



THE BENEFIT OF GETTING LOST

IN PARTNERSHIP
WITH UCL

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EXECUTIVE SUMMARY

The arts have long been praised as a means of switching off, escaping the real world and rebalancing the stress of the daily grind.

Whilst the benefits of switching off are well-known, we wanted to explore what role cinema can play in this. Specifically, we wanted to see what happens to your mind and body when you spend time at the cinema - one of the only places you can truly switch off and leave your phone and the world behind.

Looking in detail at existing research and data we conducted an in-depth primary and secondary analysis to inform comprehensive new research in association with UCL that would tell us exactly why getting lost in a great story at the cinema feels so good.

In a world where we're in a state of permanent distraction, always on, are overloaded with competing information, constantly bombarded with social media pings and notifications and where the lines between our work and personal lives and becoming more and more blurred, taking time to step away and immerse yourself at the cinema couldn't be more relevant.

Our findings show just what happens to us during the cinema experience, physiologically, psychologically and holistically with our experts filling in the blanks on the benefits of this precious down time in the modern world.

When completely invested in the film and its plot twists, participants saw changes in their heart rates and increased emotional arousal levels. Perhaps most

fascinatingly, many of these effects were experienced in unison.

On top of this, supplementary research suggests that while many elements of the cinema have distinct benefits, collectively they have the potential to change the way our brain functions, enhancing things like our memory, focus, bonds with other people, processing and understanding of information as well as our creativity, resilience and overall mood.

The 'closing' line? Not only can a few hours immersed in the big screen provide some much needed relief, making you feel good, but it can actually boost your creativity, productivity and connectivity, so it is good for you too!





METHODOLOGY

Two groups of volunteers participated in an experiment conducted by UCLs Faculty of Experimental Psychology.

51 participants watched the 2019 live action adaptation of Aladdin at the Vue Westfield Stratford, London.

An additional 26 participants participated as a control group, taking part in a comparable task of reading a novel for the same amount of time.

Both groups completed pre and post-performance questionnaires, wore biometric sensors to track their heart rate, electrodermal activity and body temperature to measure their physiological responses to the film and novel.

SUMMARY OF FINDINGS

PHYSICAL

Those who watched the film experienced a range of physical symptoms:

1. INCREASED HEART RATE

Though stationary, the film viewers in the study were involved in a form of low-intensity cardio for a set period of time. Over two hours of the film, on average participants' heart rates were in their healthy heart zone for 40 minutes. Though very light, this level of stimulation can help to build cardio fitness levels and burn fat. Heart rate peaks were also aligned with specific storyline moments in the film

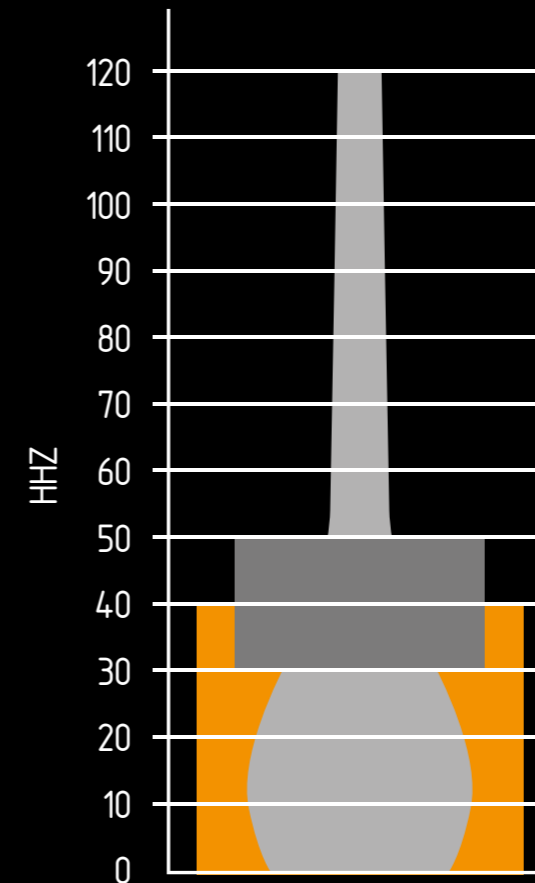
2. INCREASE IN ELECTRODERMAL ACTIVITY

Electrodermal activity is the property of the human body that causes continuous variation in the electrical characteristics of the skin. Certain peaks and events in the film triggered an increase in emotional arousal levels, measured by skin conductance.

3. SYNCHRONISED PHYSICAL ACTIVITY

Regardless of whether they arrived individually or in a group, as our audience members watched the film, their heart rates became more closely aligned

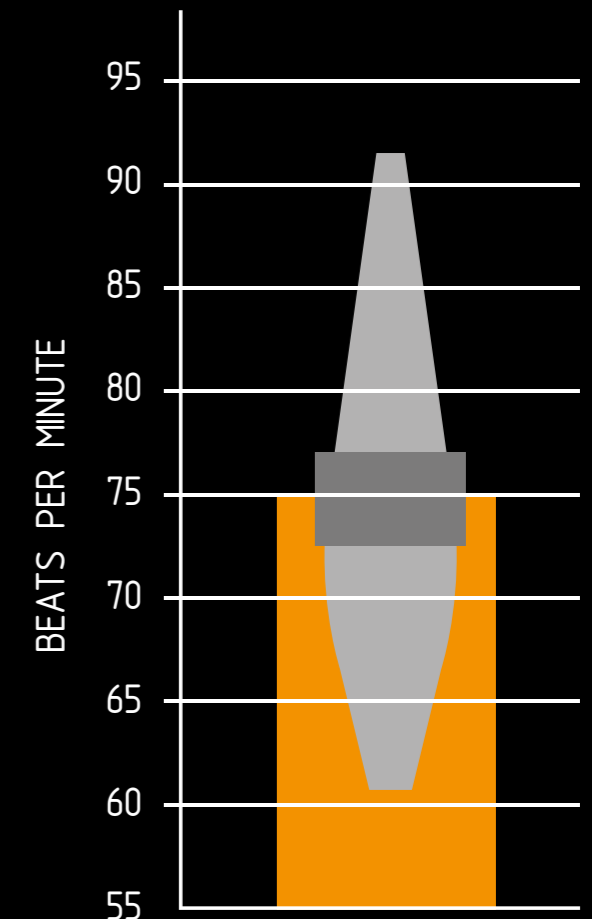
MINUTES SPENT IN HEALTH ZONE



40 MINUTES

spent in the healthy heart rate zone (40-80% of max heart rate) during a two hour film

HEART RATE



A 35-year-old maximum heart rate would be 185 bpm, their healthy heart rate zone starts at 74 bpm. For the 35-year-old, a trip to Vue is likely to keep them in a heart rate zone that corresponds to healthy functioning.

A large graphic of the number 55% in white, with the percentage sign in orange and yellow. A thin white horizontal line is positioned below the graphic.

55%

OF VIEWERS BELIEVED THAT THE EXPERIENCE WAS THERAPEUTIC IN AN EMOTIONAL SENSE AND FELT UPLIFTED BY IT

A large graphic of the number 45% in grey, with the percentage sign in orange and yellow. A thin white horizontal line is positioned below the graphic.

45%

OF PARTICIPANTS LEFT THE FILM FEELING EMPOWERED

A large graphic of the number 45% in grey, with the percentage sign in orange and yellow. A thin white horizontal line is positioned below the graphic.

45%

OF PARTICIPANTS FELT LIKE THEY HAS A TRANSCENDENT EXPERIENCE, PASSING INTO A DIFFERENT STATE OF CONSCIOUSNESS FOR A PERIOD OF TIME

A large graphic of the number 75% in white, with the percentage sign in orange and yellow. A thin white horizontal line is positioned below the graphic.

75%

OF PARTICIPANTS FELT FULLY ABSORBED BY THE FILM

SUMMARY OF FINDINGS

MENTAL

Two hours in front of the big screen also triggered a number of emotional responses.

Over half (55%) of viewers believed that the experience was therapeutic in an emotional sense and felt uplifted by the experience.

Viewers also commented that they felt completely engrossed in the cinema experience and were able to forget everything else around them, with three quarters (75%) of participants saying they felt fully absorbed by the film. Nearly half (45%) went as far as saying they felt like they'd had a transcendent experience, saying the film passed them into a completely different state of consciousness.

As a result, viewers left the film feeling uplifted and inspired, nearly half (45%) of viewers say they felt empowered after the film, which was reflected in higher mood and arousal levels.

IMPLICATIONS

The research highlighted three core elements of the cinema experience that triggered physical and emotional responses:

- The cultural element
- Shared group setting
- Focused environment

External research shows the implications of these benefits and how they can benefit us in the long-term:

FOCUSSED ENVIRONMENT + FOCUS AND MEMORY

Multitasking has become the norm in our day-to-day lives and the technology we use has become a reflection of this. However, what we often forget is that attention is a limited resource (Kahneman, 1973, Marois & Ivanoff, 2005) and the tech capability on our devices can impact our brain's ability to manage different tasks.

In fact, numerous studies have proved that multitasking often leaves us less productive because of the time and focus lost due to constantly switching tasks, or the 'switching cost' (Rogers and Monsell, 1995).

Constantly switching tasks has a proven effect on long-term focus. Not only are those who multi-task frequently more prone to distraction, but they also find it harder to focus on a single task by choice, their standards of working are generally lower when they multi-task and their ability to filter out irrelevant information is worn low. (Rosen, Cheever & Carrier, 2012).

"'Media-multitasking', where we sit down to watch TV with our smartphone or tablet in hand, or listen to music while texting or playing a video game, is so common that it's estimated 54% of adults regularly use another device while watching TV. And while it might feel efficient and even restful, all the evidence proves that it's damaging our brains.

Research from Stanford University found that people who describe themselves as regular media multitaskers cannot pay attention, switch from one job to another, or recall information as well as those who focus on one thing at a time. In addition to slowing down our brain's performance, the University of London also found that multitasking actually lowers our IQ!

Multitasking of any kind reduces our efficiency and performance because contrary to what we might believe about ourselves, our brains can only focus on one thing at a time. When we try to do two things at once, our brains simply lack the capacity to perform both tasks successfully.

In our 24:7 connected world it's more and more important that we give our over-stimulated brains time to switch off and fully focus on one thing. Psychologists have known for a while of the power of being in a 'flow' state, one where we're completely immersed in an absorbing experience, forgetting the passage of time. It's restful and rejuvenating for our brains, as well as incredibly enjoyable - and it's an experience exactly like getting lost in a great film on a big screen."

Tanya Goodin
Founder of Time to Log Off and author of "Off"



"Let's not also forget about the mental health implications. Research also shows that "the competing demands we are bombarded with activate our sympathetic nervous system, which means we are often being micro-dosed with stress all day," according to Dr Mark Winwood, the Director of Psychological Services at AXA PPP healthcare.

"The ability to sustain focus and attention plays a critical role in building mental resilience. This is because problem solving typically requires a concentrated effort to overcome obstacles. If you are regularly distracted, you are far less likely to successfully complete a difficult task. In other words, our ability to work through problems without distraction makes us better able to solve problems and be productive.

In some ways, your brain works just like a muscle - use it or lose it. By engaging in activities that promote sustained attention, we strengthen our ability to concentrate and avoid distractions when we need to. Over the years, however, there have been dramatic increases in the competing demands on our attention, particularly from social media and personal computing devices. A few hours at the cinema, where we are completely removed from distractions, can actually help with this."

Dr Joseph Devlin
Professor of Cognitive Neuroscience and Vice Dean of
Experimental Psychology at UCL



CULTURAL EXPERIENCES + COGNITIVE FUNCTIONING

When we engage in cultural activities such as the cinema, our brains are presented with complex, intense, emotional and novel experiences to process, which puts demands on our emotional-cognitive functioning.

Not only can this impact mental health, with studies suggesting cultural experiences can reduce depression and loneliness, but it can also help in boosting memory and slowing overall cognitive decline. (Fancourt, Steptoe, & Cadar, 2018).

We know that both the imaginative and immersive elements of cultural experiences are good for our brain function and have sustained long-term benefits.

Cultural experiences like going to the cinema provide opportunities to devote our undivided attention for sustained periods of time. In our daily lives, we habitually multi-task because so many things are competing for our attention. In the cinema, however, there is nothing else you can do except immerse yourself. In a world where it is increasingly difficult to step away from our devices, this kind of sustained focus is good for us." Dr Joseph Devlin, Professor of Cognitive Neuroscience at UCL.

In fact, the evidence of benefits is so strong that Arts Council England has publicly advocated that GPs should consider prescribing cultural activities such as visiting the cinema to patients, which they argue will help reduce overall NHS costs (Bazalgette, 2014).

SHARED GROUP SETTINGS + ADULT PLAY

Numerous studies show that synchronised physical activity can have a positive effect on our overall social connectedness as it results in a shared social focus. A shared social focus not only has a proven link to greater bonding and empathy with others (Shteynberg, 2010), but also has been proven to reduce symptoms of loneliness and depression (Todd, Camic, Lockyer, Thomson & Chatterjee, 2017). It's also been linked to greater team performance and creativity (Henning et al, 2001, 2005).

"One of the symptoms of our smartphone-fixated culture is that we're increasingly retreating into solitary experiences on our devices; plugged in with headphones into thousands of tiny separate worlds. It can hardly be an accident as a result that loneliness is on the rise for all age groups. One of the antidotes to our isolation is a shared big screen experience, when we all go through the same emotional journey together. It has the power to bond us together in a way that solitary screen scrolling can never do."

Tanya Goodin
Founder of Time to Log Off and author of "Off"

Therefore, taking some time out at the cinema can not only provide us some well-earned relief, but also enhance our overall brain function.





CONCLUSION

While we are well aware of the benefits that switching off can have on our mental health, the research demonstrates implications on the actual functioning of our brain.

But why cinema specifically? Uniquely, the cinema is one of the only places left where you can step away from devices and the outside world and truly switch off. The distinctive characteristics of the cinema - namely, the extended, immersive, social and focused characteristics can collectively impact our brain and creativity.

In theory, this means that other ways of switching off would not be as effective.

The bottom line? A few hours behind the big screen is not only fun, but could be good for you!

APPENDIX

Research conducted by Joseph T. Devlin, Jorina von Zimmermann, Emily Goldman, Ruth A. Hackett & Daniel C. Richardson, July 2019 'Getting lost in a movie'

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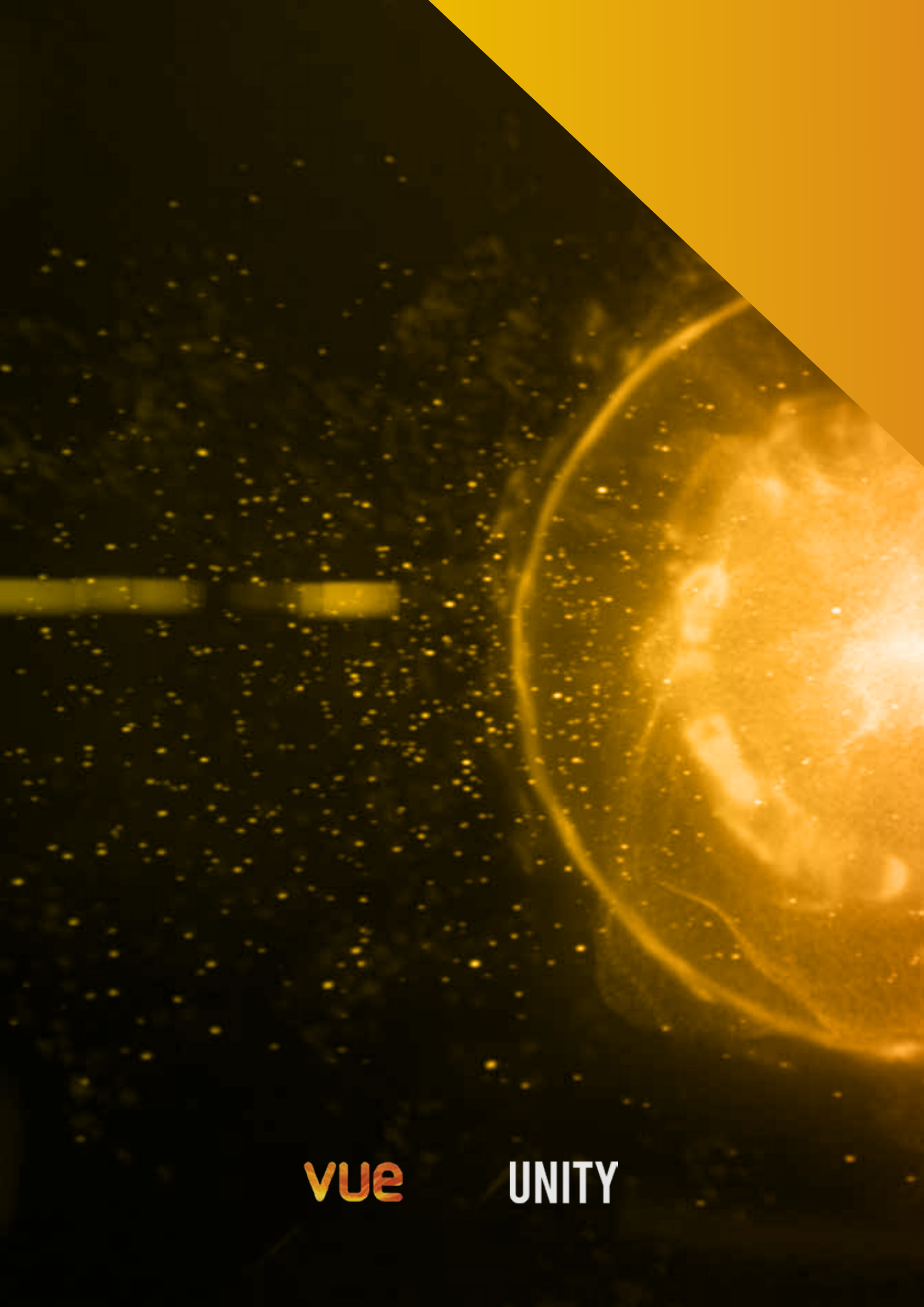
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