson Law - Stress and Performance

In 1908, the psychologists Robert Yerkes and John Dodson studied how quickly dancing mice learned to choose between a black box and a white box when they received electric shocks of different strengths. In one set of tests, learning was fastest with medium shocks, and slower with very weak or very strong ones. Decades later, other writers turned this result into a broad idea about pressure and performance, often drawn as an upside-down U. Today it is best seen as a useful picture, not an exact law, because the original study was small and the evidence in people is mixed. This summary gives general information, not medical advice.

1. Too Little Pressure

At the low end of the curve, pressure and alertness are low. Work feels easy or boring, so our attention drifts. A little challenge, such as a deadline or a clear goal, often wakes us up.

Example: A student has a whole month for an essay and keeps putting it off. She sees too little pressure, so she sets her own deadline for each section. The essay moves forward every week.

At work: Lamees, a marketing analyst, checks the same weekly report every Monday and has started to miss small errors. She recognises too little pressure: the task has become routine. She asks for one new analysis each week, and her attention returns.

2. Too Much Pressure

At the high end of the curve, pressure is too high. Strong stress can narrow our attention and make simple mistakes more likely. Short bursts of pressure are normal, but long-lasting stress can harm health and wellbeing.

Example: A learner driver is so nervous in his test that he forgets to check the mirrors. His instructor names it: too much pressure. With slow breathing and calm practice, he passes the next time.

At work: Two days before a big launch, Lamees has five urgent requests and cannot think clearly. She recognises too much pressure and lists the tasks with her manager. They move two requests to next week, and she can focus again.

3. The Middle Zone

Between the two ends is the top of the curve, where performance is often best. Here we feel alert and engaged, but still in control. The middle zone is different for each person and can change from day to day.

Example: A runner trains best when the target pace is hard but possible. She aims for the middle zone: a goal that stretches her without breaking her. Her times improve steadily.

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At work: Lamees looks for the middle zone in her own week. She plans one challenging project and some routine tasks each day. She feels busy but in control, and her work is accurate.

4. Task Difficulty

Yerkes and Dodson also found that the best level depended on how difficult the task was. For hard tasks, the peak tends to come at a lower level of pressure. For simple tasks, we can often handle more pressure and still do well. So a complex task needs a calmer setting, while a routine task may need more energy.

Example: A chef plates familiar dishes quickly in a busy kitchen. With task difficulty in mind, he tests a new recipe in a quiet hour instead. The new dish turns out well.

At work: Lamees must build a new forecasting model, a hard task for her. Thinking about task difficulty, she books two quiet mornings with no meetings. For routine reports, she keeps her usual fast pace.

5. Use the Idea Wisely

The law is a helpful picture, not a precise formula. It invites one simple question: do we need more challenge, or less pressure? If stress stays high for a long time, it is important to see a doctor or another qualified professional.

Example: Before an exam, a teacher sees that some students are bored and others are anxious. Using the idea wisely, she gives the bored students an extra challenge and the anxious ones a practice test. Both groups feel more ready.

At work: Lamees now asks the question in her weekly meeting with her manager. When she feels bored, they add a challenge; when she feels overloaded, they remove a task. Her work stays steady through busy months.

Conclusion

In summary, the Yerkes-Dodson law suggests that performance often rises with pressure up to a point, and then falls. Too little pressure brings boredom, and too much brings stress and mistakes. Used with care, this simple picture helps us find the right amount of challenge.

Sources

- Yerkes, R. M. and Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. Journal of Comparative Neurology and Psychology, 18, 459-482 – https://psychclassics.yorku.ca/Yerkes/Law/
- Teigen, K. H. (1994). Yerkes-Dodson: A law for all seasons. Theory & Psychology, 4(4), 525-547 (how the law was later reinterpreted) – https://journals.sagepub.com/doi/10.1177/0959354394044004
- Simply Psychology: Yerkes-Dodson Law of Arousal and Performance – https://www.simplypsychology.org/what-is-the-yerkes-dodson-law.html
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