Testing the signaling role of creativity in the context of intersexual and intrasexual selection

The aim of the study is to verify the signaling role of creativity in intersexual and intrasexual selection contexts. Sexual selection and the instinct to reproduce are nearly as strong as the instinct to survive. Maybe that is why love has such an overwhelming strength among humans. It concerns both men and women equally. Courtship and mating issues have always been an inspiration for artistic creators. And Darwin suggested that creativity evolved as an adaptation to courtship. Miller developed his hypothesis into a theory which posits that not only physical, but also psychological traits can be fitness indicators that serve as signals attracting potential mates. A peacock's tail is the most popular sexual ornament among animals. We can imagine that such a showy attribute serves rather beauty than survival. However, it attracted peahens, so its owners achieved reproductive success. Humans display different forms of physical attractiveness. Usually symmetry and health indicators are the most valued by both men and women, as these traits are desired for offspring. However, as humans' cognitive abilities are much more advanced, psychological traits are even more appreciated. The psychological trait that is the most associated with beauty is creativity. However, creativity is equally the feature related to fine arts, technological innovations, and also the abilities that lead to such products. Defining creativity, researchers emphasize the ability to provide novel and useful solutions. And cognitive studies on the psychology of creativity are focused mainly on divergent thinking as a g-factor of creativity, similarly to IQ in the case of intelligence. However, in evolutionary studies on creativity as a signal for potential mates, mostly creative products are under investigation. If creativity has evolved as a signal for a potential mate, it should not only be perceived as attractive and translate into reproductive success, but should also be observable in contexts associated with mating: in the context of attractive partner or activated mating goal, as an intersexual selection mechanism, but also in intrasexual competition. In this project we want to test the signaling role of creativity among men and women, and verify if divergent thinking – the g-factor of creativity – can increase in the context of inter- and intrasexual selection. We plan to conduct four studies. Internet Study 1 will verify if creative potential increases when a physically attractive individual of the opposite sex enters the stage in the context of a dating site. Internet Study 2 will be conducted to replicate the effects of the first study in a similar situation and additionally to verify the psychological attractiveness of the opposite-sex individual as a potential long-term, or just a short-term mate. In Study 3 we will try to replicate the effect of attractiveness again in a situation resembling a dating site, but with the addition of attractive (vs not attractive) same-sex individuals on the stage. And Study 4 will be the experiment conducted live online. In this experiment we will try to replicate the effects of attractiveness and competitiveness in groups in an ongoing situation. We also want to verify if arousal and motivation to perform well may be mechanisms of this phenomenon. Arousal is found to affect creativity, and the mating context may be a real trigger for arousal. Motivation to perform well, in turn, may lead to increased signaling. We also propose moderators, relationship status and relationship satisfaction, as these factors may affect the need to attract opposite-sex individuals. As moderators we will also test mate value, as lower mate value individuals, when single, should be especially motivated to signal their availability as a partner, feeling rather less choosy as a potential mate. We also propose sociosexuality as a moderator because of its direct association with the need for signaling.