

✓ 1. Write a précis of the following and suggest a suitable title: (20)

Clearly, the empirical study of the biochemistry of aggressive and violent behavior in humans has just begun. The most well-replicated relationship appears to be the inverse association between indicators of central serotonergic function and aggressive/violent behavior, or perhaps more specifically, impulsive aggressive/violent behavior. This general finding is supported by a large animal literature showing that experimental increases in 5-HT function result in decreases in aggression, while decrease in 5-HT function increases aggression. A positive relationship between testosterone and aggression/ violence is also suggested by a large number of studies. The magnitude of this relationship appears to be small, and it may be due, at least in part, to increases in testosterone following commission of aggressive or violent behavior. The inverse association between platelet MAO activity and aggressive/violent behavior is also intriguing; however, its significance remains questionable. It is important to note again that the large majority of studies on the biochemistry of aggression and violence in humans are correlational in nature; the direction of the brain-behavior relationship cannot be specified from these studies.

A neglected area of research is the biochemistry of prosocial, affiliative behavior in humans, presumably these relationships would be the inverse of those found for aggressive and violent (i.e., antisocial) behavior (e.g., the serotonin reuptake inhibitor paroxetine increasing affiliative behavior in healthy volunteers). Higher order relationships are certainly possible, however. Greater emphasis also needs to be placed on experimental studies in humans in which neurotransmitter or hormonal functioning is altered and the effects on behavior observed. Such studies will help to elucidate the biochemical mechanisms contributing to human aggression and violence.

Investigators are only beginning to map out possible neurotransmitter/neurotransmitter and neurotransmitter/hormone interactions in the regulation of human aggressive and violent behavior. Serotonin/norepinephrine and serotonin/testosterone interactions have been hypothesized; however, experiments designed to test these relationships in humans have only just begun. One of the difficulties in this field is the lack of easily measurable peripheral indicators of central neurotransmitter function. Hormonal responses to neurotransmitter agonist challenges represent one such indicator; whole blood serotonin may yet prove to be another. Future investigation of adrenal/gonadal hormonal interactions promise to provide a greater understanding of the relationship between hormones, stress, and aggressive behavior.

Interactions between biochemistry and the environment will also need to be a focus of future investigation. A biochemical system may be tuned in such a fashion that it provides a template for the occurrence of aggression or violent behavior given the occurrence of certain environmental stimuli, for example, individuals with low serotonin may exhibit aggressive behavior specifically when provoked. Studies designed to demonstrate persons by environment interactions will help to illuminate the multitude of interactions that likely occur in the expression of aggressive and violent behavior in humans. An array of newer techniques has the potential to further enhance our understanding of human aggressive, violent, and prosocial behavior. / vis imaging of brain neurotransmitter synthesis and receptor function will clarify

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the neurochemical systems regulating prosocial and aggressive behavior. Groups of well-defined individuals selected for specific behavioral characteristics (e.g. physical aggression, impulsivity) should be studied in order to advance our knowledge of the biochemistry of the components of clinical disorders (e.g., conduct disorder). Only through such fine-grained analyses will the biochemical underpinnings of

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Title: Biochemical Studies on Human Behavior

According to a biochemistry research, there is inverse relationship between central serotonergic function and impulsive behaviour. It is also supported from study of animal literature. Moreover, there is interlinkage among plethora of biochemistry studies on ill-conduct of a human. The research on biochemistry of social factors is also important to find out the causes of human aggressiveness. Similarly, it must be analysed that hormonal disorder can affect human conduct. No doubt, it is just the beginning of such multiple studies on human behavior. Lack of ease in calculating the responses of hormones is a key hurdle for determining the exact impact on human conduct. The deep analysis of adrenal interactions can provide true information ^{about} interlinkage between hormones and mental stress. The synegetic study of biochemistry and environment can also help finding factors behind antisocial and prosocial behavior of individuals. Visual analysis of transmission and reception of brain neurons is equally important to determine factors controlling human behavior. Thus, well-educated people, having expertise on specific characteristics, should be hired to determine clinical patterns of human behavior.

8. Translate the following into English while keeping in view figurative/idiomatic expressions. (10)

دہشت گردی کی بہت سی تعریفیں ہیں لیکن اسے عام طور پر سیاسی طور پر منظم غیر ریاستی اداکاروں/عناصر کی طرف سے املاک کو تباہ کرنے، لوگوں کو زخمی کرنے، پر غمال بنانے اور/یا شہریوں کو قتل کرنے اور اس طرح دیکھنے والے وسیع تر سامعین کو ڈرانے اور متاثر کرنے کے ارادے سے کیے جانے والے سیاسی تشدد کے طور پر دیکھا جاتا ہے۔ ہدف آبادی اور اس کی حکومت کے ردعمل دونوں میں سیاسی، مذہبی یا نظریاتی تبدیلی: نیز گروپ کے اپنے بمردوں کے درمیان حمایت حاصل کرنے کے لیے دہشت گردی بہت زیادہ بڑے پیمانے پر ذرائع ابلاغ پر انحصار کرتی ہے تاکہ متاثرین کی نسبتاً کم تعداد پر کیے جانے والے حملوں کے نفسیاتی اثر کو زیادہ سے زیادہ اثر لینے والے سامعین کو خوفناک تصویریں فراہم کر سکیں۔ اس بات پر کافی تنازعہ ہے کہ کس کو دہشت گرد قرار دیا جائے، خاص طور پر ایسے حالات میں جہاں غیر ریاستی عناصر یعنی آزادی پسند (باغی یا گوریلا جنگجو) کو بھی مقبوضہ علاقوں میں جائز بغاوتوں کی قیادت کے طور پر دیکھا جا سکتا ہے لیکن اس کے باوجود کون دہشت گردوں کی طرح کے ہتھکنڈے استعمال کرتا ہے، دیکھنا چاہئے جیسے کہ بادی النظر میں، عام شہریوں کو ڈھال کے طور پر استعمال کرنا اور اندھا دھند شہری اور فوجی اہداف کو نشانہ بنانا۔

Translation

There are multiple definitions of terrorism but commonly it is deemed as to harm, hurt, kill and fear the civilians for political interests. Terrorism depends upon the presence of political, religious and ideological differences between public and governments response to terrorism. People ideologically aligned with terrorist outfits spread pictures of terrorist incidents to affect the mentality of citizens. There is controversy about definition of terrorists particularly in those conditions when banned groups are leading independent movements in occupied regions. Despite that it should be understood that who is acting like terrorists involved in acts like using citizens as a shield for killing people and military personnels, to define the terrorism.