Lab Report

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Abstract

This experiment veers into systems that control the personality of an individual and the behavior therein. It shows how different systems relate to the functioning of the human body in response to different situations and the underlying factors of personality in humans. The systems represent a foundation structure that drives most personality traits. The body of a person contains different traits that are controlled by the entire systems. These traits are the domains of a personality that describe the personality of an individual in response to factors like conscientiousness, extraversion and neuroticism (Lewis, Haviland-Jones, & Barrett, 2008). However, the entire systems are grouped according to their interrelationship in terms of activation or inhibition behavior in one's body. There are two different models of describing human personality traits. These include Behavioral Activation System (BAS), which controls approach to different factors on one hand, and Behavioral Inhibition System (BIS), which controls withdrawal factors on the other. This paper gives the consistent findings about relationships between BAS and BIS. Moreover, it shows how to derive the coexistence between neuroticism and extraversion personality traits from a random assessment of BIS and BAS (Gruszka, Matthews, & Szymura, 2009).

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Nomenclature

Under these systems, there is Behavioral Activation System (BAS), which forms a part of the neurological system for control of body arousal. The most common part of the brain that necessitates this function is the thalami. The system responds to different conditions by regulating the behaviors of one's body approach. It is also known as the reward system. Behavioral Inhibition System (BIS) refers to a part of the brain that responds to different conditions with non-rewarding stimuli (David, Boniwell, & Ayers, 2012). This system is vulnerable to emotions that may be negative. For instance, in the case of fear or frustration, BIS functions to control the levels to normality. However, this experiment explains how one's personality physiologically or behaviorally responds to varying situations. It explains how BIS/BAS system relates to the dimensions of personality. Consequently, there is a consistent use of neuroticism as a personality factor that is fundamental in one's body. It is associated with depressed moods and anger, while extraversion is a body act of being sensitive and manifested in the outgoing, for instance, one has energetic behavior or is talkative by nature (Vollrath, 2006).

Introduction

BIS and BAS are the functions of the body, which determine the traits of a person. The relationship that exists between these two bodies functions is the work in the reverse order. In the experiment, the data correlations give results for the descriptive statistics showing the relationship between BIS/BAS and the personality traits of neuroticism and extraversion. The table of statistics shows that there is a common value of a probable descriptive sample valued at 36. The SPSS results for statistics show that the mean for the BIS is lower than the mean for the BAS drive. The value for the mean of BIS is at 2.9563, while the value for the mean of the BAS drive is 2.7569. This shows that under normal circumstances the responsiveness of BIS is higher than that of BAS (Corr, 2008). Consequently, the increase or decrease of these values depends on the prevalence of either BAS or BIS. In situations of BIS body parts activation, the cortex releases enzymes of activation of the arousal of the body. This brings the levels of arousal up, thus balancing the mean value of activation to 0.9485. Conversely, when the levels of body arousal are high, the body works in a counter reaction through activation of BIS to counter the effects of BAS to balance the body (Gruszka, Matthews, & Szymura, 2009).

In the light of a random assessment, the statistic mean of neuroticism is lower than that mean value of extraversion. These are personal traits that result from the change in the body arousal system, while they are determined by the functions of both BIS and BAS as body parts that control these traits. It is therefore evident that if the mean of BAS is lower than BAS, this means that the mean for neuroticism must be lower than the mean for extraversion. From the statistical data, the mean for neuroticism is 2.3056 at an extraversion mean value of 3.4429. These values are in agreement with the theoretical understanding of the relationship between the functions of BIS and BAS. It is also evident that the minimum value, the maximum value and the standard deviations of body arousal are higher than those values for inhibition. Consequently, the table of gender shows that gender is the constant factor in determination of levels of arousal, in which females show a higher level of arousal than their male counterparts (David, Boniwell, & Ayers, 2012).

The correlation between extraversion and functionality of BIS shows that there is a significant value of -0.342 at the 0.05 (2-tailed), while the correlation between neuroticism and the functionality of BIS has a significant value of 0.631 at the 0.05(2 tailed). This shows that the activation of body parts with BIS functionality reduces the significant value of extraversion. The converse is also true that the activation of the body parts with functionality of BIS increases the significant value of neuroticism. On the other hand, the correlation between BAS drive and neuroticism gives a significant value of 0.002, while that of the correlation between BAS drive and extraversion gives a significant figure of 0.400 at the 0.05 level (2-tailed). This shows that the body parts for activation of BAS do not go beyond the zero levels, which implies that the functionality of BAS is always higher than BIS (Corr, 2008).



Theory

In the experiment, the traits of personality are found to be connected to both positive and negative effects that may affect the cognitive duty in the body. Since extraversion and neuroticism portray both positive and negative atmosphere, they might also influence similar judgment. For instance, in the experiment, participants (n=36) who carried out a study on factors of personality traits defined their states with a possibility of both negative and positive activities occurring. This shows that interrelated factor traits foretell a possible conclusion. The experiment implies that the factor traits of both extraversion and neuroticism constitute a steady cognitive configuration. These traits having positive and negative emotionality are defined in terms of emotional activity. Moreover, a person with a high level of neuroticism and extraversion acquires an intense response to stimuli contrary to the one with low levels. However, situations with high levels of extraversion record a positive effect when responding to positive stimuli. Conversely, in situations of neuroticism, there is a negative affect while responding to negative stimuli (Vollrath, 2006).

It has been found out that both BAS and BIS correlate an opposing manner with the Reward Dimension. Neuroticism can be widely pronounced by the BIS since both are sensitive to negative emotions. On the other hand, BAS is characterized by positive assessments and emotionality which can predict extraversion at most due to approach tendency with positive emotions. Nevertheless, BIS can also spearhead feelings that are positive if negative evaluation fades although this cannot destroy core element of negative evaluation. Similarly, BAS can cause a negative trait like anger when blocked to attain the positive hence extraversion relates positively to BAS. The effect of personality on conclusions can be direct or indirect (Lewis, Haviland-Jones, & Barrett, 2008).

Results and Discussion

It is noted that moods that are positive can cause a biased recall of information that is positive in the case of extraverts rather than of introverts. For instance, most people with high-N persons may undergo a network that has complex emotions that are negative than low-N persons. However, judgments can be affected by personality through stable differences of an individual in the related networks. It is evident that affect-congruent conclusions can be predicted by the extraversion-neuroticism combination in degenerating equations. It is also evident that the statistical values like the mean, the standard deviation, the minimum and the maximum values for the BIS body functionality are higher than those values of the BAS functionality. For instance, while the value of the moving average of the BIS functionality stands at 2.0278 with a standard deviation of 0.53489. Consequently, the analysis for neuroticism depicts a mean value of 2.3056 with a standard deviation of 0.69413. On the other hand, the moving average value for extraversion is found out to be 3.4429, which is slightly higher than that of neuroticism with a standard deviation of 0.69222.

Gender is the constant factor of proportionality for the functionality of both BIS and BAS in the sense that there are higher levels of responsiveness to the body functionality of BIS/BAS in women than in men. In this experiment, there were a total of N participants, with N being equal to 36, made up of 28 females and 8 males. This system provides a comprehensive conclusion since the bigger the figure of those with active response, the more detailed the conclusion. In relation to the correlations, it is evident that extraversion correlates with BIS in a negative mode with a significant value of -0.342 at the 0.05 level (2-tailed). On the other hand, the correlation between BAS drive and extraversion gives a positive significant figure of 0.044. This value is slightly higher than that of neuroticism in correlation with BIS functionality and the BAS drive. Gender is also the constant factor for depicting the nature of correlation, in which females show varied responses to the influence of the personality traits (Vollrath, 2006).

The correlations between neuroticism and functionality of BIS and BAS drive are positive values with that of neuroticism having a correlation with a significant value of 0.631 at the 0.011 level (Pearson correlation) in relation to the functionality of BIS. On the other hand, the correlation between BAS drive and neuroticism gives a significant value of 0.02. The correlation between extraversion and neuroticism depicts a negative significant value of -3.59 at the 0.05 level (Pearson correlation). This shows that as much as the influence of BIS functionality to neuroticism with an inhibition of body arousal gives rise to a positive impact, the functionality of BAS drive culminates in a counter action to balance the body to normalcy (Corr, 2008). In males, BAS and BIS functionality is lower as compared to the activity in women because of the differences in the hormonal discharge. This implies that females secrete hormones that increase the rate of functionality of both BIS and BAS, while the male counterparts secrete hormones, which inhibit the functionality of both BIS and BAS. This is largely affected by the levels of excitement, in which females are highly activated to excitement as compared to male counterparts (David, Boniwell, & Ayers, 2012).

It is evident that as much as the BIS body functions lead to neuroticism, the BAS functionality leads to extraversion. These two body functions work in an opposite direction. When the levels of body arousal are high, the neurological system works in favor of the BIS functionality to reduce the levels of activation to normal. Consequently, when the levels of body activation are low, the neurological system works in favor of BAS functionality to increase the levels of body activation. This might result in the mood swings of a person, which defines the behavior and personality in human beings (Gruszka, Matthews, & Szymura, 2009).

Conclusion

As much as BIS and BAS drive functions of the body work in reverse order, they determine the traits of a person since they are sources of mood modulation. This implies that if a person does not have a proper system of control of the functionality of both the BIS and BAS drive, there may be extreme situations of control of emotions (Gruszka, Matthews, & Szymura, 2009). This is because the moving averages, according to the hormonal distribution, do not give an automated system of control of both extraversion and introversion. The lack of proper control of these personality traits is the result of the lack of control of the BIS/BAS functionality, while the results depict deviations from the normal marked by mood swings. From the analysis of the datum, it is evident that the mean value for BIS is higher than that of BAS drive under normal circumstances since the essentiality of extraversion in the human body is more dominant than that of neuroticism. It is also evident that gender is the constant factor of proportionality in this relationship, in which females are more proactive to these functions than male counterparts due to hormonal differences (David, Boniwell, & Ayers, 2012).



References

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