

## **Abstract**

Evolutionary psychology supposes that human behaviour consists of adaptive tools, functional and mutually intertwined, that help an individual to survive and reproduce. Human proneness to ascribe psychological characteristics, based on an individual's facial features, may present such an adaptive tool. Facial sex-typicality, the individual representation of facial features regarding a given sex (male/female), affects other ascribed characteristics. Potential functional associations between sexually dimorphic facial structure, perceived sex-typicality, and physiological and behavioural correlates are the very topic of this thesis.

Following theoretical background, there are three studies listed as 'Published studies' (Study 1-3). Study 4, the submitted manuscript, has not been peer-reviewed yet. Study 5, already published, is listed as 'Appendix'. Study 1 (Fiala et al., 2021) compares the effects of perceived 'sex-typicality' and measured sexual shape dimorphism on ratings of attractiveness across five distant countries. Rating participants and stimuli faces were always from the same country. Whilst perceived female femininity is preferred across cultures, analysis of preference of perceived male masculinity and both-sex measured sex-typicality reveals cross-cultural discrepancies. Study 2 (Fiala et al., 2022) challenges the traditional viewpoint towards facial sex-typicality. According to our conclusions, the concept of a single universal scale of perceived sex-typicality is incorrect, calling the methodology of many past studies into question.

Study 3 (Pavlovič et al., 2021) studies cross-cultural differences in perceived attractiveness once the same facial stimuli (Czech Europeans) are assessed by people of different ethnic and/or cultural backgrounds (Czech Europeans, Czech Vietnamese and Asian Vietnamese). Shared culture (Czech) affects preferred characteristics to a substantial degree and tends to partly overwrite preferences based on shared ethnical origin (Vietnamese). Study 4, however, points to limits of this conclusion as no conclusive cross-cultural differences in the facial perception were revealed for Vietnamese faces and the three groups of raters (Pavlovič et al., manuscript). The fifth study, Appendix, (Kleisner, Leongómez, et al., 2021) adds another (acoustic) modality, showing that adaptive problems related to sex-typical performance and its assessment based on diverse potential cues are not vision-specific.

The thesis shows that a single scale of sex-typicality is questionable. While 'masculinity' and 'femininity' affect human perception of attractiveness and dominance, they do not present two opposite ends of a single linear scale. Moreover, the sexual shape dimorphism, unidimensional linear scale, does not predict the perception of masculinity and femininity consistently.

**Key Words:** dimorphism, perception, culture, face, evolution

