

Citation:

Bakhle Shrirang, “*Study of Psychiatrists’ perceptions about ‘mind’ and its position in Psychiatry today*”, Indian Journal of Mental Health, 2015; 2(1): 70-73

Abstract

Background

The term ‘mind’ is important in Psychiatry. For example, when certifying Testamentary Capacity, Psychiatrists certify that a person has a sound ‘mind’. ‘Mental’ means ‘related to mind’. With advances in neurobiology, Mental illness is being considered disease of brain. So are ‘Mental’ disorders, disorders of mind or brain?

Aim

The study aims to understand Psychiatrists’ perceptions about these fundamental issues: Is MSE done to know status of mind or brain? What is the difference between Psychiatry and Neurology if both study brain? Is ‘mind’ the difference? If Psychiatry is ‘study of disorders of mind’, then what is mind? What are the parts of mind? Is there any currently accepted framework or model of the mind?

Materials and methods

A questionnaire to assess the perceptions of Psychiatrists about these issues was presented to qualified Psychiatrists and Psychiatry residents. The replies were analysed to understand opinion trends and to see if there was consensus about these topics.

Results

There is clear consensus that Psychiatry and ‘mental’ disorders are concerned with ‘mind’.

However, there is complete lack of consensus about nature of mind and related topics. There is consensus that ‘mental’ disorders are not disorders of just brain.

Conclusions

‘Mind’ is important in Psychiatry. However, considering the complete lack of consensus about the nature of mind and related topics, there is an urgent need to debate and evolve consensus about these vital topics.

Key words: mind, brain, perceptions of Psychiatrists, Psychiatry, Neurology

(Main article)

Introduction

The term ‘mind’ is used often in Psychiatry. For example, when certifying Testamentary Capacity, the Psychiatrists have to say that a person has a sound ‘mind’. [1] Historically, too, the science of Psychiatry evolved around the topic of mind. The National Institute of Health’s (NIH) US National Library of Medicine Website describes the “Diseases of the Mind: Highlights of American Psychiatry through 1900”. It says:

“Benjamin Rush, often called “The father of American Psychiatry”, wrote the first systematic textbook on mental diseases in America entitled, *Medical Inquiries and Observations upon Diseases of the mind* published in Philadelphia in 1812.”

Please note how the US NLM’s webpage that describes the history of American *Psychiatry* is titled “Diseases of the *Mind*”. And the Father of American *Psychiatry* wrote the first textbook of *mental* diseases describing the diseases of the *mind*. [2]

However, in the last few decades, the focus in Psychiatry seems to have shifted to neurobiology and brain.

The word ‘mental’, too, is used often in Psychiatry: Mental disorders, Mental Status Examination, Mental Health Act, National Institute of Mental Health, DSM of Mental Disorders (DSM 5) etc. The word ‘mental’, according to the Oxford Dictionary, means ‘related to mind; related to disorders or illnesses of the mind’. [3] But banners put up at a recent Psychiatry conference said, “Mental illness is disease of the brain”. [4] This represents the view of the ‘Biological Psychiatry’.

So are ‘mental’ disorders, disorders of mind or brain or both? Has ‘mind’ become redundant? Can Psychiatry replace the terms ‘mind’ and ‘mental’ with ‘brain’ and ‘neurological’?

If the ‘Mental’ disorders are disorders of the brain, then what is the difference between Neurology and Psychiatry? Why are some disorders of the brain (such as hemiplegia) not considered as ‘mental’ disorders?

The DSM-IV-TR, too, is not sure about this issue. The DSM is a manual of “mental” disorders. But it says, “...unfortunately the term (mental) persists in the title of DSM-IV-TR because we have not found an appropriate substitute.” [5] Thus the DSM-IV-TR wanted to remove the word ‘mental’ from its title but it could not find a more appropriate word.

Background

Brog and Guskin (1998) have reported a survey about “Medical students’ judgments of mind and brain in the etiology and treatment of psychiatric disorders”. [6] However the study was about the perceptions of general medical students and not just members of the Psychiatric fraternity. Harland et al (2009) report “A study of psychiatrists’ concepts of mental illness”. [7] But the focus of their study was the perceptions about the different aetiological models such as biological model, cognitive model, behavioural model etc. Miresco and Kirmayer (2006) surveyed Psychiatrists’ and Psychologists’ opinions about the Mind – Brain dichotomy in the aetiology of mental illness using clinical vignettes. Their analysis was also related to whether they tend to put the blame on the patients depending on whether the aetiology was perceived as primarily psychological or neurobiological. [8]

Aim

A survey of literature and discussions with eminent Psychiatrists from India and abroad, revealed different opinions about the topic of ‘mind’. Hence the present study was planned to crystallize the viewpoints. The present study aims to understand the perceptions of

Psychiatrists about these fundamental issues in Psychiatry: Is the topic of ‘mind’ still relevant in today’s Psychiatry? If so, then what is mind? What are the relationships between mind-brain and mind-behaviour? What is the best method of studying the mind? If Psychiatry is to be considered as ‘the study of diseases of the brain’, then what is the difference between Psychiatry and Neurology? Is mind the difference?

Materials and methods:

Instruments

A questionnaire was prepared to understand the perceptions of Psychiatrists about these topics. It has 15 questions. [See Appendix 1]

The first group of 4 questions aims to understand the perceptions about the similarities and differences between Biological Psychiatry (with its focus on the brain) and Neurology which is also the study of brain.

The next 2 questions are about understanding the perceptions about the word ‘mental’ – as in ‘Mental’ disorders and the Mental Status Examination.

The next 7 questions probe the perceptions about the nature of mind, its relationship with brain and behaviour and the best method of studying the mind of the patient.

The last 2 questions deal with the ‘Mental’ disorders and brain.

The preliminary discussions had revealed a variety of opinions, and since the aim of the study is to understand the perceptions about these topics, the questions were deliberately kept open-

ended. Options were offered in only two of the questions and they, too, have an option of ‘any other’.

Participants

The participants in Psychiatry conferences form the background population. They were offered the questionnaire. The respondents voluntarily filled up the questionnaire. The response rate was 60%. The form briefly introduced the purpose of the study. The respondents were assured about confidentiality.

General demographic characteristics

Variables	n	%
Age		
< 30	15	41.6
30 – 40	13	36.1
40 – 50	4	11.1
> 50	4	11.1
Gender		
Male	27	75
Female	9	25
Qualifications		
MD and/or DNB and/or DPM	24	66.6
Psychiatry Residents	12	33.3

The average age is 34.8 years.

It is not known whether the male:female ratio represents the ratio across the Psychiatric fraternity.

Method

Since most of the questions were open-ended and subjective, the varieties of answers were analysed for similarities. All the different answers were duly recognized. They are listed in Appendix 2. Since the focus of the study is the status of mind in today's Psychiatry, the analyses were done to note the perception trends about it.

Results

The analyses of the conceptually important questions are described first.

Q. [2] 'Psychiatry' is the study of disorders of:

- The answer 'mind' was given by 38.8%.
- The word 'mind' was included in the answers of additional 36.1%.
- Totally 75% used 'mind' in their answers.
- Totally 16 different answers to this question.
- No one gave 'brain' as the only answer.

Q. [5] 'Mental' disorders are disorders of:

- The answer 'mind' was given by 44.4%.
- The word 'mind' was included in the answers of additional 36.1%.
- Totally 80.5% used the word 'mind' in their answers.

- Totally 14 different answers.
- No one gave 'brain' as the only answer.

Q. [7] In your opinion, is there an entity called 'mind' OR "There is no mind but only brain"?

- Totally 88.8% opined that there is an entity called mind.
- 8.3% opined that mind is functional correlate of brain.
- 1 opined that there is no separate entity called mind but there is only brain.

Q. [8] What is 'mind'?

- 3 did not answer the question.
- 33 gave 33 different answers to this question. No two answers are same.

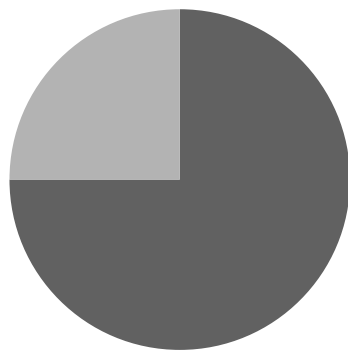
Q. [11] What are the parts of mind? What is mind made up of?

- 27.7% did not answer this question.
- Of the respondents, 26 gave 26 different answers. No two answers are same.

Q. [12] Is there any theory or model of the mind that is universally accepted by all Psychiatrists, Psychologists and Neurologists today?

- 66.6% gave the answer 'No'.
- 8.3% gave Freudian Topographical theory as the answer.
- 5.5% gave id, ego, superego (which is Freud's Structural model).
- 3 gave 3 other answers.
- 1 did not answer the question.

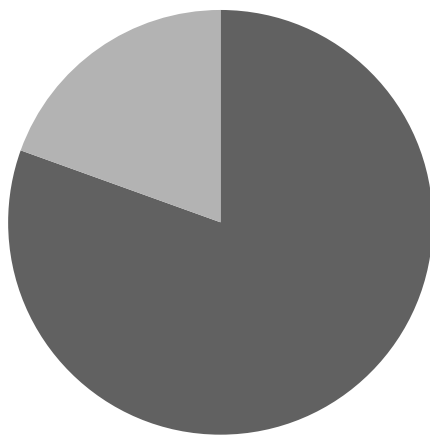
Q.2. Psychiatry is the study of disorders of:



- Mind included in answer
- Mind not included in answer
- Only brain



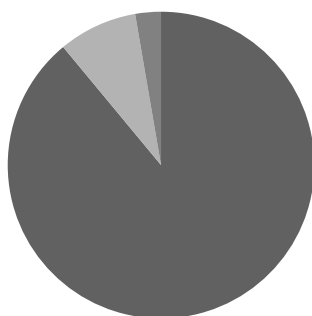
Q.5. 'Mental' disorders are disorders of:



- Mind included in answer
- Mind not included in answer
- Only brain as answer



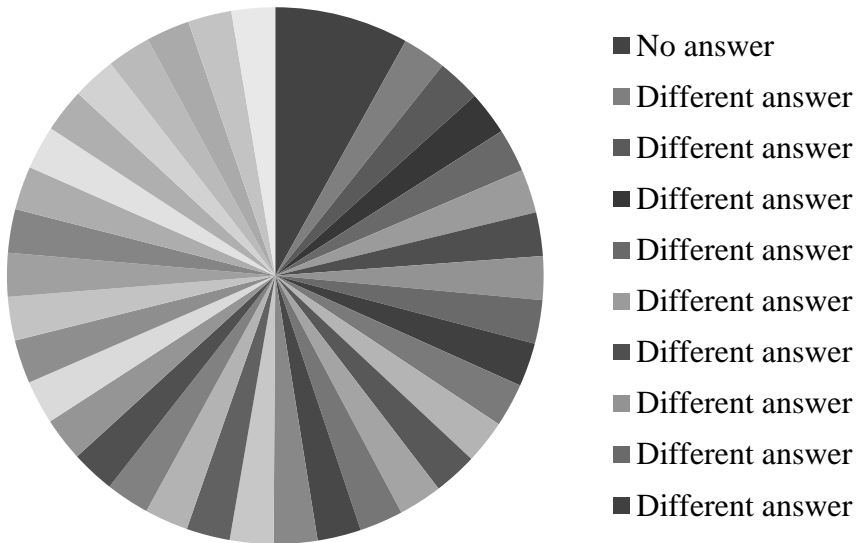
Q.7. Is there an entity called 'mind'?



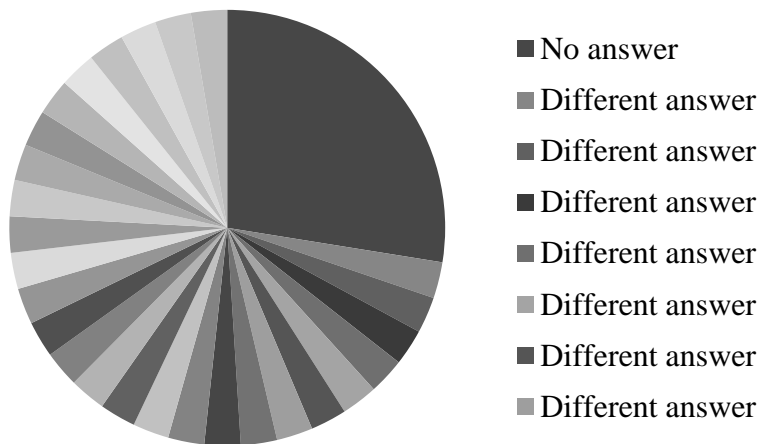
- Yes
- Functional correlate of brain
- No



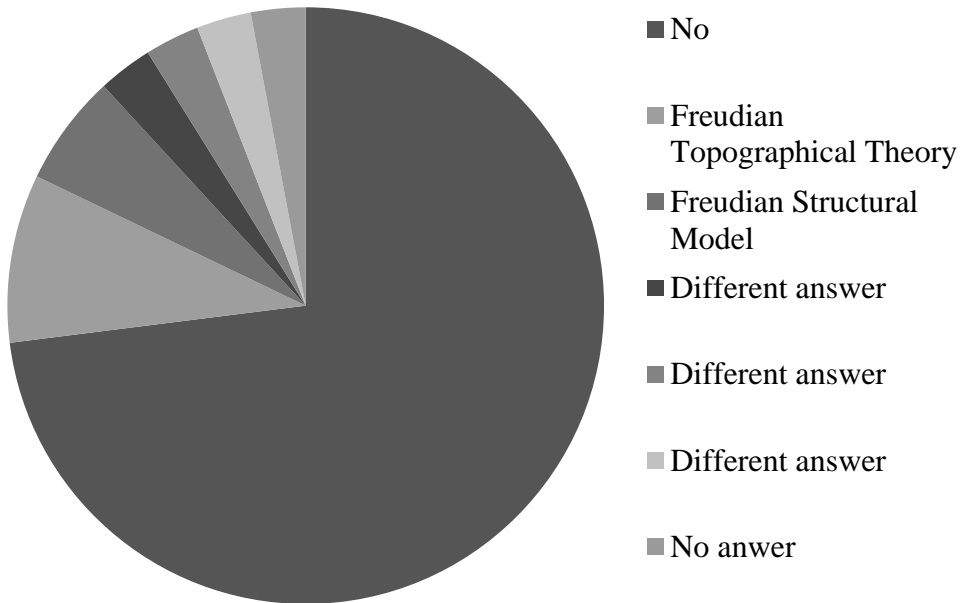
Q.8. What is 'mind'?



Q.11. What are the parts of mind? What is mind made up of?



Q.12. Is there a universally accepted theory of mind?



The analyses of the other questions are as follows:

Q. [1] 'Neurology' is the study of:

- * 80.5% gave 'brain' and / or 'nervous system' as the answer
- * 8.3% gave 'structural changes in the brain' as the answer
- * Totally 88.8% opined that neurology is the study of brain and/or nervous system.
- * 4 gave 4 other answers

Q. [3] 'Psychology' is the study of:

- * 50% gave 'mind / psyche' as the answer
- * 25% gave 'behaviour' as the answer

* 8.3% gave 'mind and behaviour' as the answer

* 9 gave 9 different answers

* 1 did not answer

Q. [4] What is the difference between 'psychiatric disorders' and 'neurological disorders'?

* 30.5% gave the answer that meant neurological disorders have structural basis whereas psychiatric disorders lack structural certainty.

* 16.6% said that neurological disorders are disorders of the brain and psychiatric disorders are disorders of the mind.

* The rest 19 gave 17 different answers.

Q. [6] 'Mental' Status Examination (MSE) is used to study the status of:

* 33.3% gave the answer 'mind'.

* 'mind' appeared in the answers of additional 27.7%

* 11.1% gave the answer 'brain'.

* 'brain' appeared in the answer of additional 13.8%

* Totally 16 different answers.

Q. [9] What is the relationship between mind and brain?

* 16.6% gave answers that meant interlinked structure – function relation

* 12.1% said they are interrelated

* 12.1% did not answer

* Totally 20 different answers

Q. [10] What is the relation between mind and behaviour?

* 41.6% gave the answer that meant behaviour is governed by state of mind

* 16.6% did not answer

* Totally 18 different answers

Q. [13] In your opinion, which is the best single method of studying the ‘mind’ of the patient: fMRI, DTI, DWI, PET scan, EEG, ‘observing non-verbal behaviour’, ‘studying speech’ or any other?

* 19.4% gave the answer ‘observing non-verbal and verbal behaviour’

* 16.6% answered that all these methods should be combined

* 11.1% gave the answer ‘observing non-verbal behaviour’

* Totally 15 different answers

Q. [14] Can we define the diagnostic criteria of ‘Mental’ disorders in terms of brain parameters such as fMRI findings or other brain investigation techniques?

* 75% gave the answer ‘no’

* 19.4% gave the answer ‘yes’

* 1 gave the answer ‘maybe’

Q. [15] In your opinion, ideally, the diagnostic criteria of ‘mental’ disorders should be described in terms of (a) symptoms (b) dysfunctions in brain (c) dysfunctions in mind (d) any other:

* 27.7% gave the answer ‘combination of all’

*22.2% gave the answer ‘symptoms’

*11.1% gave the answer ‘symptoms and dysfunctions in mind’

* Totally 11 different answers

Conclusions

The results indicate clear trends. There is clear consensus about some topics while there is no consensus about others.

There is clear consensus about the following topics:

~ 75% feel that Psychiatry is concerned with ‘mind’. No one gave ‘brain’ as the only answer.

~ 80.5% feel that ‘mental’ disorders are concerned with mind. No one gave ‘brain’ as the only answer.

~ 88.8% opined that there is an entity called ‘mind’.

~ 66.6% opined that there is no universally accepted theory or model of the ‘mind’.

~ 75% feel that the diagnostic criteria of mental disorders cannot be described in terms of brain markers.

~ 61% opined that the ‘Mental’ Status Examination is concerning the status of the ‘mind’.

There is lack of consensus about the following topics:

~ There is complete lack of consensus about ‘What is mind?’. Each of the respondents provided a different definition of mind. 8.3% did not answer the question.

~ There is complete lack of consensus about ‘What are the parts of mind? What is mind made up of?’ 27.7% did not answer the question. Each of the other respondents provided a different answer.

~ The lack of consensus about ‘mind’ is reflected in the analyses of related questions: What is the relation between mind-brain and mind-behaviour? What is the best method of studying ‘mind’?

Discussion

There is consensus that Psychiatry and ‘mental’ disorders are concerned with ‘mind’.

However, there is a complete lack of consensus about the nature of mind and related topics.

On the other hand, there is complete consensus that ‘mental’ disorders are not disorders of just brain. There is also consensus that the diagnostic criteria of ‘mental’ disorders cannot be defined in terms of brain markers.

It is quite illuminating to study the spectrum of perceptions about these vital topics by going through the range of answers given in Appendix 2

Limitations

This is a pilot study with a small sample size. Hence the conclusions need to be confirmed with larger studies. However, the clear cut trends – both the consensus and the lack of it – are worth studying. A better representation from across the country and abroad will make a future study more representative. The participants are predominantly aged less than 40 with the average age being 34.8.

Future work

The term ‘mind’ is used often in Psychiatry. For example, when certifying Testamentary Capacity, the Psychiatrists have to say that a person has a sound ‘mind’. Considering the complete lack of consensus today about ‘mind’ and related topics, there is an urgent need to debate and evolve consensus about this vital topic in Psychiatry.

References

- [1] Jiloha R.C., “Mental capacity/testamentary capacity”. CPG 2009, Indian Journal of Psychiatry
- [2] Ozarin Lucy, North Michael (Ed.), “Diseases of the mind: Highlights of American Psychiatry through 1900”, US National Library of Medicine website, Last updated Sep 17th 2013, page viewed Mar 27th 2015.
- [3] Oxford English Dictionary, 2010, p. 566
- [4] Banners at the ANCIPS 2012, Kochi
- [5] Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision, 2000, p.xxx

[6] Brog MA, Guskin KA, “Medical Students' Judgments of Mind and Brain in the Etiology and Treatment of Psychiatric Disorders: A Pilot Study”, *Academic Psychiatry* 1998;22:229-235.

[7] R. Harland et al (2009). A study of psychiatrists' concepts of mental illness. *Psychological Medicine*, 39, pp 967-976. doi:10.1017/S0033291708004881.

[8] Miresco M.I., Kirmayer L.I., ‘The persistence of mind-brain dualism in Psychiatric reasoning about clinical scenarios”, *Am J Psychiatry* 2006; 163:913-918

Appendix 1

Questionnaire for the study:

[1] 'Neurology' is the study of:

[2] 'Psychiatry' is the study of disorders of:

[3] 'Psychology' is the study of:

[4] What is the difference between 'psychiatric disorders' and 'neurological disorders'?

[5] 'Mental' disorders are disorders of:

[6] 'Mental' Status Examination (MSE) is used to study the status of:

[7] In your opinion, is there an entity called 'mind' OR "There is no mind but only brain"?

* If you believe that there is an entity called 'mind' then please answer the following questions:

[8] What is 'mind'?

[9] What is the relationship between mind and brain?

[10] What is the relation between mind and behaviour?

[11] What are the parts of mind? What is mind made up of?

[12] Is there any theory or model of the mind that is universally accepted by all Psychiatrists, Psychologists and Neurologists today?

[13] In your opinion, which is the best single method of studying the ‘mind’ of the patient: fMRI, DTI, DWI, PET scan, EEG, ‘observing non-verbal behaviour’, ‘studying speech’ or any other?

[14] Can we define the diagnostic criteria of ‘Mental’ disorders in terms of brain parameters such as fMRI findings or other brain investigation techniques?

[15] In your opinion, ideally, the diagnostic criteria of ‘mental’ disorders should be described in terms of (a) symptoms (b) dysfunctions in brain (c) dysfunctions in mind (d) any other:

Appendix 2

The numbers in parentheses indicate the number of respondents who gave that answer.

[1] 'Neurology' is the study of:

- ~ brain (17)
- ~ central and peripheral nervous system (7)
- ~ brain and nervous system (4)
- ~ structural changes in brain (3)
- ~ neural circuits and functionality (1)
- ~ organic cause of neurological illness (1)
- ~ disorders of concrete functions of brain (1)
- ~ brain functioning, neurological structures and their impact on everyday living (1)

2] 'Psychiatry' is the study of disorders of

- ~ mind: (14)
- ~ mind and brain: (5)
- ~ mind-brain interface (1)
- ~ behaviour: (2)
- ~ neurological dysfunction on mind and behaviour (1)

- ~ mind and behaviour (1)
- ~ mental illness, mind – behaviour (1)
- ~ brain + behaviour and mind + molecules interaction dysregulation (1)
- ~ neurochemical, social, emotional changes leading to disturbance in behaviour (1)
- ~ mental illness (3)
- ~ mental disorders that are largely functional (1)
- ~ neurochemistry + interaction with human experience (1)
- ~ abstract function of the brain (1)
- ~ mind and its functions; brain and neurological function through manifestations in behaviour and emotion and drugs used to help a person enjoy his living (1)
- ~ functional disorders of mind (1)
- ~ human behaviour in disturbed mind (1)

(total 16 answers)

[3] 'Psychology' is the study of:

- ~ brain-mind processes (1)
- ~ human mind (psyche) (14)
- ~ behaviour, attitude, mind (1)
- ~ cognition and emotion (1)

- ~ no answer (1)
- ~ behaviour (9)
- ~ mind and behaviour (3)
- ~ thoughts and behaviour (2)
- ~ human experience and functionality (1)
- ~ abstract functions of brain (1)
- ~ mind and its functions and use of non-drug therapies to help persons enjoy living (1)
- ~ emotions, behaviour (1)

[4] What is the difference between 'psychiatric disorders' and 'neurological disorders'?

- ~ psychiatric = brain-based + mental component, neurological = brain based (2)
- ~ neurological: structural basis, psychiatric: lack structural certainty (11)
- ~ psychiatric disorders include neurology also (1)
- ~ psychiatric = behavioural, neurological = physical (2)
- ~ psychiatry= behaviour affected by mind-brain; neurological=structural (1)
- ~ psychiatric= disorders of psychological and behavioural; neurological: organic (1)
- ~ psychiatric disorders are outcome of neurological disorders (1)
- ~ disorders of brain and mind (6)

~ neurological have organic aetiology; psychiatric disorders have biopsychosocial aetiology (1)

~ psychiatry: dominated by symptoms and syndromic classification; neurology: treated as a part of body (1)

~ psychiatry= disorders of emotion, thought, behaviour; neurological= nervous system (1)

~ psychiatric= functional domain disorders (1)

~ symptomatology differs greatly (1)

~ neurological = abnormalities and pathological changes in nervous system leading to particular signs and symptoms; abnormalities and psychopathologies of mind leading to behavioural and thought process changes leading to signs and symptoms (1)

~ psychiatric disorders are just the manifestations of pathology of human behaviour and mind (1)

~ psychiatric= stigmatized by society while neurological disorders are not. Many effective treatments available for psychiatric compared to neurological illnesses. (1)

~ neurological= obvious pathology; psychiatric = hypothetical pathology (1)

~ neurology restricts itself to study of brain, brain structures and how they interact with behaviour. Psychiatry is interested in how brain , brain (neurological / endocrine) structures and their functions' impact on emotions, behaviour, thinking, important relations and functioning of individual (1)

~ psychiatric= mental disorders due to neurochemical imbalance; neurological= due to abnormality in nervous system and its connections (1)

[5] 'Mental' disorders are disorders of

~ mind: (16)

~ brain and mind: (7)

~ brain and behaviour (1)

~ mind and behaviour (2)

~ mind and mood (1)

~ mind and body (1)

~ functional illness of mind and brain (1)

~ psychological nature (1)

~ neurology + psychiatry (1)

~ various domains of brain such as cognition, affect (1)

~ functioning of mind (1)

~ memory, cognition, behaviour, personality (1)

~ emotion, thought, behaviour (1)

~ thinking and behaviour (1)

(total 14 answers)

[6] 'Mental' Status Examination (MSE) is used to study the status of:

~ mind (12)

~ patient (1)

~ brain and mind (4)

~ cognition (2)

~ brain (4)

~ mood, thinking, insight (1)

~ mind and central nervous system (1)

~ cognition, perception, mood etc. (1)

~ mind, behaviour (2)

~ thinking and behaviour (1)

~ no answer (1)

~ mental disorders (1)

~ mind, body, environment interaction (1)

~ cognition of brain (1)

~ mind and its functions (emotions, thinking, behaviour (1)

~ a person's present state of mental wellbeing (1)

~ mind, thought, overall behaviour (1)

[7] In your opinion, is there an entity called 'mind' OR "There is no mind but only brain"?

~ yes: (32 out of 36)

~ mind = functional correlate of brain (3)

~ only brain (1)

* If you believe that there is an entity called 'mind' then please answer the following questions:

[8] What is 'mind'?

~ no answer: (3)

~ seat of thoughts, feelings, emotions, behaviour (1)

~ mana : (1)

~ the one responsible for one's thoughts and feelings (1)

~ complex functioning of organ 'brain' and its way of interpreting them (1)

~ inner conscience (1)

~ integrated form of thought, behaviour , attitude (1)

~ the part that handles your emotions and thinking related to it (1)

~ invisible existence which controls us in respect of cognition and act to self and others (1)

~ how we think, behave, react, feel is mind (1)

~ mind consists of cognition, mood, perception (1)

~ that which is responsible for one's thoughts and feelings, the seat of faculty of reason (1)

~ behavioral and psychological manifestations of the functions of brain through emotions, thoughts and behaviour (1)

~ it is perception, thinking and behaviour (1)

~ mind is what is hidden in brain; what we think, do, express. Our emotions, our cognition is controlled by mind (1)

~ mind is like software which runs in hardware of brain (1)

~ functional abstract correlate of brain (1)

~ part of brain controlling thoughts, emotions and behaviour (1)

~ the entity that deals with emotion, thought, behaviour (1)

~ A conglomeration of psychological functions of thought, emotion, behaviour which are under control of will or Determination (1)

~ Brain + environment (stimulation) + heart + others' brain + mind + heart (1)

~ a way of function of higher function of brain (1)

~ functions of human being controlled by a system known as mind (1)

~ It is the seat of 'being'. Makes us what we are (our thoughts, emotions, values etc.) and a tool to become what we can be (1)

~ it is the state of brain at one point or the other (1)

~ mind is not a physical / anatomical thing. Rather it is combination of anatomical / emotional interaction (1)

~ abstract function of the brain (1)

~ functional aspect of brain (1)

~ The brain functions of thinking (ideas), emotions and their manifestation in behaviour are collectively called mind (1)

~ mind is a person's personality, emotions. It is what makes us different from each other (1)

~ mind is something which cannot be pointed out but it is responsible for person's emotional response (1)

~ it is the entity which governs the behaviour and sentiments of a person (1)

~ brain has 2 components – conscious and subconscious. The subconscious is mind which is automatic. Mind expresses the things that are deeply rooted in the brain – may be called as servomechanism of brain (1)

~ mind is the part of body which thinks and feels (1)

(total 33 different answers out of 36)

[9] What is the relationship between mind and brain?

~ mind is like advisor to brain (1)

~ interlinked structure-function relation (6)

- ~ mind is functional, behavioural unit (2)
- ~ no answer (4)
- ~ mind resides in brain (1)
- ~ working brain is mind (1)
- ~ synergistic (1)
- ~ mind is controlled by brain (2)
- ~ complex (1)
- ~ they coexist (1)
- ~ brain= structural unit similar to programmes; mind is output/ reflection/resultant of complex blend of emotions (1)
- ~ behavioural and psychological manifestation of brain function through emotion, thought and behaviour (1)
- ~ interrelated (4)
- ~ mind is broader term, brain is structure (1)
- ~ like sugar in sweet milk (1)
- ~ emotion, perception interplay (1)
- ~ brain= hardware, mind= software (2)
- ~ reciprocal (2)
- ~ mind is reflection of state of brain at one point (1)

~ brain looks after logical function; mind does not follow logic (1)

~ they are somewhere related affecting each others' function but have their independent function (1)

[10] What is the relation between mind and behaviour?

~ mind monitors behaviour and alters according to emotions (1_

~ mental aspects of behaviour = mind based (1)

~ Behaviour is governed by state of mind (15)

~ Physiological (1)

~ no answer (3)

~ interrelated (2)

~ manifestation of working brain is behaviour (1)

~ one component of mind is behaviour (1)

~ behaviour is external visible component of mind (1)

~ age-old theory of evolution (1)

~ mind= software, behaviour= desktop picture / expression (1)

~ behaviour is the action taken by a person using his mind (1)

~ mind has a positive and negative effect on behaviour (1)

~ good mind leads to good behaviour (1)

- ~ when the mind is still, the behaviour will be virtuous and wise (1)
- ~ abstract functions of the brain which can be observed (1)
- ~ behaviour reflects a person's thinking, ideas, goals and emotions. Thus it reflects function of mind (1)
- ~ behaviour is usually determined by the attitude, beliefs, opinions of the mind (1)
- ~ Behaviour is the response seen in reality due to disturbances of functioning of mind (1)

[11] What are the parts of mind? What is mind made up of?

- ~no answer: (10 out of 36)
- ~ mana: (1)
- ~ frames made by brain- thoughts, feelings (1)
- ~ inner thoughts and conscience (1)
- ~ thought, behaviour, attitude (1)
- ~ conscious and subconscious, it is made up of verbal, non-verbal perception and expression (1)
- ~ thinking, feeling, memory and behaviour (1)
- ~ attitudes, feelings, thoughts, emotions etc. (1)
- ~ perception, thinking and behaviour (1)

- ~ id, ego, superego (1)
- ~ mind = brain + past experiences + personality + spiritual element (1)
- ~ single entity (1)
- ~ brain cells and neurotransmitters (1)
- ~ neurotransmitters (1)
- ~ thinking, emotion, behaviour (1)
- ~ brain + concept of “heart” (1)
- ~ conscious subconscious, unconscious (1)
- ~ Conscious, unconscious and supraconscious (1)
- ~ conscious, subconscious, preconscious (1)
- ~ conscious and unconscious (1)
- ~ thinking (1)
- ~ our experiences, emotion, desire, craving and various other perceptual sensation (1)
- ~ no parts – only functions (1)
- ~ ideation (thoughts), emotion and behaviour (1)
- ~ thoughts and emotions (1)
- ~ limbic system and prefrontal cortex (1)
- ~ automatic servomechanism. It is just a functional entity of brain (1)

(26 different answers out of 36) (no answer by 10 out of 36)

[12] Is there any theory or model of the mind that is universally accepted by all Psychiatrists, Psychologists and Neurologists today?

~ “No”: (24 out of 36)

~ Freudian topographical theory of mind (3)

~ Freudian- id, ego, superego (2)

~ Theory of learning (1)

~ biopsychosocial model (1)

~ no answer (1)

~ cognitive model (emotion, thinking, behaviour) (1)

[13] In your opinion, which is the best single method of studying the ‘mind’ of the patient: fMRI, DTI, DWI, PET scan, EEG, ‘observing non-verbal behaviour’, ‘studying speech’ or any other?

~ studying speech (3)

~ fMRI, PET, SPECT (1)

~ no single method (3)

~ MSE, PET (1)

~ history and MSE (1)

~ all (6)

~ observing non-verbal and verbal behaviour (7)

~ observing non-verbal behaviour (4)

~ fMRI, PET (1)

~ no answer (1)

~ PET (1)

~ may be a long process of 'knowing' the person as a whole (1)

~ fMRI (1)

~ fMRI, MSE (1)

~ all of these + a formal MSE + few standardized psychological tests (1)

~ fMRI and observing non-verbal behaviour (2)

[14] Can we define the diagnostic criteria of 'Mental' disorders in terms of brain parameters such as fMRI findings or other brain investigation techniques?

~ yes (7)

~ no (27)

~ may be (1)

[15] In your opinion, ideally, the diagnostic criteria of 'mental' disorders should be described in terms of (a) symptoms (b) dysfunctions in brain (c) dysfunctions in mind (d) any other:

~ combination of all (10)

~ symptoms (8)

~ dysfunctions in brain (2)

~ a,b,c + disability (1)

~ dysfunctions in mind (3)

~ symptoms and dysfunctions in mind (4)

~ symptoms and dysfunctions in brain (2)

~ brain and mind (2)

~ dysfunctions of a human's being (1)

~ all of these + when available other biological markers (blood and endocrinological)
(1)

~ symptoms + disturbances in social and occupational life (1)