

*Original Research Article*

## **Treating Mental Disorder- A Cognitive Approach with Audio-Visual Technology**

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### **ABSTRACT**

**Objective:** Studying the mental disorders on the basis of philosophy and behavioural psychology and reporting it in a simple film script format. Generating voice over in regional language based on, the real case studies and broadcasting the case study film along with the supporting evidences, diagrams and real MRI scans using audio-visual technology. The focus is to generate global mental health awareness using low cost technology that would generate commercial resources for the local community.

**Methodology:** The mental disorder cases are studied in the psychiatric clinics based on a typical questionnaire. The different psychiatric cases were categorized according to the type of the mental disorder. The behavioural changes were recorded by interacting with the family members and close friends of the patient. The acute mental state was keenly analyzed gathering all references. The case study was examined on the critical studies founded on philosophical and psychological principles and at the same time discussing the case with the psychiatrist from a medicinal point of view. The critical data was converted into a short film script; supporting illustrations were prepared with the help of multimedia technology; local artists performed the concerned roles and the voice over was recorded in the regional language with the subtitles in English language. The final output was in a form of an audio-visual film that has been shown to the family members of the patient.

**Result:** The presentation of the mental health awareness film has helped creating social awareness about the mental disorders. The patients and their family members are more convinced after watching the audio-visual film as compared to the conventional verbal counseling. The voice over in regional language with the local dialect has helped them decipher what is being projected. The reiteration of the film projection has helped the family members to understand the scientific reason behind the mental disorder enhancing their faith in the clinical treatment processes.

**Conclusion:** The mental health awareness mission seems to be more effective by using the audio-visual technology that requires minimum technical configuration. The study of mental states based on the philosophical paradigms has given a new applied dimension for studying the classical subjects as philosophy, thus generating the 21<sup>st</sup> century's tech-challenging opportunities

for humanities. The multidisciplinary working platform has yielded promising results for creating a mentally healthy society.

Hence, experiencing the magnitude of the mental disorders there is an urge for strong associations to expand this idea.

**Keywords:** Philosophy, Psychology, Psychiatry, Audio-Visual technology, Brain, Mind.

## INTRODUCTION

The conquest to understand the human mind in the human brain is the biggest challenge for all the school of thoughts that the human has created so far. The on-going research in science and technology invented numerous opportunities to study the human mind but have not been able to solve the human mind puzzle. The more it has practiced to unravel the more it has puzzled the human race.

The classical subjects of humanities such as philosophy, psychology have demonstrated different paradigms to judge the human mind. The unending research in medicine has always been gifted with a new challenge on every step which has helped to get more energy for the advanced research. The innovations have always surprised them about the dominance of the human mind over the human brain. The 21<sup>st</sup> century technology has manifold interactions to understand the human mind that encircles artificial intelligence, higher multimedia technologies, human-computer interactions, speech technology and so on. But the calculations neither define the human mind nor can it produce any conclusions. A very powerful thought has been expressed by Albert Einstein as “As far as the laws of mathematics refer to reality, they are not certain, and as far as they are certain, they do not refer to reality.”<sup>1</sup>

Our ancestors have depicted the human mind in varied forms and symbolic languages using multidimensional concepts. We can find the different aspects of thought expressions demonstrated in a different way in each new generation, different cultures and civilizations as it has been progressed. As the

human brain is developing new strategies, new methodologies to understand the human mind in the human brain there is the need for a cumulative research where the individual subject strengths would contribute the utmost to understand the complex mind pattern.

The experts from philosophy, psychology and psychiatry have formed associations to exchange their expert knowledge to understand and solve the mind problems. This paper discusses the need of interweaving the present 21<sup>st</sup> century technology with humanities and medicine for the mental disorder problems.

Human mind plays a very important role in the mental disorder and to understand the mind the classical subject such as *philosophy* solely holds an important position. To study the mind “*The Philosophy of mind*” contributes as a multi-assessment tool to figure out the root cause of any psychiatric problem.

Early philosophical critics as Spinoza, the greatest modern Jew philosopher of 17<sup>th</sup> century has illustrated the correlation between mind and brain as “Neither is mind material, answers Spinoza, nor is matter mental; neither is the brain-process the cause, nor is it the effect, of thought; nor are the two processes independent and parallel. For there are not two processes, and there are not two entities; there is but one process, seen now inwardly as thought, and now outwardly as motion; there is but one entity, seen now inwardly as mind, now outwardly as matter, but in reality an inextricable mixture and unity of both. Mind and body do not act upon each other, because they are not other, they are one.”<sup>2</sup>

As Spinoza has demonstrated that mind and body are but one entity and also they share similar thought processing platform, he adds further that “The body cannot determine the mind to think; nor the mind determine the body to remain in motion or at rest, or in any other state,” for the simple reason that “the decision of the mind, and the desire and determination of the body.....are one and the same thing.”<sup>3</sup>

While exploring the normal human mind or brain, we can apply various theories and practices to come to a solid defined conclusion. But the mind that does not fall in the normal category has to be interrogated by a multidisciplinary methodology.

The human behavior has a strong foundation of perennial impact of family nurturing and the environmental cognitions. It has the major contribution for moulding an infant into a lovable, generous and flexible human being. But unfortunately some humans are not been gifted with the normal physical and mental parameters and hence they are defined as having unhealthy minds.

Parents play an important role for upbringing the child and the child follows the footsteps of his or her parents being unaware of the fact of right or wrong. It solely depends upon the parents how to shape their child being a guide and a mentor. The normal behavior pattern of the parents would obviously result in a normal child development, but if the adult have the superior or inferior complexes then they are certainly going to affect the personality of the child. Mostly it has been studied that the parents try to impose either their subconscious desires upon the child or they totally discourage their enthusiastic child's mind because of their past failures. As the child grows up and understands his or her presence as a member of the society and at that moment he or she starts realizing about their parent's behavioral strategies.

The ego development in the childhood reflects upon the adolescent stage and it further nourishes the adult behavior. For any normal human being, ego plays a very simple role as an identity and mostly the identity does not interfere with the adult's personality. The flexibility of confronting any complex problem of life does not create any major disturbances throughout their life. But if the childhood ego has been developed in a superego especially by the parents then it does produce the emotional instability for the child in the adulthood. The superego blocks all the elasticity and guards the possessiveness of an individual and the unstable mind cannot bare the turbulences of life and thus results into an abnormal human mind that can be termed as having a *mental disorder*.

The genetic neurological abnormal developments are one of the causes of mental disorder as defined by the clinical methodology. Trauma plays an important role in the human mind's capacity to understand and accept the reality. Healthy mind can accept the fact by thinking rationally but the unhealthy mind will not be able to withstand the bitter fact and would be overpowered by the false beliefs and perceptions thus making one's life miserable. The reason behind any mishap in one's life examines the mind's capability to respond rationally or irrationally.

Descartes, the greatest French philosopher has answered the importance of reason in human life as “Rationalism claims in support of reason that reason is universal in all human beings; that reason is the most important element in human nature; that reason is the only means to certainty in knowledge; that reason is the only way to determine what is morally right and good and what constitutes a good society.”<sup>4</sup>

Normal human mind can analyze the reason for any misfortune with proper definitions and can be able to correct the mistakes with his or her individual reasoning capability. But the child who has been

brought up with false egoism has a powerful reason to be transformed into an adult with a mental disorder.

Apart from any neurological abnormality in the human brain, the human mind in human brain plays a very important role in the mental illness. And to understand the human mind from various perspectives there is need for the interdisciplinary studies on the basis of Philosophy and Psychology. As it has been projected from many decades that philosophy can define and interpret the nature of human mind based on different theories of *philosophy of mind* whereas, psychology demonstrates the study of human behavior thus embodying its excellent relationship with philosophy.

Psychological problems in childhood could be pre-diagnosed if the parents are well aware of the fact. In majority of the cases the parent's nurturing is the main reason for child psychological problems. The personality development of a child, whether the child be patient, innocent, flexible, generous, polite or selfish, arrogant, impatient, stubborn, that all depends upon how the child has been raised. The parents who can admit their behavioral errors and try to improve it would understand the need of the child psychologist.

The cognitive and behavioral studies in psychology have created different methodologies to assess the human mind. Psychological therapies, such as psychodynamic psychotherapy, humanistic psychology, behavior therapy, cognitive behavioral therapy and family therapies could be applied as required. But the child's aberrant behavior is ignored by the parent and the child psychological problem advances into an adult psychiatric problem.

The various environmental cognitive effects interact with the inferior or superior mental frame of an individual thus creating different behavioral patterns of the individual personalities.

“To use Brian Farrell's expression, it is not the sort of a thing that is a 'sort of thing' at all. 'Mind' functions conceptually and in discourse in much the same way that 'university' and 'army' do. The confusion in the orthodox view of mind has remained undetected because the grammatical correctness of expressions employing substantive 'mental' terms disguises their categorical irregularity.”<sup>5</sup>

The unhealthy impressions of the mental illness upon the family members create a new anxiety factor. Medicines play their role and continue to accompany the patient for the rest of their life. Apart from the medicines the psychological therapies for the patient could be helpful to return to a normal state in considerable time duration. But the verbal treatments have limitations, as it depends upon the perceiving capacity of the patient and the family members when they interact with the psychiatrists or psychologists. Many a times it causes problems due to language or even dialect barriers. Unfortunately there is time constraint for the psychiatrist and the queries seems to be interrupted. It is also not affordable for the patient and the family members to visit the consultants frequently due to financial constraints. The feasibility to visit the consultants from the rural areas is also a prominent concern for the patient and the relatives. It has been observed that most of the time the medicines are not taken regularly and thus the mental illness tends to become more critical.

Apart from the medicine and psychological counseling which is in practice last two centuries the mental health problem doesn't seem under control or has not been able to generate enough awareness about the problem globally. The meager population of psychiatrists and psychologists around the world is the major concern to cope with the ever rising need for mental health services.

The socio-economic conditions, the cultural boundaries and religious faith tend to exacerbate the social stigma and it becomes nearly difficult for the patient as well as the family members to be accepted by the society. Being unaware of the mental illness many cases get spoiled and there is no option left for the family members but to admit the patient into the mental hospital. The loss of mental stability hardly allows the patient to get into a normal condition leaving him or her permanently stigmatized. There are no rehabilitation centers where the patient could spend the rest of his or her life avoiding the social conflicts and thus leaving the family members in a forever regrettable situation.

The latest technological cohesion with the psychiatric medicine and psychological counseling has proved to be helpful for the patient as well as the family members. As we all know that the audio-visual technology has the greatest impact of delivering any kind of message to the commonest in the world very efficiently and competently. The audio-visual media has the power to broadcast the message effectively and to generate a quick response from the spectator. Also the impact is long lasting as compared to the verbal communication. The audio-visual language has the intense human interacting capability that reaches the heart of any illiterate person.

Understanding the importance of the audio-visual medium a concept has been formulated to create awareness about the mental health disorders. There will be an organization where a philosopher, a psychologist and an audio-visual department would work together along with the psychiatrist. The psychiatric case would be first diagnosed and would be given medication by the psychiatrist then the philosopher and the psychologist would create a case study report of that particular case and would also interact with the psychiatrist to understand the case from a clinical aspect. The critical study of philosophy of mind of

that particular mental disorder would be described in a simple language by the philosopher. And the behavioral observations of the mentally ill patient would be illustrated by the psychologist and the combined report would be ready for understanding the patient's case. Simultaneously, the history of the patient would be collected from the patient's family members and if possible some valuable information might be collected from close friends and colleagues to elaborate the case.

## **METHODOLOGY**

Different mental disorder studies with categorical separation of each type of mental disorder, was done. The reason behind developing mental illnesses was critically written on the basis of philosophy of mind. The patient's behavioral patterns were studied and illustrated for each type of mental disorder. The details about the acute mental state of the patient were summarized as clearly as possible recollecting those moments from the family members of the patient. Even the dialogues spoken by the patient in the acute mental disorder state were mentioned in the report very keenly. For example, a combined report on the Schizophrenia cases comprised overall reasons for the mental disorder and also had the record of the patient's acute state behavioral details.

Also, the patients who were already under medication were interrogated about their daily experiences. The side effects of the medicines were noted for each individual case and added into the different categorical lists of the mental disorder. Simultaneously the patient's cultural, educational and financial background was studied to understand the reflective cognitive effects about the mental disorder.

The report was re-written as a short film script by the multimedia department projecting as it is with no imaginary augmentations. The local artists performed

the scenes as mentioned in the report and dialogues were recorded in the local language with local dialect. The delusional state of the mind was created using special video superimposing techniques to create proper impact to understand the gravity of the problem. Appropriate voice over was given to explain the step-by-step development of the mental illness. The neurological as well as the psychological reasons behind the development of the mental disorder were recorded. The side effects of the medicines were specifically mentioned to be aware of the magnitude of the effects. Supporting videos of the patient's similar surroundings were motion pictured and were used as a background to present the cases realistically. Subtitles for the movie were in English language as any consultant from any corner of the world could be able to study the case any time.

Additionally, still pictures were prepared to show the normal and abnormal function of the brain to convince the common people that the mental disorder is not imaginative but has some physiological and neurological reasons behind it. To support this fact the examples of MRI scans were shown following these still pictures. The film presentation emphasized the importance of visiting a psychiatrist and a psychologist and taking the medicines regularly to avoid complications in personal or professional life of the patient as well for the family members.

This way, a mental disorder was studied in depth with three different approaches---a philosopher's mind approach, a psychologist's behavioural approach and the psychiatrist's medicinal approach. These studies were delivered in a very simple format of a short film to analyze mental disorder for proper treatment and also for the awareness of the mental illness using the latest audio-visual technology.

The impact of the message conveyed by the audio-visual technology helped people to

understand the scientific reasons behind any mental illness. The reiteration of such videos helped them decipher what was being projected thus giving transparency to accept the fact. It also helped the communities to understand the unfounded treatments given in rural areas based on superstitions using occult sciences.

The common reasons for prevalent mental health disorders were highlighted with human brain illustrations. All illustrations and photographs were presented in a very simple format with simple captions so to be absorbed by any common illiterate person.

The Illustrations and the main case study movie were combined and showed in the clinics, hospitals as a mental health awareness program. It also added as an academic advancement for the students of philosophy, psychology and psychiatry. The organization kept record of all the cases so that any case if it recurs after a long gap could be recollected easily. The social service organizations, NGOs used these films as a part of their social awareness activities. The methodology of creating such an audio-visual presentation was a benefit for studying the criminal cases.

The presentation of the mental disorder case study using an audio-visual technology was observed resulting in an absolute positive response from the audience. It helped generating awareness about the mental health illnesses among the society to understand and share the pain of a mentally ill patient and their family members.

The technology used in making the awareness movie did not require very high-end technical hardware or software and was based on very cost effective budget. Also the simple technical concept did not need highly skilled technical people. There was a specific requirement for a technical head to co-ordinate with the mind studies and converting them into an audio-visual presentation. Such organizations were expected to be established

in urban as well as in small towns seeing the need of the mass awareness. The amalgamation of humanities, medicine and technology helped to create local job opportunities contributing for economic developments and to build culturally rich civilizations.

Establishments of such organizations rehearsed the importance of studying mind with classical subjects as philosophy. It widened the horizon of the 21<sup>st</sup> century philosophy as an application tool for a clinical purpose. The satisfaction of applying knowledge for the social cause was the additional advantage for the interdisciplinary fields working together in such an organization.

The idea behind forming such an organization was the reflection of solidarity that helped people understand the mental disorder globally, belonging to any religion, culture, race and gender.

This inference was practiced on an individual level and there is need of cumulative effort around the globe. The urge is to get united and share the idea to illuminate the world with proper knowledge about the mental illness and to re-establish mentally healthy civilizations.

## RESULT

Research findings in private psychiatric practitioner's clinics

(Clinical practice last 15 years) -----

Total 400 cases investigated.

Mental illness stage:

Acute 25%

Mid recovering stage 50%

Maintenance dose stage 25%

Type of residential area of patients and relatives: Rural area: 35%

Urban area: 65%

Patient's gender: Male 40%

Female 60%

Literacy in Patients:

Literacy above secondary school 45%

Literacy below secondary school 55%

Literacy in relatives of the Patient:

Literacy above secondary school 80%

Literacy below secondary school 20%

Mental disorder findings: Schizophrenia, Psychotic disorder, Paranoid schizophrenia, Major depression, OCD (Obsessive compulsive disorder), Bipolar disorder

Causes about discovering the mental disorder: Family problems, Academic stresses, Post-trauma, Loss In business, Genetic.

**The audio-visual film results:** There was 100% co-operation from the patients and family members for investigating the case. True information could be collected from the family members. The audience appreciated the activity. The family members perceived that the mental illness caused the behavioral change in their loved ones and could understand that how to treat the patient after the medication is given. They could understand the importance of medicines as well.

## DISCUSSION

The awareness and the proper education about the mental disorders has remained an important aspect for the global society. Besides the technical advancement in the 21<sup>st</sup> century the "Human mind" problems seems to be ever increasing and becoming more complex with the socio-economic changes, environmental cognitive changes and cultural changes too.

The social awareness short film has generated awareness about the mental disorders. It has helped people to apprehend that the mental illness is neither an imaginative episode nor it has any dramatization. It has helped them understand the importance of consulting a psychiatrist or a psychologist to avoid delay in concerned treatments.

Also the cultural atmosphere in the countries like India still doesn't provide the complete fairness in accepting the facts, but

this particular short film presentation has led people for a healthy and transparent discussion among the family members of the affected person. The reiteration of such video has been very useful for convincing the family members about the seriousness of the mental disorder.

The voice over in regional language with the local dialect has found to be much more absorbable for the illiterate community. Also the audio-visual technology has successfully projected the disturbed mental state of their loved ones very effectively.

The diagrams about the brain and the mental disorders have helped them decipher the importance of the key functions of the human brain which has helped them for better communication within their communities. It has successfully opened up a new thought process among the rural communities that the mental illness has scientific base and has no relevance to religious faiths or occult sciences.

The global associations of philosophers, psychologists and the psychiatrists striving to impart their knowledge for treating mental disorders, but the inference with the 21<sup>st</sup> century technology for treating mental disorders has definitely proved to be heading towards a more accomplished goal.

The short film presentations are done on the local platform and also would be openly broadcasted through World Wide Web technology. The campaign about creating mental health awareness focuses on the rural areas and to fulfill this task the sponsorships from relevant organizations e.g., social welfare organizations, pharmaceutical companies, medical associations and mental health organizations would become helpful.

The voice over for the short films would be available in other regional and foreign languages besides Marathi language and American English accent.

## CONCLUSION

Approximately there are 10 new cases and 40 follow-up cases in one private clinic each day. There are fifteen to eighteen (15-18) MD psychiatrists in and around the city for the population about 11, 55,326. No mental hospitals as such, but some private hospitals have developed special mental health wards inside the private hospitals.

Patient's family members have given 100% positive response and they are more convinced after seeing the audio-visual case study film. They could understand more clearly about the signs of illness and taking care of the patient as well. The film has cleared many doubts in their mind and has answered many of their queries.

The proposed work would be categorized as per the severity of the mental problem. There are many different disorder signs found in each case, so there is tremendous scope to prepare new audio-visual films.

The patient's family members are happy to donate for such an organization. They have also shown enthusiasm about visiting such organization to see more films. They have developed faith that such organization could help them convince other family members about the mental illness, creating more moral support for the patient at home.

There are no proper psychiatric treatments available in the small towns around 80 Km from Nasik city. Relatives wish to have clinical advice from the psychiatrists in the Nasik city only those stay about 80 Km of surrounding area of Nasik city. Few relatives have tried other treatments than psychiatric medicines that include occult science as well. This percentage might increase as we investigate in the interior part of the villages nearby. The Psychiatric practitioners also wish to start such an activity in their private clinics and the Psychiatric

association is also interested to support such kind of social welfare activity.

The mental health work is ever increasing and it needs such social activity support to extend help especially for the patient's family members. And it would also help to release some pressure on the mental health services around the world.

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