

Example of facial expressions human being vs. chimpanzee critical thinking

[Technology](#), [Development](#)



Arguably, from the research findings, it is evident that the FACS approach is amenable to alteration for use with all other species of primates; this method allows one to compare and contrast the facial repertoires among many species with distinct characteristics. Developing FACS for chimpanzees has made it easy for us to understand how and why the human facial movements vary from that of the chimpanzees. The apparent difference can be deduced from the varying facial morphology, underlying musculature, and the interface between the two. From the general repertoire, nine commonly seen facial actions have successfully been described and secluded among the many other miscellaneous movements. Arguably, there has been little research focusing on the differences and the similarities that exist between the form and emotional signals in non-human primates.

Notably, the chimpanzee does not have the much dissimilarity as seen in humans: for instance the everted lips and sclera. It is suggested that the chimpanzee eye value has less signal value when compared to that of the human beings, only the gaze direction detection was put into consideration, it is clear that short of scleral comparison affects the detection of facial actions. Chimpanzees have prominent and large brows as compared to human beings, it is suggested that the movement of brow in human beings is more developed along with the hairless forehead. Additionally, the everted lips in human beings with notable vermilion enables the subtler movement, the movements changes the shape of the lips more voluntarily and detectable. It would be more fascinating and interesting to find out the psychophysics behind facial movements across various species in order to explore the contribution of contrast to expression identity. Nevertheless, not

all notable differences are a matter of comparison to facial characteristics. Remarkably, as seen from the various research findings, lack of cheek fat shows that nasiolabial furrow, used to categorize the various AU's in human beings and also the expression recognition is not found in the chimpanzee, this therefore makes the discrimination of these movements more difficult. It is very hard to hypothesize the reason as to why the human facial morphology takes the explicit form that it does. Notably, some features are possibly correlated to function, these features includes nasal structure among many other features. Some features are primarily sexually chosen, these may include the retention of neotonous features into old age. It has been established that primates have differing facial morphology and coloration during the early stages of life, it has also be noted that thus signal of immaturity during infant stage helps in their interactions with other group members. Nevertheless, as it has been described, facial expression may affect facial recognition in many prominent ways, as a result, infant facial morphology can be used in place of some explicit communicative functions. Generally, human morphology is appropriate for the production of highly relevant changes in facial appearance inclusive of the subtlest movements. Arguably, numerous facial expressions is articulated as visible at some distance, with the smile being the most outstanding of all the facial expressions even up to hundred meters away. Chimpanzees have more of a similar facial muscle plan and an extensive repertoire of self-sufficient movements, only that their facial morphology does not augment the visual impact of the facial movements as that in human beings. Additionally, chimpanzee facial expression can be attributed to the extreme prominent

appearance changes; these changes include the retraction of the lips to expose the gums and the inner lips. It is therefore of great importance to measure the expression recognition distances in chimpanzees to find out how voluntarily these signals are superficial to others, conceivably in relation to their social function. Whereas the explicit human facial morphology is in no way a novel observation, the approach used has paved way for easy identification of the exact factors that influence upon the discovery of facial movements across many species, using specific cue to identify each action. Notably, people express high accord when pointing out their personality while others attributes solely based on facial morphology. In contrast, expressions can alter the facial appearance and features to bring an impression of a different facial morphology, for instance, expressing fear may make the face of a human being surface more endogenous, while anger may be expressed by narrowing the lips and lowering the brow. It has not been established whether other facial expressions will yield to this form of study, but it is of great importance to think about the connection between movement and morphology, and their subsequent analysis by others. These factors are particularly influential when putting into consideration the perception of facial displays of other species.

Arguably, the success of FACS means that there are a number of paradigms designed for the study in humans, however this can be modified for the use studying the chimpanzees. This involves the development of ChipFACS that allows direct comparable methods to be applied in the cross species study and contribute in answering the many questions surrounding evolution of human facial expressions as well as the questions surrounding chimpanzee

communication.

Debatably, up to date, various questions of homology have primarily been retorted based on appearance expression similarity and detailed means of comparison is long unsettled. It is through making detailed cross-species comparison with a similar measurement instrument that will in the end help gain a accurate understanding of what is human and what is not explicitly human.

In comparative psychology and animal behavior disciplines a traditional objective and systematic methods of description are upheld, additionally, anthropomorphism is avoided at all costs since it is seen as an unwelcome impact on human observations. Faces are the essential features of human social interaction. Notably, human species have adapted efficient mechanisms to pull out information from the various facial expressions. Scientific inquiry about physical dimensions of faces and the perceptual processes that are intuitive renders some judgments unreliable. Certainly, the varied nature of participant's emotional interpretation of chimpanzees expressions found in the past studies could be clarified by the connection between emotional and featural insight. It is therefore important for researchers to consider how the processes influences the interpretations of what people see.

Utility of FACS method has been depicted in various studies with adults and infants in many countries including Asia, North America, and Europe. The research has incorporated social processes and emotions, perception, pain, deception and biological bases. The FACS method has confirmed to be convincing and functional for facial measurement in relations to each of

these areas.

Fast FACS according to reduces the total coding time for about an hour or so. Arguably, fast FACS has brought excellent performance in experiments; fast FACS is reliable in providing an easy and novel tool for explicit FACS event coding, it has also provided a framework where the development of computer-assisted FACS tools including automated peak recognition and verification achievable. In fast FACS, future work should incorporate the manifestation of features that are fundamental in extending the system to certain the AUs as well as compare other methods for offset and onset detection, and predominantly integrate time to energetically account for the changes ion speech particularly. The FACS method is based on the collection and the analysis of quality video recording. Consequently, most FACS study with human beings has used extremely controlled investigational settings in data collection. For instance, when investigating interactions it is very vital to have good and velar video recording of both the interactants. In FACS, two cameras in suitable and appropriate positions are usually used in synchrony. Nevertheless, the FACS approach is not suitable and straightforward for the chimpanzees; however, use of this approach in laboratory-housed chimpanzee is certainly practicable. For instance, data collected of an individual chimpanzee facial movement while watching video recording of conspecifics.

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