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Hazimeh F.S. INFLUENCE OF TESTOSTERONE ON BEHAVIOR Tutor: PhD, associate professor Gavrusev A.A.

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Testosterone is the most important male sex hormone, men who are heavily influenced by testosterone are said to be egotistical and they enjoy taking risks, but a number of European scientists have been trying to find out whether testosterone is really as bad as its reputation. The organizing and activating effects of testosterone have an influence on brain function, personality, and in particular behavior. Aggression, motivation, generosity, power motive, pro-social, verbal and social skills, autism, empathy and other themes are discovered to be affected by testosterone hormone which is responsible for determining man's overall personality.

Diverse experiments and several pertinent studies on human, concentrating on certain cognitive and behavioral aspects, have been published in order to demonstrate how testosterone impact the way of human acting especially male. Some experiments were carried out involving in a game exercise called ultimatum, by injecting testosterone to one group of participants, the other group is given placebo, so as to compare the results and analyze the effect of the hormone on coping in various situations illustrated via graphs that show how both groups differ in dealing upon a varying kinds of circumstances. Other types of tests are conducted through statistical collections focusing on how gender affects human behavior in general and the brain in particular.

So there's no simple one-to-one link between testosterone and male aggression or desire for power, latest findings indicate it's social and cultural environment factors that determine testosterone effects on manly behavior. Data results suggest that the rise in testosterone in the body boosts aggression, generosity, pro-social, antisocial, punishment, power motive and motivation, trust reciprocity and analytical skills, at the same time boys are more prone to autism and have less empathy and verbal and social skills in comparison to girls. Additionally, far away from behavior issues, some facts concentrate on how mood swings and depression are generated from testosterone volatility in men.

To sum up, the goal of this thesis was to provide an overview of our current knowledge of the complexity of the effects of testosterone on brain with special focus on their role in the known sex differences.