A NEUROCOGNITIVE MODEL OF HIGH ANXIETY TRAIT IN VICTIMS WITH POST DISASTERS EXPERIENCE

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Abstrak

Mereka yang mempunyai pengalaman berkaitan bencana amat mudah sekali menjadi mangsa yang terdedah kepada sifat kebimbangan yang tinggi. Tingkah laku ini boleh berkembang dari semasa ke semasa menjadi kebimbangan yang tulen sekiranya individu tersebut tidak mempunyai sebarang bentuk sokongan. Oleh sebab itu, pemahaman terhadap tingkah laku individu tersebut merupakan suatu cara yang penting untuk merungkai kewujudan kebimbangan itu. Beberapa tahun kebelakangan ini, focus terhadap kebimbangan ini telah menjadi fenomena. Manifestasinya telah dikaji secara meluas di peringkat bawah tentang sistem fungsi manusia (tubuh badan). Sebahagian penyelidik juga telah meneruskan kajian tersebut di peringkat yang lebih tinggi tentang fungsi kognitif. Akan tetapi, masih lagi terdapat bukti-bukti yang menunjukkan bahawa pendekatan yang tepat tidak disediakan untuk mendapatkan jawapan tentang kewujudannya dalam tingkah laku manusia. Sementara itu, maklumat-maklumat yang masih ada menunjukkan gangguan kebimbangan ini merupakan masalah psikologi yang paling lazim yang dihadapi oleh dunia sekarang ini. Tambahan pula, mereka yang mengalami gangguan ini mencatatkan angka yang sangat tinggi dalam kalangan penduduk di seluruh dunia. Oleh sebab itu, kajian ini lebih tertumpu kepada bagaimana individu yang telah mengalami bencana ini boleh memanfaatkan kebimbangan melalui pendedahan yang baik terhadap peristiwa-peristiwa yang mendatang dalam persekitaran mereka. Ini adalah langkah yang proaktif untuk menampung kewujudan gangguan kebimbangan yang lebih luas yang mungkin timbul melalui bencana yang berlaku yang mana ianya kini merupakan hal ehwal seluruh dunia. Aspek ini dicapai melalui pertimbangan terhadap Peranan mekanisma neurokognitif dalam kewujudan kebimbangan. Hasil penyiasatan menunujukkan mekanisma neurokognitif memainkan Peranan dalam kewujudan kebimbangan. Hal ini telah didemonstrasikan melalui konsep pemodelan pengkomputeran untuk mensimulasikan mekanisma yang dikenalpasti melalui dapatan kajian dan pendapat-pendapat pakar. Peningkatan dalam pengaktifan amygdala diperhatikan bagi membantu pembangunan kebimbangan sementara perkara yang sama dilakukan kepada korteks prefrontal untuk membantu menghalang kebimbangan dan sebaliknya. Tambahan pula, transformasi yang sesuai terhadap kondisi individu telah ditaksirkan menggunakan persamaan matematik untuk menunjukkan perubahan yang munasabah dari semasa ke semasa.

Kata kunci: Mekanisma neurokognitif, Sifat kebimbangan yang tinggi, Pemodelan pengkomputeran, Pengalaman pascabencana

Abstract

People with disasters experience are the most vulnerable victims of high anxiety trait. This behavior could develop overtime to pure anxiety if the individuals do not have any means of support. Hence, understanding this behaviour in the individuals is an essential means of unveiling anxiety emergence. Anxiety has been a phenomenon of focus over the years. Its manifestations have been extensively studied at the lower level of human functioning system (the body). Also, some researches have extended to the higher level of cognitive functions. Still, evidences showed that a precise approach have not been provided to elicit its emergence in human behavior. Meanwhile, extant literatures showed that anxiety disorders are the most prevalent psychological problems the world is facing today. More so, numerous numbers of people around the globe were suffering from these disorders. Therefore, this study examines how individuals with post disasters experience could develop anxiety by virtue of exposure to further events in the environment. This is a proactive measure to cater for wider emergence of anxiety disorders that might arise through disasters occurrence which is now a worldwide affair. This aspect was achieved through consideration for the role of neurocognitive mechanisms in the emergence of anxiety. The outcome of the investigation shows that, neurocognitive mechanisms play role in the emergence of anxiety. This was demonstrated through computational modeling concept to simulate those mechanisms identified through literatures and expert opinions. Increased activation of amygdala is observed to favor the development of anxiety while that of the prefrontal cortex favor the prevention of anxiety and vice versa. In addition, possible transformation of the individuals' conditions was assessed using mathematical equations to show the possible changes overtime.

Keywords: Neurocognitive mechanisms, High anxiety trait, Computational modeling, Post disasters experience.

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CHAPTER ONE
BACKGROUND OF STUDY

This chapter presents the introduction to this research by explaining the background information underlying the concepts in the study, the problem statement, research objectives as well as scope and significance of the study. It explicitly defined the focused of the study and provides brief insight into the target model.

1.1 Introduction

Anxiety is a feeling and emotion exhibited in response to a particular threat. It is characterized by set of physiological and behavioral patterns such as arousal, vigilance, and avoidance that protect individuals from the possible danger associated with that threat (Gross & Hen, 2004).

These patterns of behaviour form part of the psychological and universal mechanisms employed to excite the states of the mind towards a threat (Choi et al., 2011). Physiologically, these are normal reactions, but, if the condition associates with the cognitive functioning process, it becomes problem and if not given the necessary attention could lead to chronic condition that could affect the normal psychological state of individuals (Eysenck, 2013).

The symptoms of anxiety share similar features with fear, but, a clear distinction could be made between these and fear in term of response to a specific threat that is short lived (Rachman & Maser, 2013). In the pathological form, anxiety exist in six forms as provided in the Diagnostic and Statistical Manual of the American Psychological association (Gross & Hen, 2004). These classifications include Panic

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