Very First Impressions

* In studies, impressions formed with “zero acquaintance” were typically compared with robust data to infer the accuracy of first impressions, generally resulting in significant correlations.
* The goal of the study reported here was to test how quickly people can form impressions that are consistent across observers, independent of their validity. In the present study, threat judgements were made on neutral faces – faces with no obvious negative or positive expression – that were rigorously rated for neutral expression previously.
* We report here four experiments: The first measures the speed in which first impressions about threatening personality and intelligence can be formed, the second examines the role of awareness in these judgements, and the third and fourth test our proposal that low spatial frequencies mediate the formation of such rapid first impressions.
* Experiment 1: Speed of Impression Formation. By presenting the faces for different durations to different groups of participants and subsequently measuring the correlation between the judgements of each group and the group that judged the same faces during long presentations, we can identify how quickly observers judge a face as having a certain personality.
* In summary, the results of Experiment 1 indicate that people can form consistent threat impressions of faces with neutral expressions presented for as briefly as 39ms.
* Experiment 2: Is Awareness Necessary for Rapid First Impressions? We hypothesized that, when masked faces were presented for 39 ms, participants were aware of at least some aspects of the face, especially features critical for the formation of a threatening impression (eg the angle of the eyebrows or the lips). Participants in the 26ms experiment, on the other hand, may have not been aware of sufficient face information and, therefore, were not able to form consistent impressions of threat. To test this hypothesis, we examined to what extent participants were aware of faces information when the faces were presented for 39ms and for 26ms.
* In the 26 ms presentations, participants were not aware of sufficient face information to be able to form consistent first impressions. Consequently, at least for neutral faces, a certain level of awareness of face features seems to be necessary for the formation of first impressions, even about a trait as critical as a threatening personality.
* The results imply that in the 39ms presentations, participants were far from performing perfectly, but their performance was significantly above chance (44.2%). This further suggests that the stimulus information required for forming consistent threat impressions are extracted very early and require some, but not complete, awareness. What might this information be? We propose that such first impressions are based primarily on the low spatial frequencies in the image.
* General Discussion. Neutral faces were judged as threatening or nonthreatening similarly when they were presented for 39ms and for 1700ms durations. Thus, people their first impressions of others on whatever information is available within the first 39ms.
* An expressive face represents an “active” threat, and people may therefore be more sensitive to this stimulus and detect it at a lower threshold. When faces have a neutral expression, on the other hand, the threat characteristic that they may convey can be considered “passive”. Therefore, combined with previous reports, our findings suggest that the threshold of awareness for detecting threat is lower when the threat is immediate and can be directed toward the observer.