

The Framework of Decision Making

Senior Seminar

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The late Kobe Bryant was a well-known basketball player widely recognized as one of the best in history. He was the first guard picked into the NBA straight out of high school and won five titles. Outside of sports, Bryant was fluent in English and Italian. He occasionally conducted interviews in Spanish and dabbled in French and Mandarin. In many ways, Bryant used sports to bring people together. He was upfront and candid about his thoughts on mental health, mainly how fear and anxiety affect athletes like himself. Bryant begins by saying, “We see this when anxiety causes our stomachs to produce too much acid and give us heartburn, or our intestines to dysregulate and bring on irritable bowel syndrome, or our muscles to seize and result in chronic back pain.” (Ho) These issues are not specific to male athletes, but knowing that those the public regards as elite are not impervious to the whims of mental health provides a much-needed platform for more discussion about a topic too often overlooked. Bryant explains, “Sometimes, even when our physical systems are functioning normally, our brains produce or amplify pain and other troubling sensations either out of fear or to fulfill psychological needs (Ho) men and women experience high-pressure situations, research suggests they differ in how they psychologically process stress, manage adrenaline, and make decisions. By examining gender-based behavioral patterns and applying the OODA Loop decision-making model, we can better understand how each gender performs under pressure and how to support healthier, more effective responses.

What is stress

Stress is a state of mental pressure, strain, or worry brought on by difficult situations that can impact the body and mind. Stress can lead to different problems, like physical and mental health problems, but it can also help with everyday work. Stress can create headaches, stomach issues, impatience, anxiety, restless nights, and increased appetite. Stress can increase the use of drugs and substances, which will worsen health conditions. Stress is a circumstance that can make any mental health conditions like anxiety and sadness way worse, which can call for medical care. (“Stress.”)

Adrenaline is a reaction that happens when too much stress or panic occurs, and it is called "fight or flight." The adrenal glands release the hormone adrenaline, which sets the body to fight or run from danger, hinting at "fight or flight". Although adrenaline helps respond to danger, too much of it can be harmful. Nicotine, like cigarettes, causes the release of adrenaline, which increases blood pressure and heart rate and can result in a heart attack. Since fear is a survival factor, it is one of the leading causes of adrenaline release (“Adrenaline.”)

Stress is usually linked to positive and negative effects. Each person experiences different causes and intensities. There may be burnout, anxiety, or despair. Effective stress management enhances mental health and quality of life by preventing more serious issues like burnout, anxiety, and depression. This study's improved understanding of gender roles and tastes will help workplace and personal networks. This study will enhance our knowledge of gender-specific characteristics by providing fresh insights into strengthening social networks within professional and individual settings.(“Stress.”)

Fear is produced by scaring oneself or performing complex tasks without necessarily being in danger. Excitement, such as in risky sports or behavior, also causes an adrenaline rush.

Fear alone is the same as terror. This could be because of environments with minor problems, such as speaking in public. Mental or physical release of adrenal stress also results in adrenaline release. The nervous system's response gives the stressed body more strength and endurance to deal with stress. There will be a noticeable increase in strength once the adrenaline effect wears off. This is similar to the adrenaline rush when you hear bad news or get reprimanded at work or school. The hormone adrenaline can cause the eyes to widen, which makes everything seem brighter and sharper. During a state of emergency or terrible situation, the brain creates a rapid process that might cause time to slow down or feel slowed because of the intensity of the problem. Blood vessels increase blood flow to the heart, lungs, and muscles. More blood is sent to the different parts of the body that need fighting or running away.

Moreover, adrenaline increases blood glucose, giving the body extra power. Further, it causes rapid breathing and a high heart rate, enabling the lungs to breathe more easily. Under threatening circumstances to an individual's life, this might result in acts of superhuman energy and powers. Certain persons can become "adrenaline junkies" due to getting a short dose of adrenaline as it is delightful. ("Adrenaline.")

Adrenaline makes you feel less pain, so nothing can harm you or cause immediate damage. This tends to result in injuries during the adrenaline rush that are not notable until the rush has passed. Adrenaline rushes can cause trembling or shaking, which can result in anxiety, which can take some time to go away. ("Adrenaline.")

The Difference in Women's and Men's Psychology

In human psychology's vast and complex world, understanding the precise intricacies that define male psychology is critical. Social norms and expectations can define a general definition of manhood. This comprehensive research delves into men's psychology, showing the driving forces behind men's attitudes, behavior, and emotions. Revealing these, bridging gaps,

and promoting mental well-being are all ways to our final goal of giving more understanding and empathy. Because of structural and functional differences, the male brain molds the shape of male psychology. Neuroscientific research results indicate that these differences can affect risk assessment, decision-making, and emotional processing. (Jayanti)

Due to a special combination of hormones that affect brain circuits, men often tend towards a certain way of thinking. Comprehending these patterns can help us better understand male psychology, which provides insight into men's actions, motivations, and emotions. The biological, social, and environmental factors that create men's experiences and responses to life's challenges are at the core of their psychology. (Branden)

Historically, Cultural expectations have encouraged men to take positions emphasizing strength, stoicism, and leadership. Such attributes can be beneficial, yet also introduce stressors that have direct impacts on mental health. Men are biologically affected by the hormone variations, specifically testosterone, needed for assertive, competitive, and risk-taking actions. It's essential to recognize that such inclinations aren't the sole dictators of actions; they also intermingle intensively with environmental and social circumstances.(Branden)

Men are taught to value independence; they also tend to suppress their emotions, and they place a high priority on performance and accomplishment. People may be hesitant to try and seek therapy when they are in emotional distress due to these social standards, especially men, which increases the amount of mental health issues that men who try not to talk about their feelings feel remain untreated. Environmental factors, such as marital difficulties, work-related stress, and financial strain, make the psychological landscape that men face more difficult. (Branden)

Women's psychology examines all versions of women's behavior, emotions, and attitudes. The goal of this understanding of the examination of female psychology is to shed light

on the factors that women's psychological environments create and how to navigate them.

Women's psychology shows women's specific psychological experiences that are only particular to women and stresses the importance of recognizing and addressing their mental health needs.

(Joy)

The female brain is a fascinating and dynamic entity whose organization and operation influence behavior, emotions, and cognition. Changes in hormone levels, particularly estrogen and progesterone, have dramatic influences on the brain's operation, including mood, memory, and reactions to stress. (Richard)

Further, research shows that the female brain may be more cross-hemispherically connected, which could enhance empathy, intuitive thinking, and verbal intelligence.

Understanding the nuances of the female brain is essential to appreciating the richness of women's psychological experience. (Richard)

Social, psychological, and biological factors are significant in female psychology. Cultural norms and societal expectations impact psychological features like one's sense, rather than hormonal changes or emotional states. Social factors like relationships with others, cultural norms, and societal expectations influence women's psychology. These factors alter women's thoughts, behaviors, and emotional reactions to the outside environment. To foster a positive psychological environment, women must be supported and understood as they navigate specific psychological problems such as gender based discrimination and social pressures. (Sharm)

High-pressure Situations

A high-pressure scenario in a controlled setting is defined by urgency, high stakes, and complex tasks with strict deadlines, where failure can have serious repercussions.

Time constraints (Urgency and deadlines) are limited time to make a decision or complete a task. They require immediate action, which is necessary to complete the task. There can be no room for any mistake.

High-stakes (Consequences of Failure or Success) circumstances can have a big impact on people's lives, money, reputation, and security. While success can bring significant benefits like victory and career development, failure can result in severe loss.

Intense Scrutiny (Pressure from Others). Being watched or evaluated by coworkers, clients, superiors, or the general public. There are high expectations because failure might result in humiliation, condemnation, or diminished credibility. It frequently occurs in leadership positions, public speaking, athletics, and media settings.

Complexity and uncertainty make making a decision challenging because of the situation's numerous variables. Random factors, unforeseen events, or fresh information have the power to completely alter a situation. Making a decision requires the capacity to think quickly, adapt, and solve problems.

Limited Resources (Material, Mental, or physical): Too little money, people, time, or equipment to deal with the matter quickly causes more stress, making you prioritize and think strategically. Mental exhaustion (decision fatigue, stress overload) is one example.

Psychological and Emotional Pressure: Fear of failure, humiliation, or unfavorable outcomes. Stress, anxiety, or self-doubt make thinking clearly difficult. Resilience and emotional control are necessary for good performance.

Quick Decision-Making Decisions have to be made right now; no time for protracted study. Relying on training, instinct, or experience is a must. Overthinking raises the danger of "paralysis by analysis."

No Second Chances (High Irreversibility) Mistakes are tough to correct, and decisions cannot be reversed. The initial effort must be accurate or nearly flawless. Environment or Physical Difficulties Harsh weather, dangerous locales, or physical strain increase the challenge. We now need to determine the most effective strategy for handling the pressures of these high-stakes scenarios. The OODA Loop is the best decision-making tool that tackles the issues; it helps determine which gender most closely follows this framework under intense pressure.

OODA LOOP

The OODA Loop is a concept developed by John Boyd that emphasizes making fast, flexible decisions under high-pressure situations or as conditions change. Information observation, analysis, decision-making, and action are all necessary for making wise choices. The process is a loop in which the stage being monitored takes action and then reconsiders the situation. Adaptability is emphasized since it is necessary for success in dynamic environments.(Hashemi-Pour et al).

One of the OODA Loop's main advantages is its ability to move through the process more quickly than its rivals. During the initial orientation phase, choices and knowledge interpretation are made using mental models. (Hashemi-Pour et al).

The OODA Loop can be used in different fields, such as business, sports, military strategy, and individual decision-making. Because it is a continuous procedure, the observation phase should be reviewed once action is taken to make any necessary changes. Adaptability, which is crucial for success in shifting conditions, is also emphasized.(Hashemi-Pour et al).

The OODA Loop is a valuable tool for individuals and organizations seeking to navigate complex situations in various fields. Its key concepts include the importance of adaptability, the use of mental models, and the importance of speed in decision-making. The next step is to see

which gender is better at the OODA LOOP and who can make better decisions under pressure using real-life situations. (Rosie.)

OODA LOOP EXAMPLES

Captain Chesley "Sully" Sullenberger is a former US Air Force pilot who helped an emergency water landing in the Hudson River after a bird strike hit both US Airways Flight 1549 engines. He checked his engines, stabilized the flight path, and decided to land in the river. He helped guide the plane to control and instructed everyone to brace for impact. Sullenberger's strategy was to lower descent while maintaining stability and pitching nose-up for best buoyancy. The aircraft was ditched, and all 155 people survived. (Patrick) His composure under pressure and rapid decision-making saved lives. This case study emphasizes the importance of the OODA Loop in aviation and the need for speedy decision-making..(Hashemi-Pour et al).

The Cuban Missile Crisis began when the Soviet Union put missiles in Cuba in October 1962. President John F. Kennedy (JFK) took action to safeguard American security and stop a nuclear conflict. He noticed the situation, then evaluated to decide, and took action through the OODA Loop. JFK gathered information to understand Communist intentions and considered military options. He chose a naval blockade to prevent the missiles from getting to Cuba, ruling out invasion and airstrikes. JFK kept his composure when negotiating with Khrushchev and announced the blockade to the media. The United States removed its missiles from Turkey in secret, and the Soviet Union evacuated its missiles from Cuba. JFK's use of the OODA Loop, his understanding of awareness and adaptability ("Cuban Missile Crisis ")

On April 17, 2018, a U.S. Navy pilot named Tammie Jo Shultz successfully landed Southwest Airlines Flight 1380 following an engine failure. In a quick descent, she chose to land the plane at the Philadelphia International Airport, putting oxygen masks and cabin pressure

first. By working with air traffic control, she told the crew members to restrain passengers and manage the descent without causing any panic or issues with passengers. All 153 people survived; she maintained cool communications and outperformed several male pilots. (Shults.”)

Millions of people left the war zones in Syria, Iraq, and Afghanistan in 2015, causing Europe to have one of its worst refugee crises since World War II. Angela Merkel needed to balance political, economic, and security factors when deciding whether to manage the situation in her role as Germany's chancellor. She chose to take in the migrants by following the OODA Loop, which was to keep an eye on refugees and how many came with economic effects, and security threats. Merkel overcame the challenge of whether or not to take in more than a million refugees, which would keep Germany at the top economically, with all of Europe. She showed tenacity, flexibility, and moral leadership, making the OODA Loop application effective.

(Philip.)

Conclusion

It takes more than a basic analysis to determine if men or women perform better under pressure than the other sex. Excellent decision-making by both sexes has been demonstrated through real-world use of the OODA Loop (Observe, Orient, Decide, Act). However, the biological and psychological elements, such as stress and adrenaline, that affect decision making in high-stress situations must be taken into account to determine who may be better suited to apply this model successfully.

About decision making, stress is two-edged. On the positive side, it can sharpen instincts, focus, and alertness, and produce the fight-or-flight reflex required in a crisis. Chronic or severe stress, however, yields mental exhaustion, emotional instability, and disorganized thinking. Adrenaline, or the stress or fear hormone, increases energy and speeds up reaction time.

Although it is also responsible for sometimes making sudden judgments or overstated reactions if not controlled.

Stress and adrenaline: sharpened focus and quick, decisive action. He also learned from his training how to control the physiological impacts of stress and transform them into intentional problem-solving. Similarly, by combining aggression and diplomacy, President John F. Kennedy's leadership during the Cuban Missile Crisis established the benchmark for cognitive endurance under extended psychological stress. These are instances of how men, who have high testosterone levels and are conditioned to express themselves, will excel at quick, action-oriented reactions when adrenaline might be helpful.

On the other hand, Angel Merkle's moral and smart leadership during the humanitarian crisis and Tammie Jo Shualtz's composed flying in engine failure show how women respond to stress differently. Research indicates that women handle stress differently, with higher levels of activity in both sides of the brain, which improves emotions, empathy. This makes it possible for women to be controlled and calm in stormy situations, using a more helpful and forward-looking approach to decision making, even when their adrenaline is pumping.

The biological and psychological differences show diversity of strengths rather than superiority of who's better than who. Because adrenaline increases strength and endurance, men may be able to react physically more quickly when urgent action is needed. In long-term stressful situations, women may be better at sustained attention, empathy, and communication skills that can be just as crucial in leadership, diplomacy, and caregiving settings.

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These characteristics show up differently at each level when viewed through the lens of the OODA Loop. Men may work more quickly during the "Act" stage, responding quickly and acting impulsively. To make inclusive, contextual, and balanced decisions, women might take longer in the "Observe" and "Orient" phases. Decision quality and emotional impact are more significant in some situations than decision speed.

To summarize, stress and adrenaline are inevitable in situations with high-pressure situations, but people react differently to them. The OODA Loop is ideal for those who can adapt, manage emotional reactions, and make quick decisions without sacrificing clarity or moral awareness. Men and women have been shown to do so, though on different psychological paths. The goal is not to make one sex superior, but rather to appreciate the strengths that both can offer to high-pressure decision-making. Promoting gender diversity in leadership, aviation, the military, medicine, and other high-priority sectors provides groups with more alternatives for cognitive types, emotional intelligence, and stress management. Finally, the finest decision-makers are not male or female, but those who are capable of clear thinking, quick adaptation, and purposeful leadership in high-pressure situations.

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