

## Cheerleader Effect - Psychology and Neuroscience

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With the diffusion of the various Social Networks, Facebook-Twitter-Instagram-Tik Tok, and above all with the immoderate use in this quarantine-virus period, it happens more and more often to create more and more profiles, finding yourself with a delicate simple but decisive choice: Which photo to choose? There are those who put the close-up of their face, who a whole picture of themselves, who children, who the pet, who the landscape, who a quote. But if the goal is to be attractive or interesting, who doesn't want to?!, The best choice is a group photo with friends. And once again science comes to meet us: two researchers from the University of San Diego, D. Walker and E. Vul, have shown that faces appear more attractive when they appear in a group, the so-called "cheerleader effect". For example, let's take Cheerleader girls, certainly beautiful girls, but their beauty is an optical illusion, produced by the fact that the groups appear instead of individually. Each of them would appear less attractive on their own than when they are with the rest of the group. This illusion, like the illusion of Ebbinghaus or the Moon, is a visual illusion based on various co-

gnitive and perceptual processes, whose what we see is not always a simple or direct reflection from what we have in front of us but depends both on our visual systems (bottom-up) and from various contextual information, expectations and experiences (top-down). It is therefore about visual-cognitive processes, where when we see a set of objects or faces, our visual system processes information on the whole set, including the average dimensions of its components, their position, the media of emotional expression of the faces, even the micro facial movements. Consequently, even if the whole contains many objects or single faces, we perceive them as a group and form our impression not on the suingolo but on the group as a whole. This influences our perception of the individual members of the group and we tend to see them more similar to the group than they actually are. The researchers then saw that by looking at compound faces, generated by mixing individual faces, they looked more attractive than those used to make them. (Hierarchical Encoding Makes Individuals in a Group Seem More Attractive). It was thought that the group's preference is because it also transmitted

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social or emotional information; but it was not so. The researchers carried out another experiment, in which the group photos were constructed by assembling individual faces photographed separately. But even here, the faces were declared more attractive when they appeared together; however, the effect disappeared when the group photo was composed of the same face repeated several times, so it is the average perception of many different faces that creates this optical and perceptive effect. And it doesn't change if the photograph is made by a large number of people. These neural processes are the same whether you interact in person or through the various social networks; from here is also based the neuro marketing and the various commercial choices or influencers. In conclusion: if you are looking for visibility, bring friends.