

BRAINWAVES

The magazine of the Epsom College Psychology Society

INSIDE

The Psychology of
Horror

Seeing is Believing:
The Science behind
the Dress and Shoes
Debate

Whose who in the
World of
Psychology?

Mood Music -
Understanding the
Effects of Music on
Our Mood

“What’s in a
name?” -
Exploring the Label
Debate

Creative Writing
Competition

Edition focus:

FEAR



CONTENTS

Note from the Editor

A welcome message -
Alicia Edwards (L6th) - 2

Profiles in Psychology

Stanley Milgram -
Ana Damore (Article)(L6th) & Nastya Borisova (Design)(L6th) - 3

Philip Zimbardo -
Callie Tuen Muk (L6th) & Nastya Borisova (Design)(L6th) - 4

William James -
Alicia Edwards (L6th) - 5

The Freud Legacy -
Sophia Machanets (L6th) - 7

Feature Articles

"What's in a name?" Exploring the Labels Debate -
Callie Tuen Muk (L6th) - 11

Mood Music – Understanding the Effect of Music on Our Mood –
Amy Schoonhoven (U6th) - 13

Seeing is Believing: The Science Behind the Dress & Shoes Debates - Alicia Edwards (L6th) -17

A Case Study in Social Change - Smoking - Sophia Machanets (L6th) - 20

Reviews

The Psychology of Horror – Funny Games (2007)
Ada Ucuncu (L6th) - 21

The Menendez Brothers -
Ana Damore (L6th) - 24

The Long Read

Why do teenagers watch horror films given the short and long term effects the films have on them? - Alice Griffiths (U6th) - 25

Creative Writing Challenge

Writing to Scare - 26



Note from the Editor

ALICIA EDWARDS

Have you ever asked yourself why your mind reacts a certain way in specific situations? Then look no further! Brainwaves magazine is here to help demystify the unknowns of your behaviour and avoid those sticky situations.

We'd like to take a moment to thank the many people who have contributed to the creation of this magazine (including you, the reader!). Most notably, the editorial team would like to express its gratitude to the Psychology department: Mrs Britton and Mr Streeting. Your guidance and immense support are no less than motivational and inspires us to become the best psychologist-journalists possible.

Although Brainwaves will look great on our personal statements, that is far from the magazine's primary purpose. As students of a highly disputed "STEM" subject, we are passionate about showcasing the importance of Psychology as an A-level subject. We hope to encourage more students to consider it as part of their academic journey. For the Sixth Formers who decided not to take Psychology, this magazine might just open your eyes to the wonderful world of the human mind and show you what you are missing. And for who are taking Psychology as an A-level subject (congratulations, you've hit the jackpot), hopefully this magazine becomes an entertaining "study-buddy." To summarise, this magazine aims to enlighten you, our reader, to the wonders of Psychology - not just that of the brain, but its wider influence on our society.

The aim of this magazine is to encapsulate the broad subject matter of Psychology although we appreciate this could never be fully achieved in a single magazine edition. Our A-Z guide (or, as we like to call it, the "Asch to Zimbardo" guide) explores provides an introduction to some of the giants of the field, debunks common myths, even includes a little creative writing, and much, much more. We believe Psychology can be a powerful tool in promoting empathy and understanding. In putting together this issue, a theme emerged - the Psychology of Fear. This is an emotion that we *all* feel from time to time so we hope that in reading this magazine you might learn a thing or two about yourself and others. If you feel inspired to contribute or dive deeper into the fascinating field of Psychology, we'd love to hear from you. Join the Brainwaves team by emailing sebastian.streeting@epsomcollege.org.uk.

Thank you for reading, and enjoy exploring this microcosm of the captivating world of Psychology with us!

ARTICLE: ANA
DAMORE
DESIGN: NASTYA
BORISOVA

STANLEY MILGRAM [1933 – 1984]

STANLEY MILGRAM IS BEST KNOWN FOR HIS STUDY ON OBEDIENCE TO AUTHORITY KNOWN AS 'MILGRAMS EXPERIMENT (1963)'.

- MILGRAM BEGAN HIS **SOCIAL PSYCHOLOGY** COURSE AT HARVARD IN 1954 AND GOT HIS PHD IN 1960.
- MILGRAM WAS INTRIGUED BY THE EVENTS OF THE HOLOCAUST AND DECIDED TO CONDUCT A STUDY ON OBEDIENCE.

THIS STUDY SHOWED THAT TWO THIRDS OF PARTICIPANTS CONTINUED TO THE HIGHEST LEVEL OF **450 volts**

THIS EXPERIMENT BECAME **ONE OF THE BEST** SOCIAL PSYCHOLOGY STUDIES OF THE 20TH CENTURY.

NEVERTHELESS, THE STUDY HAS BEEN CRITICISED FOR HAVING MANY **ETHICAL ISSUES** SUCH AS THE PARTICIPANTS HAVE BEEN DEEMED TO HAVE EXPERIENCED PSYCHOLOGICAL HARM HOWEVER.

MILGRAM ARGUES THAT HE DEBRIEFED ALL HIS PARTICIPANTS AND ONLY 2% REGRETTED BEING PART OF THE STUDY

HE CONDUCTED OTHER INNOVATIVE EXPERIMENTS SUCH AS THE:

- **SMALL-WORLD** EXPERIMENT
- **LOST LETTER** EXPERIMENT
- **ANTI-SOCIAL** BEHAVIOUR EXPERIMENT

THE **SMALL-WORLD** EXPERIMENT SHOWED THAT ANY TWO RANDOM PEOPLE IN THE US ARE LINKED BY A CHAIN OF (ON AVERAGE) SIX STEPS WHICH INTRODUCED THE EXPRESSION '**SIX DEGREES OF SEPARATION**'.

MILGRAM ALSO CREATED A CONCEPT CALLED **CYRANOIDS** WHICH ARE 'PEOPLE WHO DO NOT SPEAK THOUGHTS ORIGINATING IN THEIR OWN CENTRAL NERVOUS SYSTEM: RATHER THE WORDS THEY SPEAK ORIGINATED IN THE MIND OF ANOTHER PERSON WHO TRANSMITS THESE WORDS TO THE CYRANOID BY RADIO TRANSMISSION'.

FUN FACT:

HE WAS IN THE SAME CLASS AS ZIMBARDO (WHO DID THE STANFORD PRISON EXPERIMENT)



PHILIP ZIMBARDO

MARCH 23, 1933
- OCTOBER 14,
2024

THE STANFORD PRISON EXPERIMENT

CONDUCTED IN THE BASEMENT OF
STANFORD UNIVERSITY IN **1971**.
24 MALE COLLEGE STUDENTS RANDOMLY
ASSIGNED ROLE OF "GUARD" OR
"PRISONER" IN MOCK PRISON.

HE WAS AN AMERICAN
PSYCHOLOGIST,
PROFESSOR AT
STANFORD UNIVERSITY

INITIALLY
STATED TO
LAST 2
WEEKS, BUT
TERMINATED
AFTER **6 DAYS**
BECAUSE OF
EXTREME
REACTIONS
AND
BEHAVIOUR OF
PARTICIPANTS.

GUARDS:
CRUEL,
SADISTIC
BEHAVIOUR
TOWARD
PRISONERS



ELECTED
PRESIDENT
OF AMERICAN
PSYCHOLOGICAL
ASSOCIATION
IN 2002

KNOWN
FOR HIS
1971 STANFORD
PRISON
EXPERIMENT,
WHICH
WAS LATER
CRITICISED
SEVERELY
FOR ETHICAL
AND SCIENTIFIC
REASONS

PRISONERS: SUBDUED,
DEPRESSED

APPLICATION FOR ABU GHRAIB
PRISON ANALYSIS

REVEALED HOW PEOPLE WILL READILY
CONFORM TO **SOCIAL ROLES**

SIGNIFICANCE OF SITUATIONAL FACTORS AND POWER
DYNAMICS IN SHAPING PARTICIPANTS' BEHAVIOUR

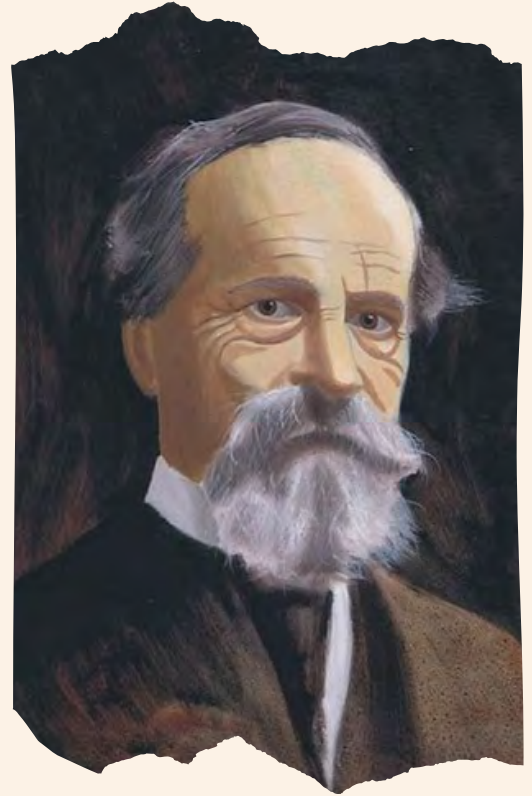
Profiles in Psychology

A Profile of William James

ALICIA EDWARDS

Where and when is William James from?

William James (1842-1910) was born in New York City. Coming from a highly intellectual family, he was educated in Europe and the United States. Although James was originally interested in painting, James switched to science and completed his medical degree at Harvard Medical School in 1869.



What area did he work in?

Known as the “Father of American Psychology,” James saw Psychology as the conscience of the mental life believing that consciousness is what makes mental life possible. He was a leading figure in the philosophical movement of Pragmatism and a founder of the psychological movement of Functionalism, focusing on how mental activities help individuals adapt to their environment. He also gained notability from his involvement in the Psychologist’s Fallacy, the (fictitious) Brain Usage Theory, and James’s Theory of the Self.

What are James’ major ideas/contributions to Psychology?

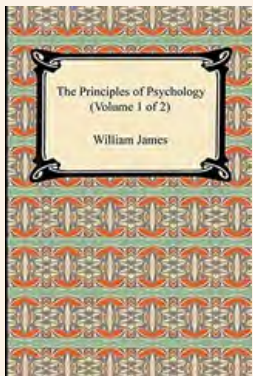
James developed Functionalism, which focusses on the purpose of the mind, influenced by Darwin’s theory of evolution. Functionalism emphasises how mental processes help individuals adapt to their environment, opposing Wundt’s structuralist approach which suggests that the goal of Psychology is to study the structure of the mind and consciousness. He also co-developed the James-Lange Theory of Emotion, proposing that emotions are caused by our interpretations of physiological reactions to events. He emphasised consciousness as a continuum, which would have massive implications for the development of Psychology as a science.

How do William James' ideas affect us today?

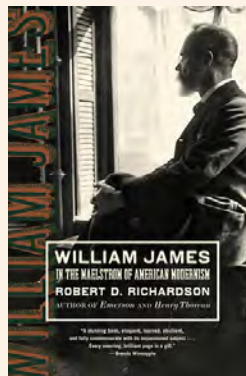
James' ideas continue to shape our understanding of human emotions, thought processes, and identity. His theories on consciousness, emotion, the self, habit, and the interconnectedness of the nervous system provide foundational insights into both Philosophy and Psychology. His pragmatism encourages us to understand ourselves better and use our minds to navigate and positively contribute to society.

Where should I look if I want to find out more?

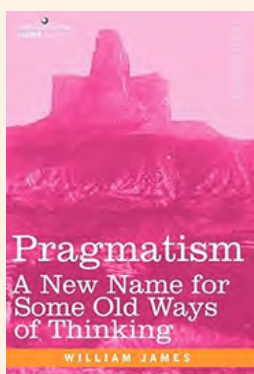
Reading some of William James' works would be an effective way to find out more about his vital role in the foundations of Psychology as a modern science, such as:



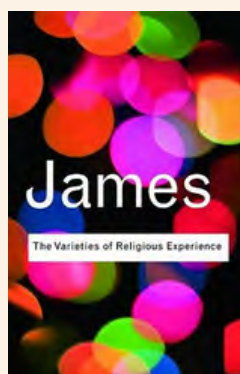
The Principles of Psychology



Robert Richardson's biography. *William James: In the Maelstrom of American Modernism*



Pragmatism: A New Name for Some Old Ways of Thinking



For finding out about his role as a philosopher, you should read *The Varieties of Religious Experience*

Profiles in Psychology

The Freud Legacy

SOPHIA MACHANETS



The Freud Legacy: Two Minds, One Family, Enormous Impact

When the name “Freud” is mentioned images of a bearded man asking about dreams might spring to mind.

Sigmund Freud, the father of Psychoanalysis, revolutionized our understanding of the human psyche.

For those of you who don’t know what Psychoanalysis is – it is an approach in Psychology that explores how unconscious thoughts, feelings, and memories influence behaviour. But did you know his youngest daughter, Anna Freud, also left a significant mark on Psychology? Together, their achievements created a legacy that continues to shape Psychology today.

Sigmund Freud: The Visionary of the Unconscious

Sigmund Freud dared to ask, “What if we don’t even understand ourselves and our mind?”; His ground-breaking theory of the unconscious mind proposed that much of our behaviour is driven by desires, fears, and memories hidden beneath the surface. He introduced us to concepts of the id, ego, and superego - three different aspects of our personality locked in a constant psychological battle.

Freud’s most famous technique, Psychoanalysis, encouraged patients to speak freely about their thoughts, dreams, and childhood memories. Through this “talking cure”, he believed he could unearth repressed emotions and conflicts. While some of his theories, such as the Oedipus Complex, are controversial today, Freud’s bold ideas paved the way for modern Psychology by shifting the focus from observable behaviour to the inner workings of the mind.

Anna Freud: The Advocate for the Vulnerable

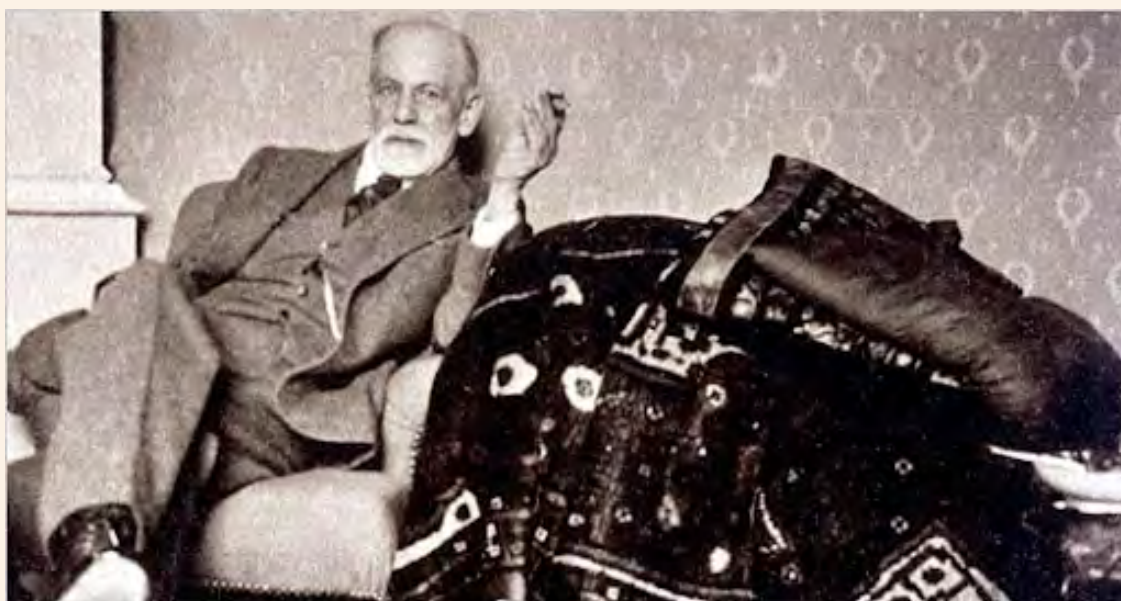
While Sigmund explored the unconscious, Anna Freud focused on protecting it, especially in children. As a pioneer in Child Psychology, she extended her father's work in Psychoanalysis to develop treatments for young minds. Anna highlighted the importance of understanding a child's environment, relationships, and unique developmental stages.

Her contributions to defence mechanisms - unconscious strategies we use to protect ourselves from anxiety stress, or uncomfortable feelings - helped in understanding concepts like repression, denial, and projection. But Anna's true passion was helping children deal with trauma, especially during World War II, by also navigating family instability. She believed in creating safe spaces where children could express themselves and heal.

Two Sides of the Same Coin

Sigmund and Anna Freud showed how Psychoanalysis can be applied in different ways: Sigmund explored the adult mind, while Anna focused on helping children. Their work reminds us that Psychology is not just about theories, but about understanding and improving lives.

Think you're immune to Freud's influence? Just wait until your next dream...



The Freud Quiz: Discover Your Inner Dynamics

Curious about what's happening beneath the surface of your mind?

Sigmund Freud believed our thoughts, feelings, and actions are influenced by hidden forces. Take this mini test to explore your id, ego, and superego dynamics, as well as your defence mechanisms.

Disclaimer:

This quiz is for entertainment and educational purposes only, based on Freud's theories of the id, ego, and superego. It is not a scientific or diagnostic tool and should not be used to draw conclusions about personality or mental health.

Instructions: For each question, choose the option that resonates with you the most. Tally up your points at the end to reveal your results.

1. You've been craving your favourite dessert all week, but your friend unexpectedly eats the last slice. How do you react?

- a) Get upset and take it personally—they knew you wanted it! (1 point)
- b) Calmly acknowledge your disappointment but let it go. (2 points)
- c) Pretend you didn't want it anyway, even though you feel frustrated. (3 points)

2. You're preparing for an important exam but are tempted to binge-watch your favourite show. What do you do?

- a) Watch the show—it's more fun than studying. (1 point)
- b) Study first, then reward yourself with one episode. (2 points)
- c) Push the urge aside completely and focus only on studying. (3 points)

3. You make a mistake at work, and someone points it out in front of others. What's your initial thought?

- a) "Why are they embarrassing me? They must have it out for me!" (1 point)
- b) "I messed up—let's fix it and move on." (2 points)
- c) "It's not that big of a deal; mistakes happen to everyone." (3 points)

4. You're offered a leadership role in a school project, but it comes with more work. How do you feel?

- a) Excited! This is a great opportunity to show what I can do. (1 point)
- b) A little nervous, but I'll think it over before deciding. (2 points)
- c) Worried about the extra pressure, but I'll take it on to prove I can handle it. (3 points)

5. You're having a disagreement with a close friend. What's your first reaction?

- a) Get defensive and blame them for everything. (1 point)
- b) Try to understand their point of view and find a compromise. (2 points)
- c) Immediately apologize, even if you're not entirely sure you're wrong. (3 points)

Results: What Drives You?

5–8 Points: Id Dominant

Freud would say your id—the part of your psyche focused on instinct and desire—is steering the wheel. You're impulsive, passionate, and crave immediate gratification.

While it's great to follow your heart, don't forget to balance your impulses with rational thinking.

9–12 Points: Balanced Ego

Your ego, the rational mediator, is in control. You're skilled at balancing your inner desires (id) with your moral compass (superego).

Freud might applaud your ability to stay grounded while navigating life's challenges.

13–15 Points: Superego Strong

Your superego—the voice of reason and morality—dominates. You value structure, responsibility, and doing what's "right," sometimes at the expense of your own needs.

Freud might encourage you to embrace your instincts a bit more.

"What's in a name?"

Exploring the Labels Debate

CALLIE TUEN MUK

Overview of Mental Health Labels

Mental health labels are terms used to diagnose and categorize mental health conditions based on symptoms, behaviours, and other criteria.

These labels help professionals identify, understand and communicate about different mental health issues.

Benefits of Mental Health Labels

-Facilitating Communication and Understanding

Labels provide a common language for individuals, healthcare providers, and researchers to discuss and understand mental health conditions. This clarity can lead to better communication, support, and treatment outcomes.

-Access to Targeted Treatment and Support Services

Having a specific mental health label can guide individuals towards appropriate treatment options and support services tailored to their needs. It can help in accessing resources and interventions that are most effective for their condition.

Drawbacks of Mental Health Labels

-Labeling and Stereotyping

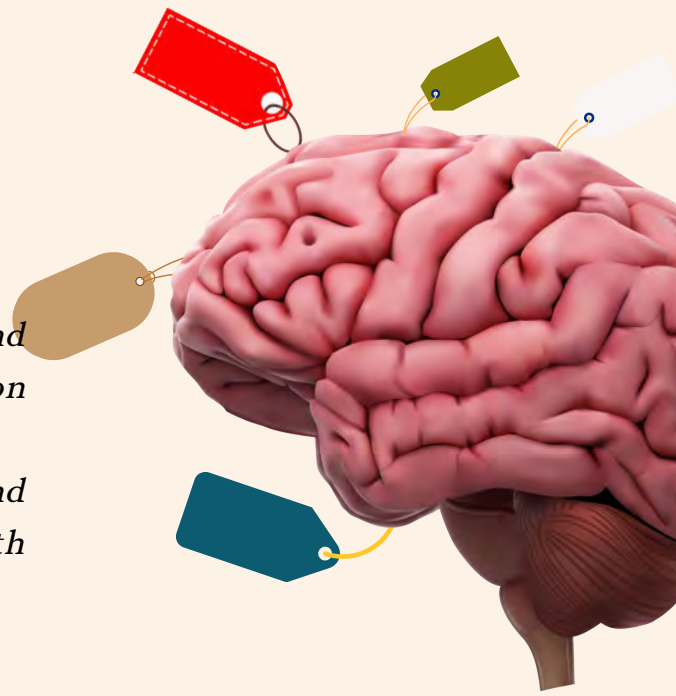
Labels can sometimes oversimplify complex mental health experiences and lead to stereotyping or generalizations. Individuals may feel reduced to their diagnosis, overlooking the uniqueness of their journey and personality.

-Social Stigma and Discrimination

Mental health labels can contribute to social stigma and discrimination, affecting how individuals are perceived and treated by others. This stigma may discourage individuals from seeking help or disclosing their mental health concerns and can influence how individuals are perceived by society.

-Impact of Labeling on Self-Perception

Being labeled with a mental health condition can impact an individual's self-perception and identity. It may lead to feelings of shame, self-doubt, or a sense of being defined by their diagnosis.



Empowerment and Identity Through Labels

Embracing mental health labels can also lead to empowerment and a sense of identity. Let's explore how labels can be reclaimed for self-definition and how they can foster communities of support.

-Reclaiming Labels for Self-Definition

Rather than letting labels define them, individuals can reclaim these terms to shape their self-perception. By owning their experiences and identities, people can empower themselves and break free from the constraints of societal expectations.

-Building Communities Around Shared Labels

Shared labels can be a catalyst for building supportive communities. Connecting with others who share similar experiences can reduce feelings of isolation and foster a sense of belonging. These communities offer valuable support networks for navigating mental health challenges.

Strategies for Navigating Mental Health Labels in Society

Navigating mental health labels in society requires understanding the complexity of these terms and advocating for person-centered approaches. Strategies for promoting a more inclusive and compassionate discourse around mental health include:

-Educating Others About the Complexity of Labels

Educating society about the nuances of mental health labels is essential for fostering empathy and understanding. By unpacking the complexity of these terms, we can challenge stereotypes and promote a more inclusive dialogue around mental well-being.

-Advocating for Person-Centered Approaches to Mental Health

Rather than reducing individuals to their labels, advocating for person-centered approaches prioritizes the unique needs and preferences of each person. By shifting the focus from labels to the individual behind them, we can create more compassionate and effective mental health support systems.

Conclusions

In conclusion, mental health labels serve as both a tool for understanding and a potential source of harm within the realm of mental well-being. While they can facilitate access to appropriate treatment and support, they also have the power to perpetuate stigma and limit individuals' self-perception. By recognizing the complexities of mental health labels and advocating for person-centered approaches, we can work towards a more inclusive and empowering mental health landscape where individuals are seen beyond their labels.

Mood Music – Understanding the Effect of Music on Our Mood

AMY SCHOONHOVEN

Picture this: you're having a rough day, and suddenly, your favourite upbeat song comes on the radio. Instantly, your mood lifts, your stress passes, and you feel a newly found sense of energy. Coincidence? Research suggests not... Music has an incredible ability to influence our emotions, with scientific studies proving that it can calm anxiety, boost happiness, and even help us manage stress.

The Science Behind Music and Emotion

At the heart of music's impact on mood lies its effect on the brain. When we listen to music, our auditory cortex processes the sound, while the limbic system—responsible for emotions—interprets its meaning. Researchers have discovered that dopamine, a "feel-good" neurotransmitter, floods the brain during enjoyable musical experiences. A landmark study by Salimpoor et al. (2011) demonstrated that listening to music we love triggers dopamine release, giving us feelings of euphoria like those produced by food or even love.

Additionally, the structure of music plays a role in evoking specific emotions. Songs with fast tempos and major keys often inspire happiness and energy, while slow tempos and minor keys evoke feelings of sadness or introspection. Peretz et al. (1998) found that changes in tempo and pitch activate distinct emotional responses, underscoring music's power to shape our feelings.

How Music Enhances Mood

Stress Relief: Music is a proven stress reliever. Soothing tunes can lower cortisol levels, the hormone associated with stress, helping to calm the mind and body. A review by Chanda and Levitin (2013) highlighted music's role in reducing stress and improving overall well-being. For instance, classical or meditative music often promotes relaxation, making it a go-to choice for those looking to unwind.

Boosting Motivation: Upbeat music has the power to energize and motivate, making it a staple for workouts and productivity. In a study by Terry et al. (2012), participants who exercised with motivational music showed improved performance and endurance. Songs with strong rhythms and positive lyrics can encourage us to push through challenges, whether it's a tough gym session or a long day at work.

Therapeutic Applications

Music therapy has emerged as an effective tool for treating mental health conditions. Research by Hanser and Thompson (1994) found that elderly patients experiencing depression saw significant mood improvements after engaging in music therapy sessions. Whether it's listening to uplifting songs or actively creating music, therapy taps into music's unique ability to heal.

The Personal Side of Music

While music universally impacts mood, individual experiences vary greatly. Personal preferences, cultural background, and even memories associated with certain songs influence how we respond. For instance, North and Hargreaves (2008) explored how familiar music often evokes stronger emotional reactions, as it connects to individual experiences and nostalgia.

Creating custom playlists tailored to specific moods can also be a powerful tool for emotional regulation. Feeling down? A “happy playlist” filled with upbeat tracks can shift your mindset. Need to relax? A calming mix can help reduce tension. Apps like Spotify have imbedded this concept throughout their app, offering mood-based playlists to help users curate their emotional soundtrack.

The Challenges of Music’s Emotional Power

However, music isn’t always uplifting. Sometimes, songs associated with past relationships or tough times can trigger sadness or melancholy. Janata et al. (2007) studied the link between music and autobiographical memory, finding that familiar tunes can evoke vivid, sometimes painful memories.

Additionally, excessive exposure to loud or intense music can lead to overstimulation, potentially increasing stress instead of alleviating it. Striking a balance is key to experience the emotional benefits of music.

Broader Implications

Beyond personal enjoyment, music influences mood on a societal level. It enhances experiences in film, marketing, and social events, subtly guiding our emotions.

A suspenseful movie scene, for instance, owes much of its tension to a foreboding soundtrack. Ever watched a horror movie? Maybe watch the suspense scenes again without the sound, you may be surprised at how less intense it really is! Similarly, music allows the space for a social connection, acting as a universal language that unites people across cultures. Koelsch et al. (2010) explored how shared musical experiences can strengthen social bonds, emphasizing music’s role in community and belonging. If you’re heading to Spain this summer, turn up those Spanish songs and you may be able to communicate more clearly when you get there!

Music is far more than entertainment—it’s a powerful emotional tool that can transform how we feel. From lifting our spirits and calming our nerves to helping us connect with others, its effects are intense and varied. By understanding the science behind music’s impact and embracing its potential, we can use it to enhance our mental well-being and enrich our lives. So next time you’re feeling down, put on your favourite song—you might be surprised at the difference it makes.

How to implement Music into your life, to change your mood

1. Build a Mood-Boosting Playlist

·Purpose: Create a playlist of songs that make you feel happy, energized, or calm, depending on your needs.

·How:

- Include upbeat songs to combat feelings of sadness or lethargy.
- Choose tracks with soothing tempos and peaceful melodies to ease anxiety or stress.
- Experiment with instrumental music or nature sounds if lyrics feel overwhelming.

Tip: Apps like Spotify and YouTube often suggest mood-based playlists, which can serve as a starting point.

2. Use Music for Mindfulness and Relaxation

·Purpose: Calm the mind and reduce anxiety with meditative or ambient music.

·How:

- Listen to slow, steady rhythms (e.g., classical, or lo-fi music) while practicing deep breathing.
- Pair relaxing tracks with mindfulness exercises, such as body scans or guided meditation.
- Try music specifically designed for relaxation, such as binaural beats or soundscapes.

Example: Research by Chanda & Levitin (2013) found that slow-tempo music helps reduce cortisol, the stress hormone.

3. Tap Into Nostalgia

·Purpose: Evoke positive memories and emotions by revisiting songs from your past.

·How:

- Create a playlist of songs that remind you of happy times, such as childhood, vacations, or celebrations.
- Use these songs to counteract negative thought patterns by focusing on positive memories.

·Note: Be cautious if certain songs are tied to painful experiences, as they may evoke sadness instead of comfort.

4. Experiment with New Genres

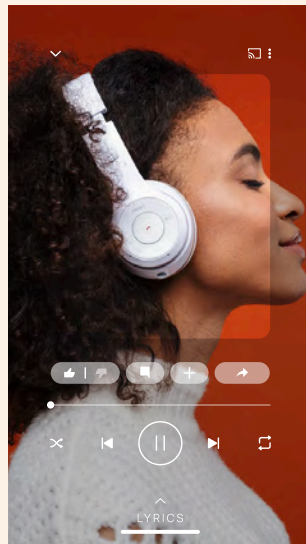
·Purpose: Discover fresh emotional responses by stepping outside your musical comfort zone.

·How:

- Explore genres like jazz, world music, or electronic beats to find new emotional connections.
- Platforms like Pandora or Spotify can help introduce you to unfamiliar artists and styles.

·Why: Novelty can stimulate the brain, offering a sense of excitement or distraction from persistent worries.





References

- Salimpoor, V. N., et al. (2011). "Anatomically distinct dopamine release during anticipation and experience of peak emotion to music." *Nature Neuroscience*.
- Chanda, M. L., & Levitin, D. J. (2013). "The neurochemistry of music." *Trends in Cognitive Sciences*.
- Peretz, I., et al. (1998). "The amygdala, the auditory cortex, and emotional memory for music." *NeuroPsychology*.
- Terry, P. C., et al. (2012). "Effects of music in exercise performance." *Psychology of Sport and Exercise*.
- Hanser, S. B., & Thompson, L. W. (1994). "Effects of a music therapy strategy on depressed older adults." *Journal of Gerontology*.
- North, A. C., & Hargreaves, D. J. (2008). "The social and applied Psychology of music." Oxford University Press.
- Janata, P., et al. (2007). "Music evokes autobiographical memories." *Cognitive, Affective, & Behavioural Neuroscience*.
- Koelsch, S., et al. (2010). "The social side of music: How music creates social bonds." *Trends in Cognitive Sciences*.

Seeing is Believing:

The Science Behind the Dress and Shoes Debates

ALICIA EDWARDS



The year is 2015. The internet is sent into a frenzy by a viral optical illusion: the now-infamous debate over the colour of a dress. Was it blue and black, or white and gold? Similarly, the discussion on the colour of shoes - whether grey and teal or pink and white - became another point of contention among internet users. While these debates provided entertainment, they also sparked a broader discussion on the relationship between perception and cognitive function. Some individuals attributed these differences to “left-brain” or “right-brain” dominance. But does the science support these claims? In short, no.

This article will explore why these illusions occur, debunk the myth of brain hemisphere dominance, and explain what pitted the planet against each other.

The Brain Dominance Theory: An Overview

The idea that people are “left-brained” or “right-brained” has persisted for decades, suggesting that individuals who are “left-brained” are logical and analytical, while those who are “right-brained” are creative and intuitive. Roger W. Sperry’s Split-Brain experiments found that the left hemisphere controls speech, language, and comprehension, recognises words, letters, and numbers, and does analysis and calculations. The right hemisphere controls creativity, perception, and spatial understanding and recognises faces, places, and objects.

While this division does exist, it is an oversimplification. Nielsen et al. (2013) found that the two hemispheres do not function in isolation. Instead, they collaborate in a highly integrated manner, processing information simultaneously and sharing cognitive tasks. As such, the notion of “left-brained” and “right-brained” individuals as separate, distinct types is a pseudoscience that has manifested itself in mainstream pop Psychology.

So, why is this myth still so popular? It is catchy, easy to understand, and fits nicely into our desire to categorise ourselves. But neuroscience has moved on, and so should we.

What's Really Happening with the Dress and Shoes?

These illusions are not evidence of brain dominance but rather of how our brains interpret visual information, particularly under ambiguous conditions

1. The Dress Debate

In 2015, the original image of the dress captured the world's attention. Some people saw it as white and gold; others swore it was blue and black. The dress is revealingly blue and black, but how your brain interprets the image depends on how your brain processes light and shadow.

·If your brain assumes the dress is in shadow, it subtracts blue light, making you see white and gold.

·If your brain interprets the dress as being in direct light, it perceives the truthful blue and black colours in richer and darker hues.

2. The Shoes Debate

Similarly, the grey-and-teal/pink-and-white shoe illusion plays similar trickery. This time, the colours you see depend on your perception of light sources and colour balance.

·People who see pink and white may interpret the image as lit by cooler (bluish) light

·Those who see blue and grey might assume warmer (yellowish) lighting is at play

Debunking the Brain Dominance Explanation

The left-brain vs. right-brain hypothesis frequently explained the differences in perception between those who saw the dress as white and gold versus blue and black, and similarly for the shoes. Here, seeing the dress as white and gold means you are a more creative, right-brained person; while seeing blue-and-black perceivers means you are a logical, left-brained thinker.

However, this explanation lacks empirical support. Instead, individual differences in visual processing sufficiently explain these optical illusions rather than a dichotomy of cognitive styles associated with brain hemispheres.

If brain dominance were a legitimate factor in these perceptual differences, we would expect a more consistent pattern in how people perceive ambiguous images. Instead, individuals' perceptions can change depending on lighting conditions, previous visual experiences, and even momentary fluctuations in how the brain processes colour. This variability undermines the idea that hemisphere dominance can neatly categorise perceptual differences.

Why This Matters

The persistence of the left-brain/right-brain myth detracts from a more nuanced understanding of cognitive tasks. It simplifies the complexity of the brain's functions and ignores the wealth of research that shows how the two hemispheres cooperate in all mental processes. Moreover, it leads to an incomplete understanding of human perception, especially optical illusions, and visual phenomena.

Instead of focusing on an antiquated and oversimplified theory of brain lateralisation, we should embrace a more integrated approach to understanding the brain. Perception, particularly in cases like the dress and shoe illusions, is influenced by numerous factors: lighting, personal experience, context, and even the specific neural mechanisms involved in interpreting colour and light.

Conclusion

While we may never agree on the dress (or the shoes), one thing is clear: the brain is far more complex than a simple left-right dichotomy. The unmistakable “magic” lies in how our brains interpret ambiguous visual information—adapting to context, lighting, and individual experiences. Next time someone suggests you are “right brained” because you see the dress as white and gold, you can confidently explain that it is not about brain dominance but how our brains process visual information in unique and sometimes unpredictable ways.

And if you still do not see the dress as blue and black? That is perfectly fine. The existent debate is not about colours or hemispheres—it is about whether we have finally moved past this argument (probably not).



THE PSYCHOLOGY OF SOCIAL CHANGE CASE STUDY SMOKING

SOPHIA MACHANETS

Definition:

Social change occurs when whole societies, not just individuals, adopt new attitudes, beliefs, and behaviours.

LESSONS FROM MINORITY INFLUENCE

(1) DRAWING ATTENTION:

Campaigns highlight that most young people or adults are non-smokers, using statistics like "80% of teenagers choose not to smoke." This draws attention to smoking as a minority behaviour and makes quitting more appealing.

(2) CONSISTENCY:

Anti-smoking messages are delivered consistently over time, using non-aggressive, positive reinforcement. For example, public health campaigns emphasize the benefits of quitting smoking through repeated, supportive messaging, like "Every cigarette you don't smoke is a step towards a healthier life."

(3) DEEPER PROCESSING:

Information campaigns challenge individuals to think critically about smoking. Graphic warnings on cigarette packs or advertisements detailing health risks make people reconsider previously held ideas, such as the belief that smoking is "cool" or "stress-relieving."

(4) AUGMENTATION PRINCIPLE:

Stories of activists who quit smoking despite challenges (e.g., long-term smokers overcoming addiction) inspire others. Their sacrifices, like enduring withdrawal symptoms, show the strength and possibility of quitting, making the cause more compelling.

(5) SNOWBALL EFFECT:

A small number of people quitting smoking influences others, creating a ripple effect. For instance, smoke-free zones or peer support groups start with a few individuals and gradually lead to widespread adoption of non-smoking norms.

(6) SOCIAL CRYPTOMNESIA:

Over time, smoking bans and anti-smoking attitudes become so normalized that people forget how society shifted away from smoking being widely accepted. While the change is remembered, the initial efforts of campaigns and activists are often forgotten.

LESSONS FROM CONFORMITY RESEARCH

Key Researcher: Solomon Asch

- **Normative Social Influence:** Social change is encouraged by showing what the majority is doing.
 - Example: Anti-smoking campaigns highlight that most young people don't smoke.
- **Dissent and Social Change:** Asch's research shows that dissenters can break the power of conformity, inspiring others to follow.

LESSONS FROM OBEDIENCE RESEARCH

Key Researcher: Stanley Milgram, Philip George Zimbardo.

- **Role Models:** Milgram's studies highlight how disobedient role models reduce obedience in others.
- **Gradual Commitment:** Zimbardo suggests that starting with small instructions makes it harder to resist larger changes, leading to shifts in behaviour.

SMOKING

Conformity:

- Normative Influence: People quit smoking to fit in with non-smoking groups
 - Informational Influence: Anti-smoking campaigns and health experts guide behaviour
- Majority Influence: Non-smoking norms pressure individuals to conform

Obedience:

- Authority Figures: People follow advice from doctors and public health officials
 - Legislation: Smoking bans and taxes enforce compliance
- Fear of Punishment: Consequences like fines discourage smoking in restricted areas.



Reviews

The Psychology of Horror – Funny Games (2007)

ADA UCUNCU



Horror movies are known for their intensity. They're easily the most thrilling genre, but why are they so intriguing? For some movies, like the Scream franchise, there is an element of mystery that hooks us. For others, it is the gory aspect that drives our interest. It is clear that horror movies need good directors and writers in order for there to be the exciting, unpredictable plot that most horror enjoyers crave. However, it is somewhat rare for a writer to focus on the audience's awareness of their relationship to the movie to the extent seen in the 2007 film *Funny Games*, written by Michael Haneke.

The film is a satirical horror movie and psychological thriller, filmed in a shot for shot recreation of the 1997 film by the same title, also written by Haneke, though the original was in German and set in Austria. The remake is set in the United States with different actors and in English but is otherwise identical. It was created as a criticism of violence in the media, Haneke himself stating that he wanted to tell a message about it by making an incredibly violent but otherwise pointless film. He speaks more about this in an essay named "Violence + Media" which is included as a chapter in the book *A Companion to Michael Haneke*.

The movie itself follows an affluent family on holiday who are captured and tortured by two young criminals named Peter and Paul. They begin with mildly unsettling behaviours, which quickly become more uncomfortable as the movie progresses, though tensions are high throughout. The criminals treat the occurrences as a game, stating that other characters ‘can’t break the rules!’ The sadistic pair break the fourth wall regularly, adding to the tension they cause. All of these elements combined, along with other intentional choices made by the actors and director, provide a deeply unsettling atmosphere to the audience watching.

I spoke to a few people who had watched the movie to gain a broader understanding of the impacts on the audience.

One person stated “the movie immediately kicks off with an emphasis of this uncomfortable feeling with the almost immediate introduction of the two antagonists. They do nothing overtly evil or malicious upon their first introduction, however they act very odd.” This is noted as a very uncomfortable moment for the audience. The reasoning for this is as follows: “They enter the protagonists’ house and stay there when they have clearly overstayed their welcome, they make themselves very much at home creating a sense of danger as a house should be safe and is often a safe refuge in horror movies ...” Whilst these are not particularly scary, they bring with them a distinctly uncomfortable feeling. The psychological reasoning behind this could involve the fact that the audience’s schemas for what to expect in a typical environment, or even in a horror movie, are completely disrupted by the unnatural, atypical behaviour of the antagonists. A schema is a mental framework used to interpret information, usually using assumptions to predict what to expect based on previous situations which may have been similar. They prevent overwhelm and help process information quickly. However, this can often distort our perception of inputs if they do not fit our schemas. In this case, the actions of the antagonists repeatedly oppose our schemas to a point where we cannot ignore them, leading to this visceral discomfort as we lose our sense of security in predicting what will happen. This is a common theme seen in horror films, but it was especially masterful in this film due to the buildup and intensity of the horror elements later in the film.



This feeling of Peter's and Paul's control over the audience is mirrored in what my source has dubbed "the TV scene". In this part of the movie, the family are close to escape. A character called Anna manages to grab a rifle and shoot Peter, enabling her escape. However, Paul rewinds the TV remote, bringing the scene back to just before Anna manages to grab the rifle, snatching it away and trapping her hopelessly once more. This scene reminds us of the fact that the antagonists are the narrators of this story; they are in control of everything that happens. This results in a lack of control in the audience over the events they see and what they subject themselves to as a viewer. It is this uncertainty that provides a further fear to those watching. This is due to adrenaline being released into the bloodstream, resulting in a raised heartbeat and breathing rate. Most thrill seekers enjoy this feeling, being the reason so many people watch horror films. There are many other examples of such scenes. These all in combination lead to the rush and thrilling feeling we seek to find.

Haneke's use of plot devices and representations of his ideas provide an interesting take on the horror genre. He introduces thoughts and themes with a unique approach, allowing his films to stand out from others in the crowd. His movie is masterful in its presentation of the violent, sadistic events that take place and it is very interesting psychologically why these thoughts are provoked.

Sources:

- [https://en.wikipedia.org/wiki/Funny_Games_\(2007_film\)](https://en.wikipedia.org/wiki/Funny_Games_(2007_film))
- <https://www.videomaker.com/how-to/directing/film-history/a-look-into-the-gore-horror-genre/#>
- [https://en.wikipedia.org/wiki/Funny_Games_\(1997_film\)](https://en.wikipedia.org/wiki/Funny_Games_(1997_film))
- <https://scenebygreen.com/2023/11/25/funny-games-1997/#:~:text=It%20only%20takes%20Paul%20a,apply%20to%20him%20as%20well.>

Documentary Review

The Menendez Brothers

ANA DAMORE



'The Menendez Brothers' is a documentary that focuses on Lyle and Eric Menendez and depicts how family dysfunction, media coverage, and socioeconomic privilege influenced the brothers' trial. It describes the events before and during the trial and its aftermath.

Produced by Alejandro Hartmann, the documentary was released in October 2024. In its first week on Netflix, the documentary became the most-watched film, garnering 22.7 million views.

The documentary remarkably portrayed the grim nature of the story through a dark and muted colour palette and ominous music, which added a sense of unease and tension. It features interviews with individuals connected to the Menendez brothers, including psychologists and family members. It also incorporates the brothers' voice recordings, extensive archival media footage, and family images throughout the documentary. The highlight was undoubtedly the courtroom footage, which offered compelling insight into the trial's events and gave us an understanding of how the entire process unfolded.

The documentary presents diverse outlooks on the story, including those who felt sympathetic towards the Menendez brothers, those who believed they deserved the death penalty, and the brothers themselves. This array of perspectives allowed viewers to cultivate their ideas and opinions on the Menendez brothers. It has been said to be the 'best documentary on the topic' and rated highly on Rotten Tomatoes, IMDb, and Google.

The Long Read

Why do teenagers watch horror films given the short and long term effects the films have on them?

ALICE GRIFFITHS




Scan the QR code below to read Alice Griffiths' fascinating exploration of why teens are drawn to the horror genre.






CREATIVE WRITING COMPETITION

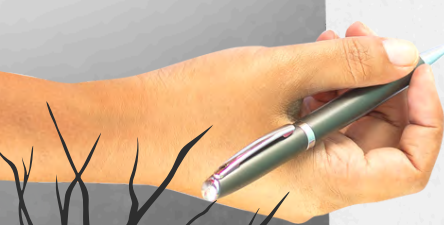


CREATIVE WRITING CAN TAKE MANY
FORMS. WRITING THAT IS COMPELLING
WILL NOT ONLY
DEMONSTRATE IMAGINATION BUT
ENGAGE THE SENSES AND THE EMOTIONS
OF THE READER.



UP FOR A FUN CHALLENGE?
INSPIRED BY THE PSYCHOLOGY OF
HORROR?
JOIN THE COMPETITION!

THEME: A SCARY STORY



SUBMISSIONS FROM: ALL WELCOME. NEW
WRITERS, SEASONED WRITERS,
STUDENTS AIMING TO REVISE FOR
THEIR GCSE EXAMS, STUDENTS WHO
WANT TO EMBRACE A NEW CHALLENGE..



PRIZES: ARE UP FOR GRABS.
THE BEST SUBMISSION WILL BE
FEATURED IN OUR NEXT ISSUE.



THE RULES OF THE COMPETITION ARE AS FOLLOWS:

1. YOU SHOULD SUBMIT A SHORT STORY OF NO MORE THAN 500 WORDS.
2. ALL SUBMISSIONS SHOULD BE ORIGINAL I.E. WRITTEN BY YOU (NO AI).
3. SUBMISSIONS SHOULD TAKE THE PICTURE BELOW AS INSPIRATION. THIS CAN BE A JUMPING OFF POINT BUT SOME ELEMENT OF THE IMAGE SHOULD BE EVIDENT IN YOUR WRITING.
4. ALL SUBMISSIONS SHOULD BE SENT TO MR STREETING AT SEBASTIAN.STREETING@EPSOMCOLLEGE.ORG.UK AS A WORD DOC.

DEADLINE: START OF SUMMER TERM (21 ST APRIL, 2025)

THE SHORT STORY BELOW WAS WRITTEN BY ONE OF OUR TEAM AND CAN PERHAPS SERVE AS INSPIRATION FOR YOUR OWN. ENJOY!



Dense, suffocating, formless fog carpets the forest floor. The silvery moonlight offers some relief from the oppressive darkness, piercing the pitch black canopy above, casting spectral shards into the frigid air. These ghostly projections serve only to remind her that in this place the night grips hard, a grip it will not relinquish for hours to come. Darkness possesses the forest; the trees are wholly in its thrall.

Lost, utterly lost. No sooner has she edged through the bitingly cold, stinging vapour than it closes ranks behind her, obscuring the path once more. As she wades through razor-like brambles, vaulting roots and the dismal, dismal fog, she is clawed at by branches that seem to lunge, grasping at the cold night. At times, gusts sweep through the misty air, dispersing it. For a moment, the gnarled, twisted roots of the ancient forest are revealed. The trees stand like monoliths, testaments to a time before recorded time.

Her legs are heavy now; each step laboured, loaded with apprehension. Step by step, she ventures deeper into the labyrinth of tangled trees. Their twisted roots conspire with the darkness to slow her passage. Exhaustion wraps around her like a blanket, weighs upon her, lulling her to the point of sleep. Her heart is clenched by trepidation, yet she perseveres. Hope still burns within her, reduced to embers by the stifling darkness and insipid cold but burning still.

All at once, as if in answer to her muttered prayers, the forest thins. The contemptuous fog is now an ethereal mist, translucent, insubstantial. The ragged web of roots gives way to firmer, flatter ground. She edges forward further. Before her, the distant moon dances on an open lake. It shimmers tantalisingly. Inexplicably, she finds herself drawn forward, beckoned by the winking, mercurial reflection of the night sky on its placid surface.

The habit of trepidation not yet forgotten, she dips at first just a toe. Soon though, she feels the gentle lapping of cool water against her ankles. She stands there for a moment, entranced by the quivering moon on the metallic expanse before her, humbled by the canopy of constellations above. At peace, she breathes. Rich, vivifying air floods her lungs. And then she hears it.

The crack of a branch underfoot. It shatters the silence. Then the patter of paws, slow and deliberate, drawing close. Slowly, slowly she turns, her heart now rattling in her chest.