

A Comprehensive Study Into the Impact of External Pressure on High School Students' Cognition and Performance

AlFadhel, Shaikhah (School: American Baccalaureate)

Jamal, Galiah (School: American Baccalaureate)

Have you ever used the excuse “I work better under pressure” or found yourself procrastinating as you believe that working under stress will better your performance? Well, we tested the validity of this common claim, and discovered shocking results. People who believe they work better under pressure think of the urgency and lack of time to do something. This can cause a person to make quick decision that are not being overthought and helps you focus. For some people high stress levels can cause improvement in concentration and performance while others are the opposite. Pressure doesn't always have the same effect on everyone and so for others pressure can be a distracted from their task. It can be the cause of a low grade due to the limited amount of time that restricts them from performing their best. The fear of failure can lead to overthinking the answers and ultimately picking the wrong choice because of the self doubt that appears in that moment. We conducted this experiment by taking them out of their usual classes and gave them a shortened version of an IQ test to group them by IQ range so that the comparison will be fair. We then had them do the Trail Making Test (TMT) – a two- part trail test. We split the total number of students into two: one group faced the TMT with added pressure, while the other group faced it without any added stress factors. After looking at their scores, we broke it down further by comparing each pressured group with its counterpart without pressure, all within the same IQ range. The experiment delves into how high school students handle stress, challenging the common belief that pressure always leads to better performances. Our results show that there's more to it than a simple “better under pressure” excuse.

Awards Won:

