The proposed thesis is comprised of eleven papers connected by the employment of the evolutionary psychological approach in research on various aspects of human sexuality. The aim of the first monothematic part is to demonstrate the evolutionary-psychological approach to one recent phenomenon in female sexuality – the use of oral contraceptives (OC). OC use has been shown to suppress psychological mechanisms that are considered to be adaptive in the fertile period of the natural menstrual cycle. In particular, OC users’ ratings of male stimuli that provide the cues of genetic quality and compatibility are lower in comparison with normally cycling women. Moreover, the increase in sexual desire and in the prevalence of proceptive behaviour observed during mid-cycle in normally cycling women is diminished. However, the impact of this phenomenon on mate-choice and relationship dynamics in an ecological context has not been studied. In the first study, we have analyzed the data of Czech women obtained via representative sampling within the Czech National Survey of Sexual Behavior. Results indicated that normally cycling women had a significantly higher number of one-night stands during the last year in comparison to OC users even when living in a long-term relationship. OC usage was also shown to have impact on the frequency of dyadic intercourse, with coupled users reporting significantly higher frequencies.

Furthermore, our second study confirmed that parous women using OC at the time that they had met the father of their child scored lower on measures of sexual satisfaction and attraction to their partner, as compared with non-users. However, OC users scored higher on satisfaction with non-sexual aspects of the relationship and were shown to have greater relationship longevity.

Our results suggest that OC use can lead to a higher prevalence of relationship-maintaining behaviour and that it can bias mate choice towards the preference of men with higher long-term relationship qualities.

In the second part of the thesis, the evolutionary-psychological approach to various aspects of human sexuality (e.g. infidelity, male jealousy and sexual fantasies) is illustrated on the basis of other papers written during my doctoral studies, while its problematic issues are pointed out.

Keywords: evolutionary psychology, hormonal contraceptives, female sexuality, mate choice, sexual hormones