



# The Neuroscience of Cooperation: How to form well- functioning teams

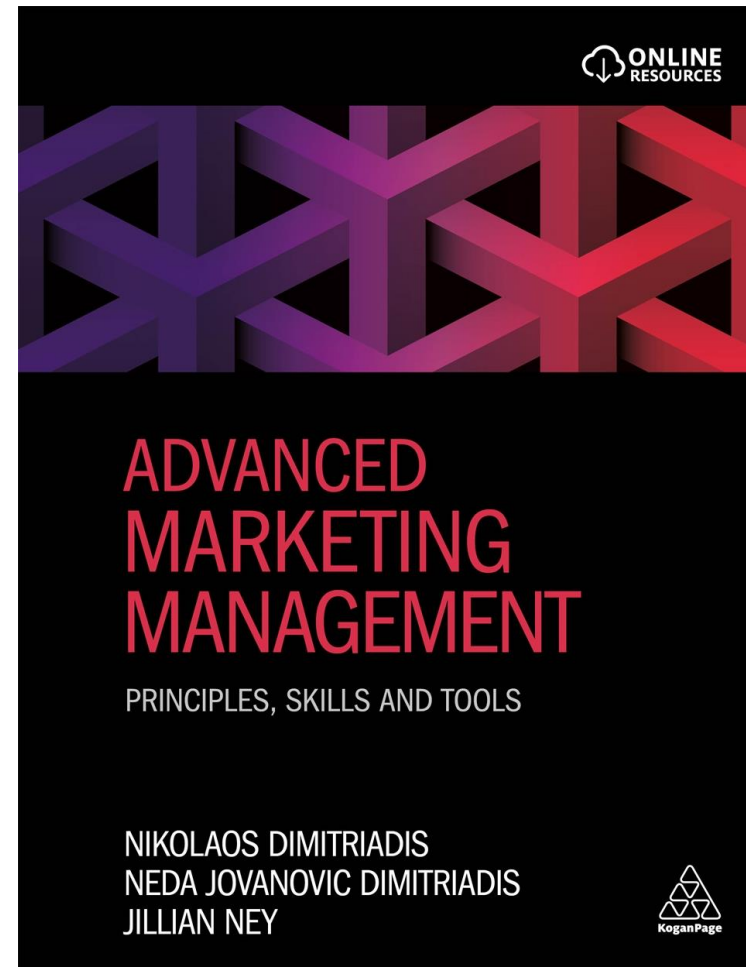
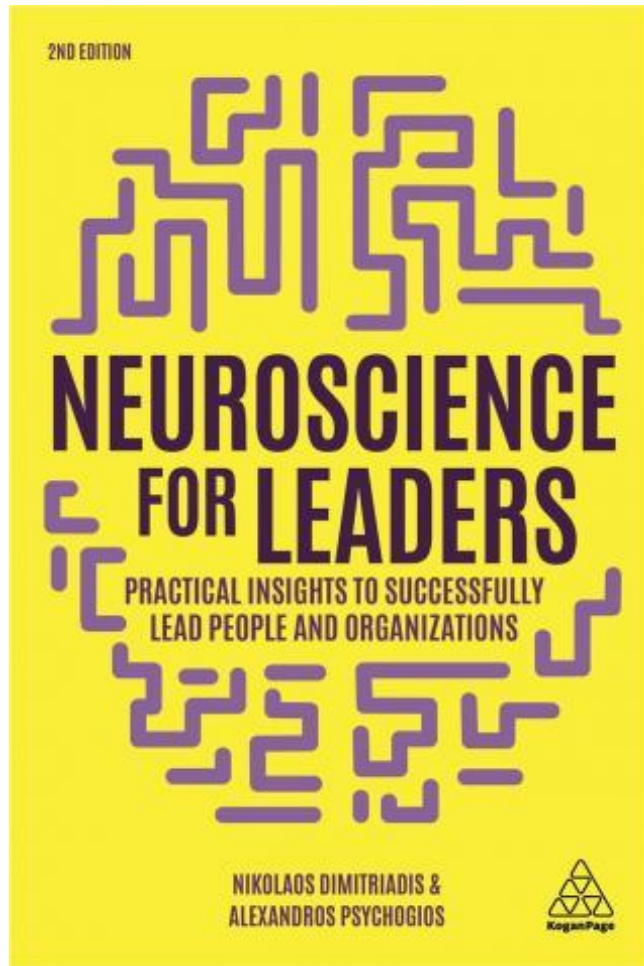
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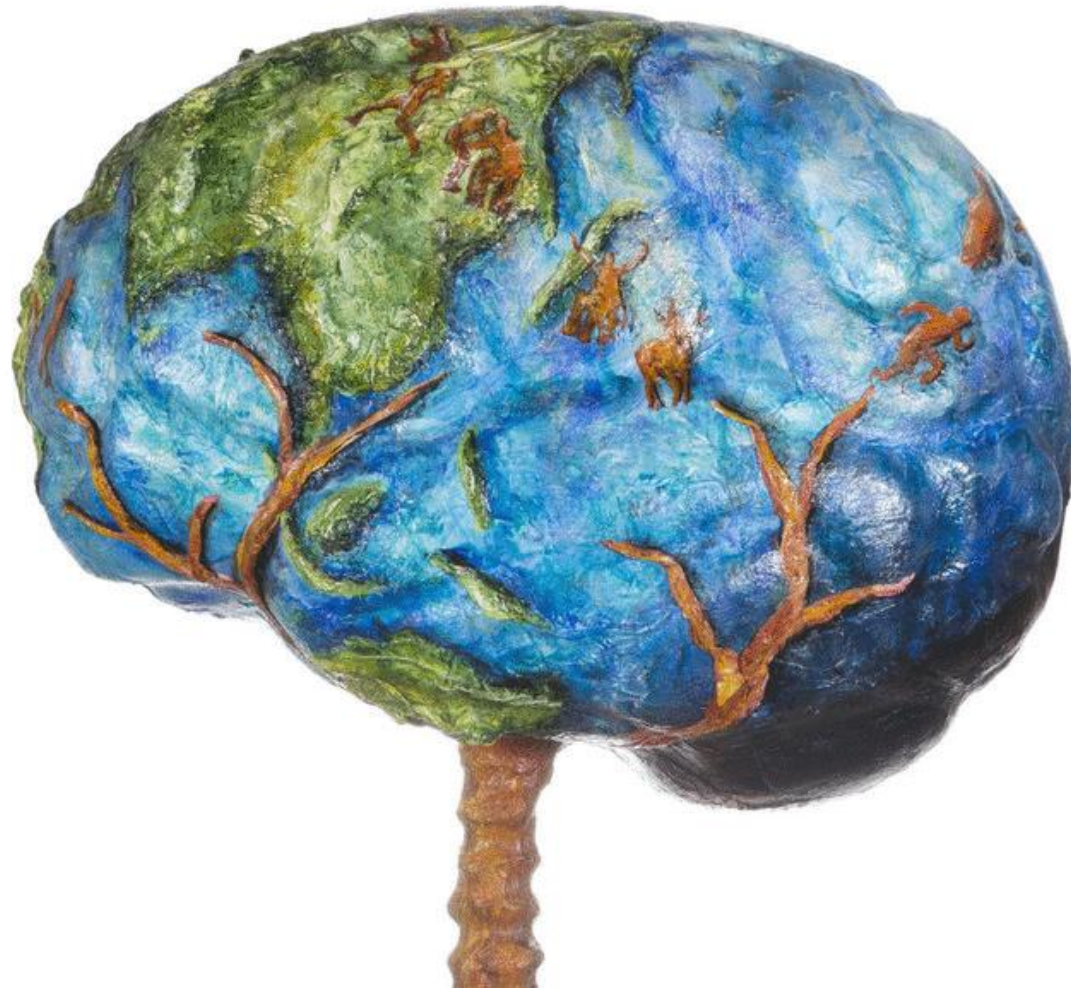
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Tested 7,500 brains from more than 25 countries.











POSITIVE MOOD  
INTERACTION



EXTENSIVE  
EYE CONTACT



CONSTRUCTIVE  
TONE OF VOICE

Enhance the ability of mother and infant brains  
to **operate as a single system!**

Promotes **efficient sharing and flow of information**  
between mother and infant.



Results apply to other types of **affiliative bond**:

- Romantic relations
- close friends
- siblings

The strength of the positive effects of brain synchronization is likely to depend on how well the two people **know each other** and the **level of trust** between them.



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Taking turns



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Duration of turns

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Relevance

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Intrusiveness

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Contingency

# Benefits of Brain Synchronicity



Feel	feel each other's inner experience to "get them" better
Communicate	communicate more effectively
Learn	learn from each other
Bond	bond stronger in tighter social groups
Respond	respond more effectively together to external threats and opportunities



LET'S  
DO IT!

RESEARCH ARTICLE | NEUROSCIENCE | 

# Neural synchronization predicts marital satisfaction

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> [Neuroimage](#). 2017 May 15;152:425-436. doi: 10.1016/j.neuroimage.2017.03.013. Epub 2017 Mar 9.

## Teams on the same wavelength perform better: Inter-brain phase synchronization constitutes a neural substrate for social facilitation

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Timothy R Brick <sup>5</sup>, Viktor Müller <sup>6</sup>, Ulman Lindenberger <sup>7</sup>

Affiliations + expand

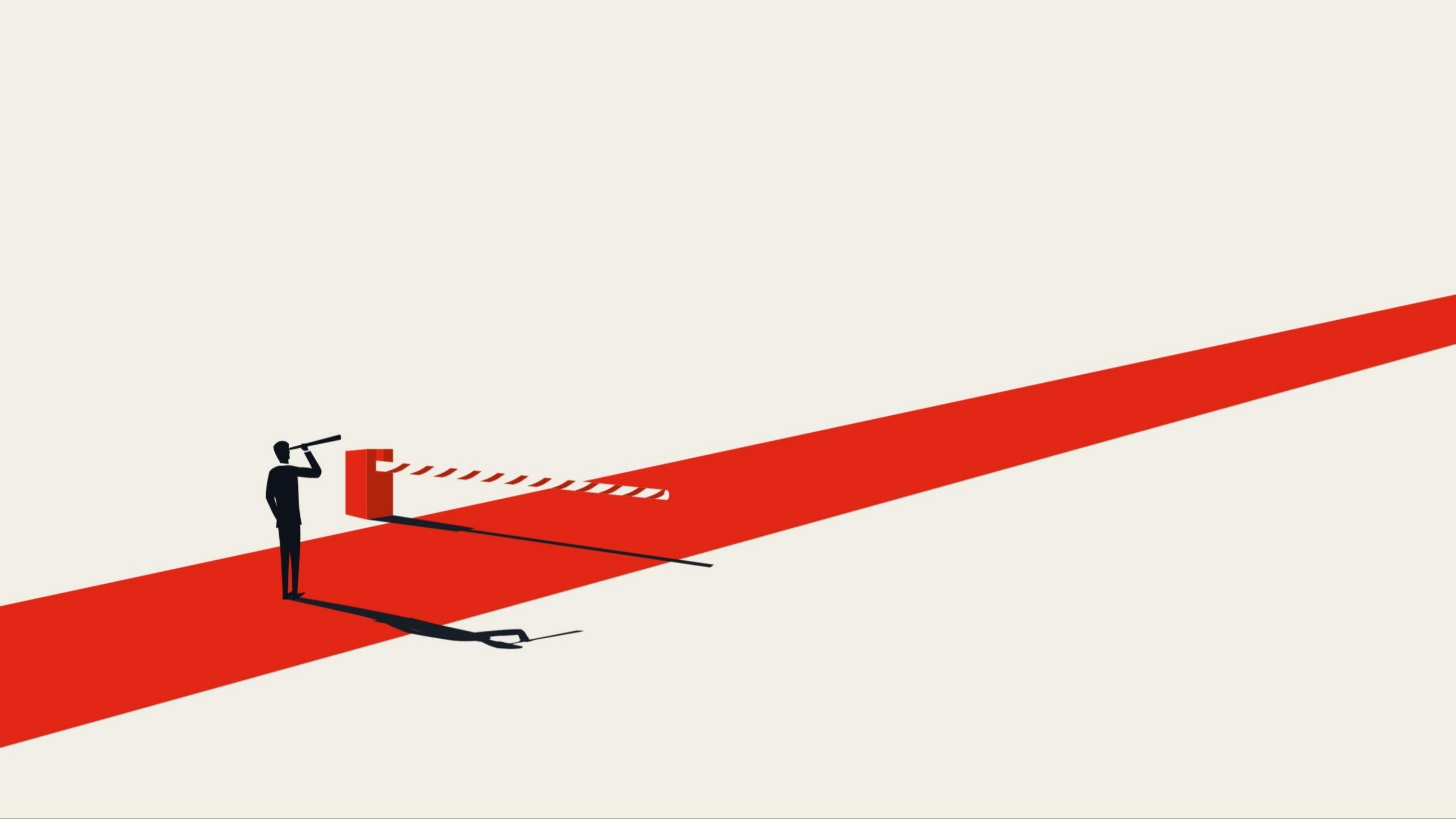
PMID: 28284802 DOI: [10.1016/j.neuroimage.2017.03.013](#)

### Abstract

Working together feels easier with some people than with others. We asked participants to perform a visual search task either alone or with a partner while simultaneously measuring each participant's EEG. Local phase synchronization and inter-brain phase synchronization were generally higher when subjects jointly attended to a visual search task than when they attended to the same task individually. Some participants searched the visual display more efficiently and made faster decisions when working as a team, whereas other dyads did not benefit from working together. These inter-team differences in behavioral performance gain in the visual search task were reliably associated with inter-team differences in local and inter-brain phase synchronization. Our results suggest that phase synchronization constitutes a neural correlate of social facilitation, and may help to explain why some teams perform better than others.

**Keywords:** EEG; Hyperscanning; Joint attention; Social facilitation; Social neuroscience; Visual search.







Low interaction

Prolonged bad mood

No eye contact

Negative tone of voice

Depression

Anxiety

Aggressiveness

Uncertainty

Unfamiliarity

Outgroup

NO TRUST



# The FIVE pillars of TRUST

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In Building Teams  
that Believe!

# Attachment

We believe those that care about us and prioritize our wellbeing.





Because all we need is LOVE!



# Morality

We believe those with the same sense of fairness and values with us.

A night-time photograph of a protest or riot. Two individuals in the foreground are silhouetted against a bright, intense fire that is consuming a barricade in the background. The person on the left is wearing a headband and has their right arm raised in a fist. The person on the right is wearing a hooded sweatshirt and has their right arm raised in a fist. The fire is very large and bright, casting a strong orange glow. In the background, a white SUV is parked on the right, and another person is visible on the left. The scene is dark, with the fire providing the primary light source.

Because what's fair is fair!

# Patterns



We believe those that help us see the world as it is by providing revealing information that makes sense.

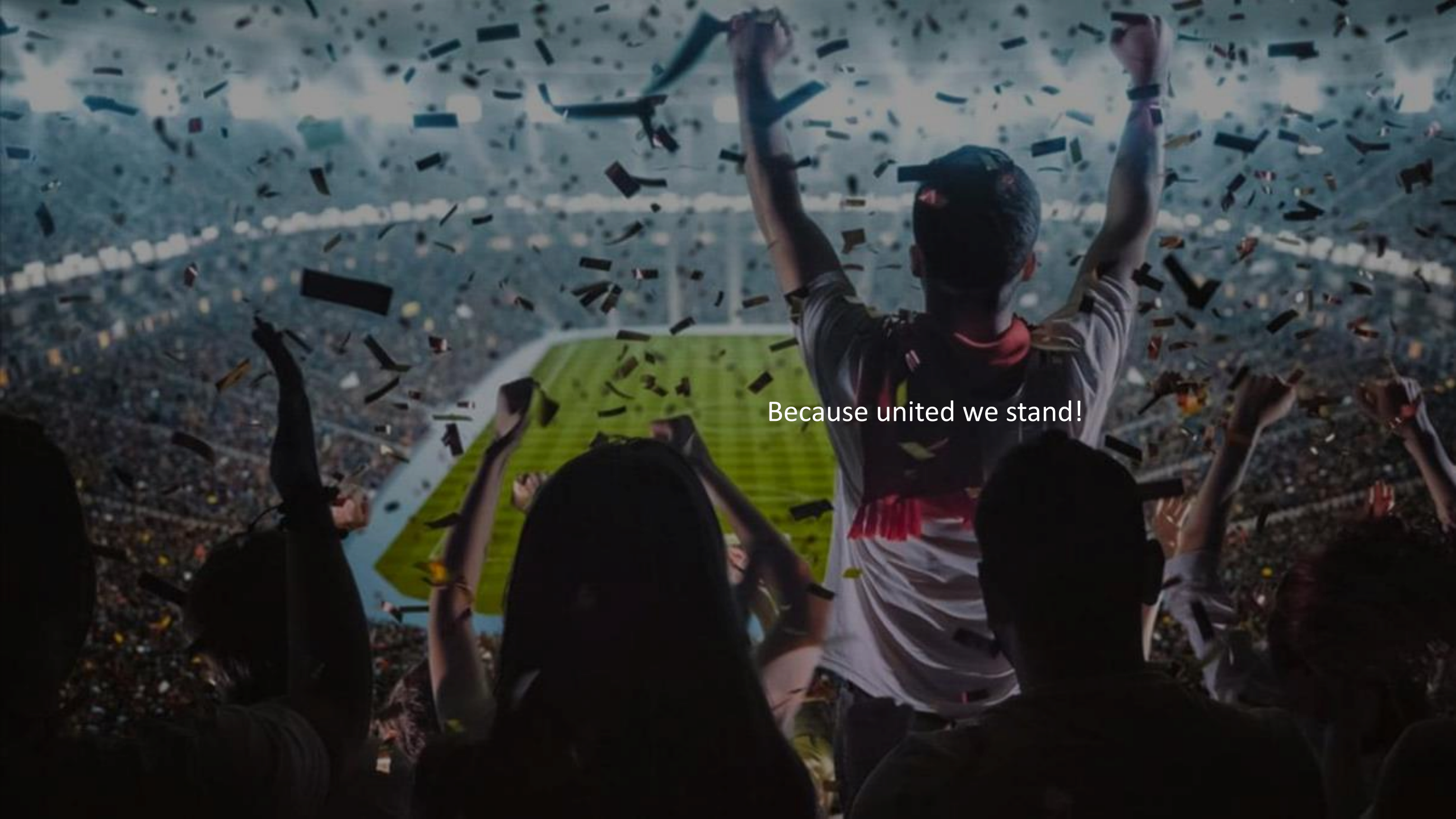


Because seeing is believing!

The background of the slide is a blurred photograph of a theater interior. In the foreground, the back of a red upholstered seat is visible, featuring a small oval tag with the number '49'. The theater seats recede into the distance, and rows of warm, yellow stage lights are visible in the background, creating a bokeh effect.

# InGroup

We believe those that are similar with us in language, ideas, preferences and habits.

A football player in a white jersey with red accents is seen from behind, celebrating with his arms raised in a large stadium. The air is filled with falling confetti. Other fans in the foreground are also celebrating with their arms raised.

Because united we stand!

A close-up, low-angle shot of a human hand reaching upwards, palm facing up. The hand is positioned in the lower-left foreground. In the background, a bright sun is low on the horizon, creating a strong lens flare and illuminating the scene with a warm, golden light. A faint rainbow is visible in the sky behind the hand. The overall mood is one of hope, aspiration, and reaching for something greater.

# Existence

We believe those that give meaning to our mortal, limited time existence, painting a bigger picture with purpose.



Because we are the world!

Attachment = **Friendship**



Morality = **Guardianship**



Pattern-seeking = **Scholarship**



In-Groups = **Companionship**



Existence = **Fellowship**



# LEADERSHIP







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