VOLUME XIII
DEPARTMENT OF PSYCHOLOGY

CHRIST
UNIVERSITY
Declared as Deemed to be University under Section 3 of UGC Act 1956

JUNE 2014 - MAY 2015

PERSPECTIVE

COGNITIVE PSYCHOLOGY : MIND, BODY AND COGNITION

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Cognition is the study of mental processes, anything from thinking, memory, perception, etc. to problem solving, creativity. The scope of cognitive psychology is immense, from cognitive processes to studying the mind as an information processing system akin to a computer. The field of cognitive psychology gained prominence post the 1960s and its influence has only grown since.

The department of psychology organised a conference in cognitive and neuropsychology this academic year, and the theme of the exhibition organised by the Psychology Association was also Cognition. Keeping in mind these events, we decided to keep the same theme for Perspective this year.

The contribution of students has been diverse, from articles, to article reviews, poems, illustrations and puzzles. Some faculty members have also shared interesting thoughts and insights with us and we are grateful for their inputs.

We hope that the readers will find reading this issue an enriching and enjoyable experience. We would also like to thank the editorial team for their hard work and effort.

The Editors

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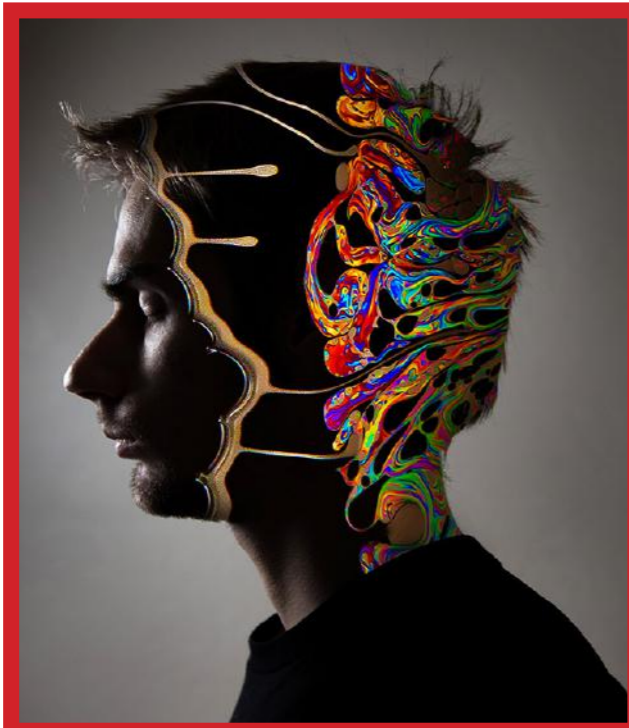
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Biological Naturalism and Property Dualism:
The Essential Arguments

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John Searle, in his article 'Why I Am Not a Property Dualist', says that the solution to the traditional mind-body problem is that every mental phenomenon is caused by the brain's neuronal processes. The causation is bottom-up in the sense that the lower-level elements such as neurons and synapses cause the higher-level features like intentionality and consciousness. He emphasizes on the biological character of the mental phenomena and that they are a part of nature. Hence, he terms it as 'biological naturalism'.

There are different mind-body problems, but Searle concentrates on how consciousness relates to the brain and presents his arguments for property dualism. Property dualism can be summarized in four propositions. One, there are two metaphysical categories, namely physical and mental phenomena, which establish all reality. Physical phenomena are objective, and they are independent of subjective experiences while mental phenomena are subjective, and they are experienced by humans or animals. Two, mental states cannot be reduced to neurobiological states; they are over and above or distinct from neurobiological states. Three, mental phenomena do not create separate substances or objects, but they are in fact properties of a human being or an animal. Any conscious animal, therefore, will have two kinds of properties that are mental and physical properties. The fourth proposition addresses the chief problem or the consequence of property dualism: how can consciousness function causally? Searle assumes two possibilities for this problem – a) if the physical universe is causally closed and nothing outside it or nothing non-physical could have any causal effect on the physical universe, then consciousness is epiphenomenal, that is, it plays no role in our behaviour; b) if the physical universe is not causally closed and consciousness functions causally, affecting physical behaviour, then there will be two distinct entities, both being irreducible.

Searle attempts to differentiate property dualism from his biological naturalism by dealing with these issues. One, the question of how many fundamental metaphysical categories are there is empty and meaningless. There are no two or many ontological categories; the issue of categorization is interest relative. We live in one world, and anyone can divide it into any number of ways. However, Searle's view is not pluralism. He maintains that consciousness is a biological phenomenon like digestion. Two, he addresses the issue of irreducibility. Consciousness is causally reducible to brain processes because all the features of consciousness are caused by neurobiological processes in the brain. Consciousness has no causal powers of its own, apart from the causal powers of neurobiology. However, causal reducibility does not lead to an ontological reducibility. This means that since consciousness is causally reducible to neurobiological processes, one cannot say that consciousness is nothing but neurobiological processes. It cannot be reduced ontologically because consciousness is something that exists in complete dependence of experience by a human or an animal. It has first-person ontology, and it cannot be reduced to something that has third-person ontology and exists independently of experiences.

Property dualists and John Searle agree that consciousness is ontologically irreducible. However, they disagree on certain points. Searle denies the fact that since consciousness is ontologically irreducible, it is something distinct and over and above its neurobiological base. There is only neurobiology that has consciousness, a higher level feature. For example, there is nothing in a car engine except molecules that have higher level features such as the firing of the spark plug, the cylinder block and so on. Consciousness is a state that exists in the neurobiological processes; it is not a separate phenomenon. Three, both of them say that consciousness is a feature of the brain, but they are not essentially saying the same thing. The property dualists say that consciousness is a non-physical, additional, distinct feature of the brain whereas Searle says that consciousness is a part of the brain processes. There is an inadequacy of the traditional terminology in the sense that the property dualists want to say that consciousness is a mental and not physical feature of the brain while Searle wants to say that it is a mental and biological and therefore physical feature of the brain. Since the traditional vocabulary was designed to distinguish between the mental and the physical, it is slightly hard to put Searle's theory in words.

Four, the property dualists say that the brain gives rise to consciousness and this gives us the picture of consciousness as light reflecting off water or froth on the waves of a beach; they don't add anything to the object. They are epiphenomenal; they are just there. The problem of epiphenomenalism does not arise in biological naturalism because according to Searle, consciousness is not something distinct from its neural base. For example, the cylinder block in the car engine has no additional causal powers apart from its molecular base but that does not mean that the cylinder block is epiphenomenal. It still plays a role in the engine.

Searle says that both materialism and dualism involve some falsehoods. The materialists say that the universe is completely physical and that consciousness does not exist. The dualists say that con-

> **The cylinder block in the car engine has no additional causal powers apart from its molecular base but that does not mean that the cylinder block is epiphenomenal. It still plays a role in the engine.**

sciousness exists, but it is not part of the physical world. The assumption of the traditional vocabulary is that consciousness is subjective and qualitative and therefore cannot be material or physical. Conversely, if something is physical, then it cannot be a state of consciousness. Searle says that once we remove these assumptions of the traditional vocabulary, we can easily state the truth, that is, the universe is entirely made up of physical parts, they are organized into systems and some of these systems are biological. Consciousness is contained in some of the biological systems, and it is an ordinary feature of the biological systems.

Searle then raises what he calls a problem for property dualism. He cannot see how it can simultaneously be held that consciousness is a feature

of the brain and also that there is a metaphysical dualism – the mental and the physical. He feels that since they think consciousness is an emergent property of the brain, something over and above it, the implication is that consciousness and other mental phenomena are not simply mental properties but separate entities from the brain. This makes property dualists lapse into some form of substance dualism, according to Searle, and he asks them to address these inconsistencies.

Edward Feser, in his paper presentation at a meeting of the Pacific Division of the American Philosophical Association in 2004, responded to Searle's 'Why I Am Not a Property Dualist' which was published in 2002. Although it is an unpublished paper, 'Why Searle Is a Property Dualist' points out some major flaws in Searle's reasoning and his conception of property dualism. Calling biological naturalism a middle position between materialism and property dualism, Feser outlines some reasons why critics of Searle would say that he is indeed a property dualist. Firstly, the property dualist and Searle both agree that consciousness and other mental phenomena are not identical to physical phenomena because they have a first-person ontology, and so are ontologically irreducible to the physical. This distinction is something so fundamental that there have to be two metaphysical categories to describe the two. However, Searle only allows for the existence of one kind of category – simply, the physical, and nothing else. If this were the case, what can one say of mental

phenomena that are essentially subjective and hence not the same as physical phenomena that by their very nature have an objective, third-person existence.

Feser argues that the categorization of the mental and physical properties of the brain are therefore not arbitrary, and even if they are interest-relative as Searle claims, they still reflect the objective reality which is that there is a clear distinction between the two categories. Taking the example of pain, he explains that such subjective phenomena, although they have an objective existence since the person experiencing it cannot change the fact of its existence, are still subjective in terms of who can access them. It is only the subject of the mental phenomena which has direct access to them while physical phenomena are publicly accessible. Refuting the next of Searle's arguments that we live in exactly one world, Feser explains that the dualist believes the same, only that there are two kinds of properties in that same world, specifically when it comes to the study of the mind. In the general ontology of the universe, there may be yet many other categories, but in the case of the human mind, there can be seen clearly a demarcation between the mental and the physical. He calls Searle's refusal to accept this difference arbitrarily. Feser points out that Searle's inaccurate analogy of consciousness and the brain to the state of solidity of the pistons of a car engine. Consciousness is not identical to the brain events whereas the solidity is identical to the molecules that form the

pistons. Searle himself admits the imperfections in the analogy and yet goes on to use it to explain that consciousness is merely a biological process, a state that the brain is in. This way the problem of causation from outside the physical world is eliminated for Searle, but it is not a problem for the property dualist either since they ascribe the causation of consciousness and other mental phenomena only to brain events. They do so while also acknowledging the fundamental difference between the mental phenomena and the brain events which have caused them. The inner, subjective experiences like consciousness, pain, qualia, and so on, are caused by brain events but cannot be placed in the same category as physical events in terms of their nature or property.

Property dualists may use terms like 'over and above' or 'emergent', but all that they mean is that consciousness is not ontologically reducible to neural processes, which is the same thing that Searle believes. If, perhaps, Searle had refused this ontological irreducibility as being true, then there is a case for argument. In this case, however, it is simply a case of word play with the jargon used by each. While Searle says that traditional vocabulary has unnecessarily created a distinction between the mental and the physical when the mental is derived from the biological which is derived from the physical, he is ignoring the one crucial factor that makes the 'mental' – which refers to consciousness and other higher order features of the brain – completely different from all physical phenomena

which by their definition must have an objective, third-person ontology. So how can Searle

re-define what is physical and claim that consciousness is just another biological process when it has an irrefutable first-person access? According to Feser, Searle only claims to have solved the mind-body problem with his simplistic explanation that consciousness is a biological state of the brain because he does not offer any explanations as to how exactly the elements of the nervous system – the neurons, synapses, glial cells, mitochondria, and so on – cause phenomena as peculiar and private as consciousness. Searle himself admits this in a previous article that there is no clear idea as

to this causal relationship. The property dualist therefore offers a more rational explanation

about the ontology of the mind by claiming that there are two fundamentally different kinds of properties possessed by the brain – one that is behavioural, material and functional, and another which is behaviourally-materially-functionally ineliminable and irreducible. It does not matter what kinds of terms are used to describe these two kinds of metaphysical categories. While property dualists call it mental, Searle only recognizes that they are ontologically irreducible and yet classifies them with the physical, making biological naturalism inconsistent and making his other claims parallel with property dualism,

which also proposes causal reducibility and ontological irreducibility. Feser, therefore, points out the erroneous assumptions of biological naturalism and that the complexity of the mind-body problem is not reduced by simply using different terminology to try and explain it.

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Whats New?

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2 MPCO

So, a lot has been going on in the field of Cognitive Psychology in the past year. Research, experiments, discoveries, advancements and the list goes on.

February, 2014

Breaking your head over studying the differences between right and left hemispheres of the brain? Worry no more. Research shows the difference between the rational left hemisphere and emotional right hemisphere is not as strict as is believed to be. Studies were conducted to see if the right and left hemispheres are actually distinct in perceiving emotional and linguistic prosody. It was found that both hemispheres are important in this process. This study could prove to be important in the area of treatment for brain diseases, also may help in developing software which could recognize our emotions and work accordingly.
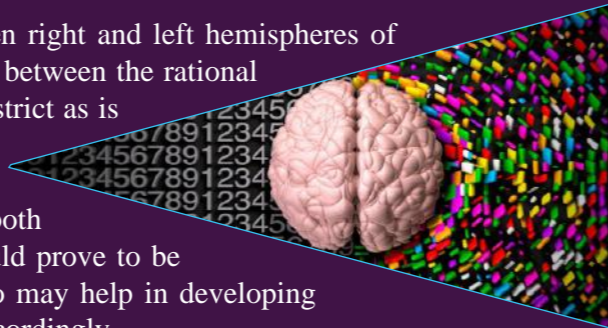
May, 2014

Do you think too much? If yes, read on. Researchers say it's not a good idea to think too much once you have mastered something. It has been found that if you think a lot, it may affect your performance. Our brain is trained to only handle one thing at a time, thus extra work on it just disrupts its function. Once you have mastered a skill, it's better to just let it do its work on its own. This is once it reaches a point where the task becomes automatic. Experiments with participants performing simple and hard computer tasks prove this.
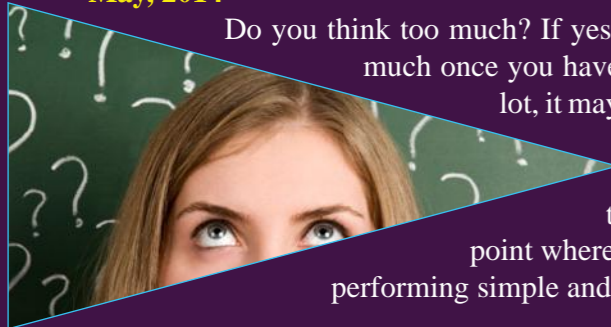
July, 2014

No pressure! Well, not exactly. Ever noticed you perform better in front of your peers? Research shows the reason behind this. Psychologists have found that behaviour such as risk-taking and sensation-seeking, which are seen as typical of adolescents is influenced by social context. Experiments with simple gambling like a coin toss were conducted, and it was found that if they can win or lose real money, for their peers or family, their performance increased significantly. Thus, the role of social context in how the brain works and thus on behaviour was made clear. This could also explain rash driving and other risky behaviour in adolescents.

August, 2014

A study by Rush University Medical Center, Chicago shows that declining cognitive ability and memory could increase the risk of stroke. Over the years, there have been researches showing the role of poor cardiovascular health in cognitive impairment. But now, it has been proved that a reverse effect, cognitive impairment could lead to problems in cardiovascular health, is also possible. This was proved to be true in adults over the age of 65 years of age. It was seen that, after an occurrence of stroke, cognitive functions declined rapidly, almost twice as fast, thereby increasing the risk of death.
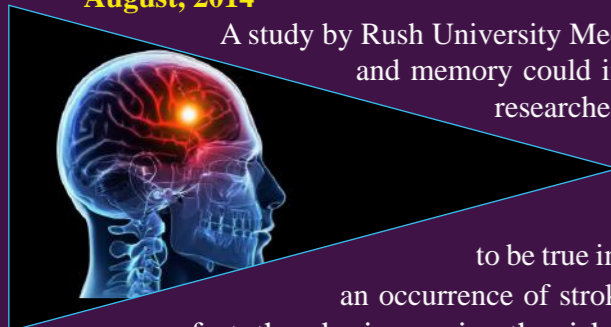
October, 2014

Hurry and get your copy of the latest version of the Oxford dictionary. Research shows having a rich vocabulary is one of the factors in improving cognitive ability. Thus, brain diseases like dementia, caused due to cognitive impairment can be prevented. A study at the University of Santiago de Compostela (USC) shows the influence of vocabulary on cognitive reserve in the elderly. It was found that participants with a low vocabulary have a higher prevalence of mild cognitive impairment, thus reaching a conclusion of a richer vocabulary being a factor in improving cognitive abilities.
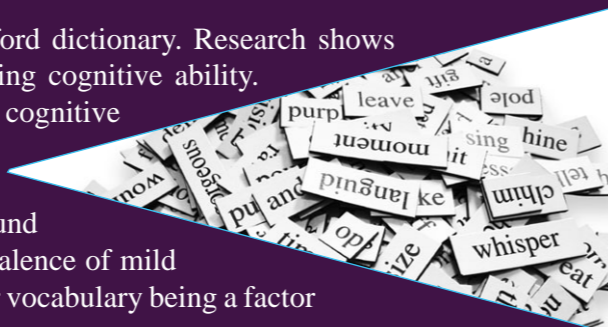
November, 2014

Scientist from the University of Texas Health Science Center and the University of Oklahoma Health Sciences Center have found that youths with a family history of alcohol and other drug use disorders have a higher risk of developing substance-use disorders (SUDs) themselves. This was found to be true in comparison to their peers who didn't have any such family histories. Studies involving forebrain activity shows there is a lower functioning in the forebrain region for youths with a family history. Though this is a factor, it shouldn't be automatically associated for drug abuse. With proper guidance and preventive measures, this situation can be changed for youths.

November, 2014

Think before you tease your grandma for not knowing things about technology. You never know, she may just top you pretty soon. A new study from Brown University has found that older people can actually take in information much efficiently than it is thought. Their ability to filter out irrelevant information ultimately helps them take in and learn from visual information more readily than younger people. Following this, scientists are keen on learning what is happening inside the brains of older people, using brain-imaging techniques. This may further lead to coming up with better strategies and devices to help older people learn more efficiently.

December, 2014

Ever got the feeling that you are not really safe in this world, given the increasing problems of global warming and doomsday theories? Well, turns out we are not completely safe even when we are inside the mother's womb. A study by Columbia University's Mailman School of Public Health researchers proves that prenatal exposure to various chemicals used in the house can lead to decreased IQ levels in kids. Chemicals such as Di-n-butyl phthalate (DnBP) and Di-isobutyl phthalate (DiBP) are found in a wide range of consumer products, like cosmetics, vinyl fabrics, etc. These chemicals have been found to be harmful to pregnant women exposed to them and babies in their prenatal stage, and cause a six or seven points level decrease in the IQ level of kids.

January, 2015
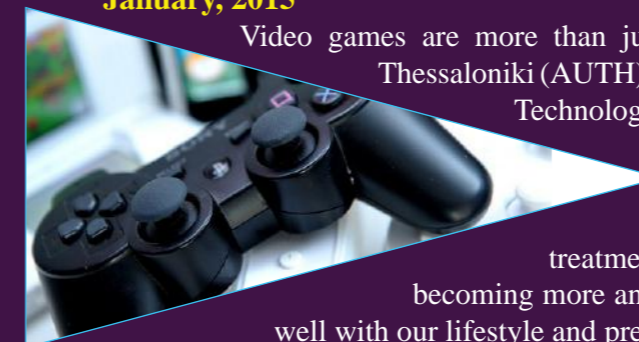
Video games are more than just an entertainment. Scientists from Aristotle University of Thessaloniki (AUTH) and the Centre for Research and Technology Hellas/Information Technologies Institute (CERTH/ITI) have developed virtual reality games which help identify mild cognitive impairment. This proves to be cost-efficient and also can identify cognitive impairment at an early stage, thereby help in giving better treatment, thus providing a better quality of life. Computers are becoming more and more a part of our lives, and games such as this can blend in well with our lifestyle and preventive healthcare.

February, 2015

Isn't this just adorable? Research shows that babies while sleeping reprocess what they have learnt. Experiments showed babies remember the names of objects better after a nap. Though the children's age didn't have a huge impact, the impact of sleep spindles (typical rhythmic activity of the sleeping brain) was found to be significant. Remember how our moms say "sleep, you'll remember better"? There is just more proof now. Sleep has a huge influence on memory organization, especially in babies, when there is a massive growth in memory. So, when you are learning for an exam, just get a comfortable blanket and get some good sleep instead of pulling an all-nighter. Works good.
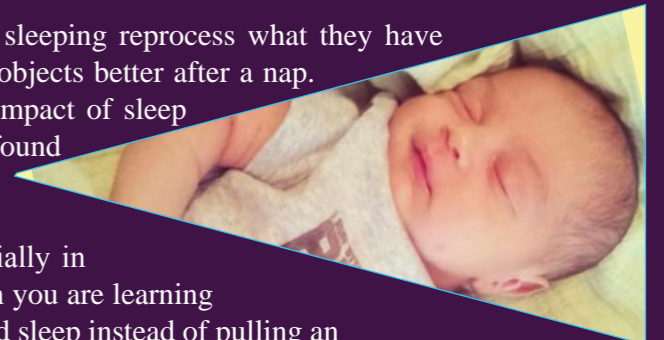
ARTICLE REVIEW

AFFECT AND COGNITION

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Abstract

This article reviews the interplay between affect and cognition and this review was done in the year 2008 by Joseph.P.Forgas and it examines the contemporary and traditional approaches to the same and it has been seen that from these reviews there is an interrelation between affect and cognition which has been shown with different explanations.

Introduction

Theoretical background

The philosophers looked into the subject matter of psychology as three different aspects cognitive, affect and conation. Affect is the one aspect that has hardly been looked into, and it has been neglected because it has been viewed as a dangerous force that sublimes rational thinking. However in the last few decades in the field of social cognition, neuroanatomy, and psychophysiology they have emphasized the importance of affect in behavior and cognition.

Various approaches also support this view regarding the interplay of affective cognition. One such approach is neuroscience approach, research in this area of neuroscience also shows that social cognition and affective processes have neural structures that are overlapping (Damasio 1994).

Neural structures such as the amygdala and medial prefrontal cortex are involved in social information processing, and neural structures such as orbitofrontal and prefrontal cortex are involved in emotional processing. These findings confirm that the emotion regions are involved in the processing of social stimuli and vice versa.

Even from the traditional approach mentioned here we can see that within the realm of psychology the approaches of affect and cognition were supported by psychoanalysis and behaviourism. Where in according to psychoanalysis affect is seen as located in the id and according to the behaviourism the affect influences thoughts and judgments through the association that is formed between affect and other stimuli. Also, it is seen from the researches in the 1980's on naturalistic cognition showed how affect plays an important role in the way people process or deal with social information.

Another study by Forgan 1982 also showed how affect plays an important role in mentally representing social experiences. Also, some of the process models of emotion appraisal show how emotional reactions are formed by the combination of situational information and memory-based information. Therefore basically this interplay is seen because affect can influence the content of cognition through two complimentary mechanisms one being inferential account- here what happens is that there is a kind of misattribution that happens to target that has actually not caused the following emotion.

Integrative theories also show that the AIM, the affect influences the content and the process of how people think. From the affective priming model mentioned in this article we can see how our mood is while retrieval matches the original encoding mood(Eich & Macualy, 2006). Thus, people who are in the positive mood recall happy events occurred during their childhood and those who are having a bad mood remember unhappy events.

Also, a few cognitive benefits of negative effects are also highlighted here which essentially talks about how negative affect can reduce judgmental mistakes by helping in accommodative thinking that are externally oriented.

We can also see from this article review how affect influences stereotyping which an evidence of the influence is between affect and cognition. According to psychodynamic views and the frustration aggression hypothesis it can be seen that negative affect can lead to intergroup discrimination and prejudice. Therefore depending on our mood the way we perceive a particular group of people differs, when we are in a positive mood our interactions with people of an outer group does not generate that much discrimination compared to our interaction with them when we are in a negative mood.

Other behavioural consequences that are reflected here are that affect influences cognition and impacts our behaviour in real life. It is seen that people who are happy are more confident and set higher expectations for themselves and are optimistic and cooperative compared to people who are in a negative mood. It is seen that positive affect acts as motivational strategy by helping people cope with the situation that are aversive in nature.

Conclusion

Therefore from the review we can see that there is a close link between affect and cognition and they influence one another. Cognitive processes influence emotional reactions and affective states influencing how people remember, perceive, interpret social circumstances and thereby display interpersonal behaviours. I personally agree with this review and the following explanations from other researches as our thinking is influenced by our mood. The happy we are the more we indulge in positive thinking and the more we are in a negative mood, the more likely that we indulge in negative thinking.

For example if we are generally in a good mood and everything around us has been happening the way we want and then we get to know that we haven't got really good marks for our exams we will still remain optimistic and think that we can do a better job next time but if we are in a bad mood because we have had a bad day at college and then we get to know that we have got low marks in one of the subjects then we are likely to think in a pessimistic manner and feel that we are no good and will lose confidence in ourselves therefore we can see from the above example how affect and cognition are interrelated.

Limitations

Though these studies shows that there has been a relationship between affect and cognition the problem here is that the term affective has still not been properly defined and, even though, a relationship is established between the two it has not been integrated.

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Can Artificial Intelligence Develop Consciousness and Intentionality?

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The early work of Church, Fodor, McCarthy, Turing and others has been based upon the belief that artificial intelligence (AI) can one day successfully match natural intelligence, or even surpass it. Some of these philosophers and researchers have also claimed that intentionality and consciousness could also arise since, if the brain can been successfully duplicated, then why not also other related brain events.

This proposition is not a problem for those convinced that the brain is a computational device and functions by input processing and output delivery. However, even for materialists and non-reductive physicalists who believe that there is only matter and nothing else, the problem still remains of explaining exactly how scientists plan to duplicate highly complex brain processes, many of which are still unknown even to neuroscientists. The proposition is even more far-fetched for property dualists who claim that there are also certain behaviourally-materially-functionally ineliminable and irreducible properties even though these have emerged from matter. If such properties cannot be ontologically reducible to brain events (and according to some they are also causally or explanatorily irreducible), how will consciousness, qualia, thought, meta-cognition and such emerge from AI?
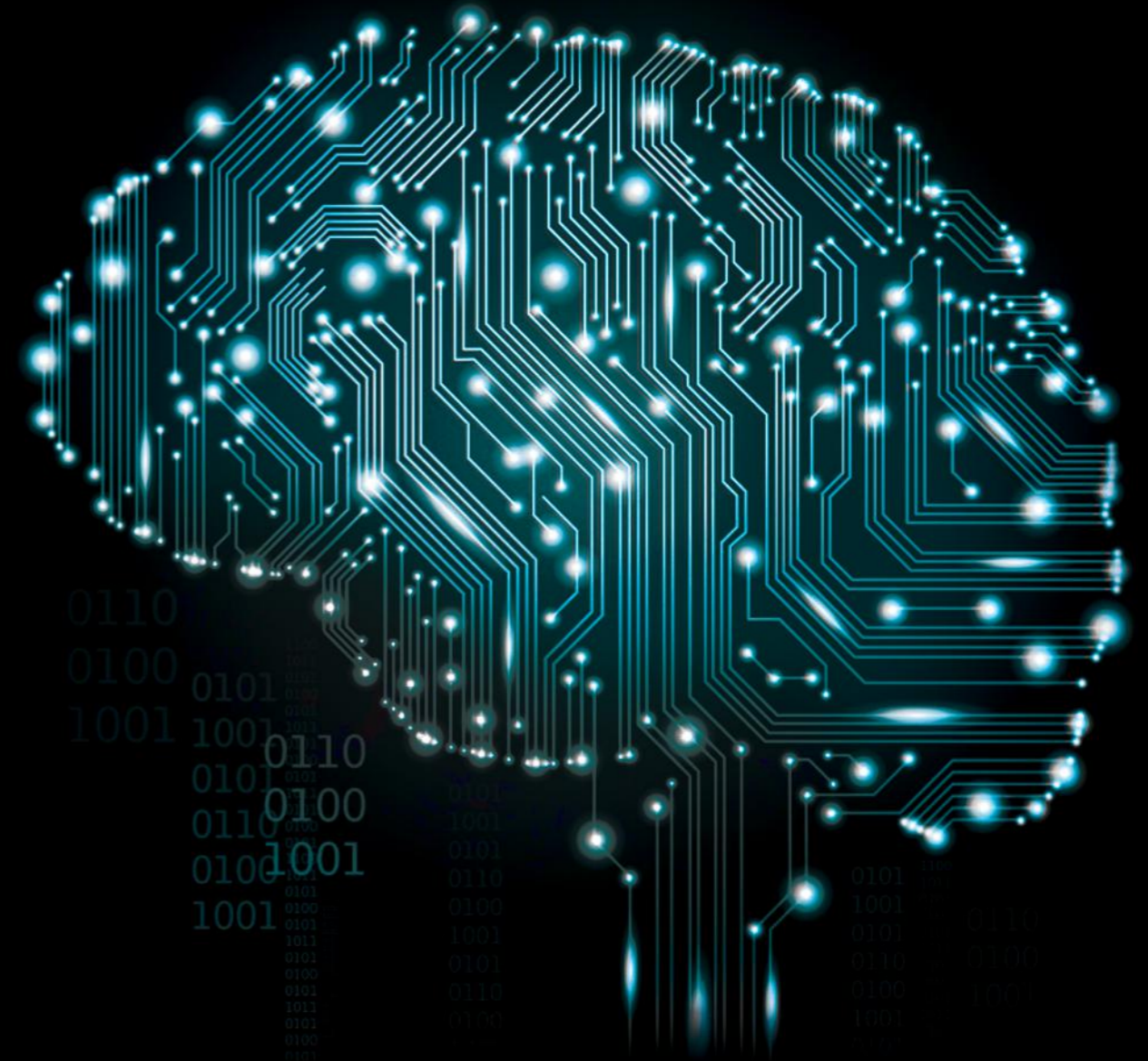
The counter-argument would be that just as property dualists claim that such ineliminable and irreducible properties emerged from the physical while still being so ontologically different from matter, why can't the same happen with AI if and when it reaches the level of complexity of the brain?To understand that, we can look at how AI has been developed so far. Through the use of programming languages and binary systems based out of the work of Babbage and others, complex digital systems and programs have been developed, those far beyond the humble calculator. Even the current technology accessible to consumers has far surpassed the analogue age of telephones with rotary dials – the ones you turn round and round in order to call a particular number – and as fun as they seem now, they were quite the tedious channel for communication in times past.But newer technology has made all that effort unnecessary.

For example, the popular iPhone by the American company Apple is considered by most to be one of the top contenders in the smartphone market. It boasts of several sophisticated features like voice recognition, GPS location tracking, language translation, high-powered gaming, touch-sensitive screens with retina display, high-end graphics and the most famous attraction – Siri. Now, according to Apple's website, Siri is an intelligent personal assistant with whom the user speaks in a natural, conversa-

tional tone and 'she' responds through voice. The program is so complex that it understands the questions asked and responds accurately to them. However, since the database for Siri's intelligence is only widened as more people use it, there are times when it may not understand if you speak in a new and unfamiliar accent. It is definitely plausible that the developers at Apple are even now working on developing Siri to overcome these challenges and to make her more accurate and human-like.

> **Even if the day comes when an iPhone user can converse with Siri just as if he is talking to a friend about the previous night's football game, can we say that Siri too has watched the game?**

Even if the day comes when an iPhone user can converse with Siri just as if he is talking to a friend about the previous night's football game, can we say that Siritoo has watched the game? And if she has, did she enjoy it? Based on what explanation can we understand that Siri enjoyed the game and felt, for example, that one team had better players than the other? Now a complex computer could probably analyze the performance

of each player through previous statistical data and by their current strategy and physical form and come to some sort of estimate about their abilities, but then these conceptions whichSiri or any other computer may develop about the game come from the functional processing of input it received by watching the game. But can it have an opinion of the game or the playersthat is based not just on the calculations it makes but on how the experience made it 'feel'? Can it support one team with the enthusiasm, emotional investment and sometimes irrational passion that the human would?

Some would argue that AI may one day develop emotions and conscious thought but if the design of these systems is based on merely computational mechanisms like rule-structured or connectionist processing, that is hard to imagine for those who believe the human mind to be more than just a connectionist or computational system. When "human" qualities such as sentience or sapience are considered, how can a machine, albeit highly developed, reason out in a life and death situation that saving the child is more urgent than saving the adult? What if an adolescent from a broken home has stolen food from a supermarket because he was starving? What kind of rules will the computer use to analyse the teenager's behaviour? Such kinds of ethical dilemmas often have no right or wrong answers even for humans, so what kind of morality could AI claim to have?

The final argument regarding AI developing consciousness and intentionality that I would like to mention is the classic one by Searle for the Turing Test. Sometime in June, 2014, a new robot was supposed to have passed the Turing test in some manner. Although it was a relatively impressive feat when compared to how previous AI systems had fared on the test, it was found later on that this robot too was repetitive, logically inconsistent and a very obvious mimicry of natural intelligence.The Turing test is said to be fallible because it only requires the computer to effectively deceive a percentage of the interrogators, some of whom may not even be experts in artificial intelligence or the metaphysics of the mind or computer science, etc. Even if a machine passes the test, Searle claims that it is not because the machine has developed conscious thought or awareness but because it has become so good at interpreting even the semantic information alongsidethe syntax and non-semantic formal structures. Still, how can one say that the machine has played a conscious role in the process if it is merely computational?

One might counter-argue that it is not possible to know that the machine has not really experienced something or has not been conscious of it. A robot could be saying the truth when it says it feels pain in its back or neck. Of course, with the current stage of AI, this seems ridiculous but if they find a way to duplicate even the irreducible and ineliminable properties, it seems plausible that AI could develop qualia or consciousness. But the meth-

odology adopted to develop AI must take into consideration more than just algorithms and analogue connections.

Like Searle argues, the person in the Chinese room may fool the speakers of Chinese but he himself does not understand the language. What if, instead of a book with Chinese symbols, he had been given a Chinese – English translation book? What if a computer, through language and symbol processing, begins to understand the semantics as well? Can it then learn the logic behind ideas, numbers, and phenomena, merely through computationalism? Can it further apply such knowledge to all kinds of situations? It is a probable proposition.

Human consciousness, however, is another question. Unless it emerges from a very complex replication of the human brain, consciousness in computers is a very unlikely phenomenon. Could machines attain a state of meta-cognition? Could they have intentional states about their intentional states? Will they,one day, write music, capture landscapes on canvas, and gracefully move with music and rhythm in ways that can still be termed as 'natural', 'original' and 'soulful'?Will they experience dreams and visions during activities such as sleep and meditation? These and other questions about intentionality, qualia or subjective experiences of colour, pain, taste, and so on, still have no clear answer.

The conclusion one might arrive at is that if property dualists indeed turn out to be right in their claim that com-

plex mental phenomena are emergent properties of a highly evolved brain, then there is a good possibility of AI systems also developing such properties when they reach that same level of complexity, provided that scientists are able to first identify and then replicate all the relevant brain processes and functions. But if it arises at some point in such an effort that human beings are not simply a sum of brain matter and all of its properties, artificial intelligence may never become 'human' in the truest sense of the word.

In the meanwhile,check out this particular article online where Chris Green, a journalist for The Independent, interviews 13-year-old Eugene Goostman – the AI mentioned earlier that supposedly passed the Turing test. It becomes quite evident why the word 'artificial' is currently used in describing these intelligent systems.

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Article Review
'Endless Fun'
By Michael Graziano

Gayatri S. Gulvady

4 MPHR

This review is about an article titled 'Endless Fun' by Michael Graziano. Graziano is a professor of neuroscience at Princeton University. He is also a novelist and a composer.

'Endless Fun' explores a concept of being able to upload one's brain onto a computer in order to live a virtual afterlife after one's death. He starts with an analogy of Edison's first phonograph, which brought dramatic changes in the field of recorded music. Music, in some sense, became immortal when the sound waves were translated into data. Similarly, the data of the brain can be captured in its unique form and transferred onto a computer in order to create a second 'you' even after the original 'you' ceases to exist. The second 'you' lives in a simulated world and represents the virtual afterlife that Graziano talks about.

While this virtual afterlife has been a popular topic that several films and books have dealt with, I believe that Stephen Hawking's view on this issue is of great significance. Hawking speculates that there is a possibility of a computer-simulated afterlife becoming technologically feasible.

Assuming such a transfer is possible, its impact needs to be looked into seriously. Looking beyond the complexity of the brain's structure, and its components such as neurons, glia and blood flow, one can apply Edison's principle here as well. In other words, replicating something does not necessarily mean the entire original component needs to be produced again. According to Graziano, using the neural network model, one needs only to focus on understanding how the connections between the neurons can be established virtually. Research is still being done in order to understand how such an artificial network can be created and maintained virtually.

Using the concept of 'connectome', which has been developed by two scientists Olaf Sporns and PatricHagmann, a network can be created which contains all the information needed to have a functioning human brain. However, the extent to which a connectome holds the information about the brain is still being questioned.

While there still exists a large amount of skepticism regarding a virtual afterlife, there are individuals who are willing to pay a price to freeze their bodies in the hope that technology in the future will be able to revive them. Such individuals might find the prospect of living a virtual afterlife in a simulated environment to be an exciting prospect.

Heading towards such a future makes Graziano raise several pertinent questions. Will the concept of individuality exist when there exists a possibility of creating another 'you'? Also, how will we look at the prospect of life and death? When one knows s/he can come back to life easily with the help of technology, is there a likelihood of humans viewing death casually? Also, how does one decide the ethical principles by which the virtual beings will abide by?

By creating a brain of an individual with the absence of any negative and destructive emotions, will s/he be really living a life? As humans, the life that we live is largely defined by both the positive as well as negative experiences that we encounter. In a virtual afterlife, will we be chasing prospects of doing something thrilling or exciting only because we have the liberty to do so? Taking a step back, who gets to decide what we want to do in this virtual afterlife?

As can be seen in the above paragraph, there are a host of questions that one can raise in reference to this issue. These questions only deal with the individual self. A series of questions need to be answered while understanding what the environment in the virtual afterlife will be like. By not having a physical body, there are a range of dimensions and possibilities that one can envision in this virtual afterlife.

The last concept that Graziano introduces in the article is of having shared experiences and thoughts by merging our minds in the virtual afterlife. There are a range of possibilities and outcomes that follow when one thinks of merging minds. In fact, with the variety of concepts introduced in the article, the prospect of leading a regular life until technology progresses seems dull.

However, one needs to question how truly exciting such a progress will be. Is this the ideal future mankind should be heading towards? As human existence has progressed, imagining what the future could look like is always intimidating. An example given in the article is that of the Roman society viewing the concept of Internet. However, since we live in a time where Internet is an integral part of our lives, the apprehensions of the Roman citizen seem unnecessary. Will this happen when virtual afterlife becomes a reality? Only time will tell.

Graziano is 'genuinely glad' (Graziano, 2013) that he will not be around to witness life like this. In my perspective, I hope technology does not progress to this extent when I am about to die either. All my life, I have been taught to let go of things and/or people when the time comes so that one can realize the true value of what one encounters. I would not like to live a life knowing that I can experience all of it even when I am gone. This is because I would take life for granted and not make the most of what I get.

To conclude, while developing such a technology does seem inevitable and feasible, the creators of this virtual afterlife need to ensure the progress is justified and safe for mankind, in every possible way.

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PLACEBO EFFECT AND MIND

DEBJANI CHATTERJEE

4 MPHR

Once, I was talking to a friend of mine, who is pursuing homeopathy (final year) about an incident of a cancer patient recovering from last stage of cancer due to will-power and a positive mind. This conversation was suddenly diverted to an interesting topic of the 'placebo-effect', that is mentioned in books of medicine. This placebo-effect talks extensively about the 'healing power of mind', I was stunned and puzzled by this fact and started to read extensively. I came across many articles that have questioned the existence of mind but have supported the one power that helps people with strong will to recover.

These philosophies have given rise to the phenomenon of placebo-effect, as doctors have realized that most often than not just the patients believing that the medicines work have done wonders to their health. In serious injuries when medical trials fail a pill that only contains simple amino acids and mineral oil, with no active ingredients are administered and the patients are made to believe that these medicines work. Just with this belief patients have recovered from serious illnesses.

How does the placebo-effect work? The concept heavily deals with positive mind power and mind over matter. Mind over matter is a phrase extensively used in order to explain mind-centric phenomenon. This phenomenon believes that mind can control physiological sensations and increase or decrease the intensity of sensations. Tony Robbins states that the power of positive thinking, concentration and will-power can trigger various neurons in the brain that can cure illnesses. Thus, mind can control matter and its effect on the senses. While scientists say this, placebo effect is a proof of the phenomenon. Placebo helps the mind to instruct the brain to fire neurons that are natural pain-killers and also helps in releasing dopamine that improves Parkinson's disease. As of now there is hardly any biological reason for the placebo effect but an extensive research with philosophical base to get various answers.

Researchers believe that with the help of placebo and positive thoughts doctors can activate a special mind-body trigger that can heal the body by itself. But there is another side of the coin to placebo. Some people actually feel they are getting better with the help of placebo but some do not feel any difference that may in turn result in psychological withdrawal of hope to recover that can backfire. These pills that are neutral can also create various side effects due to the thinking patterns of the patient. Placebo also doesn't come in vacuum as the patients need to go through psychotherapy in order to make placebo work wonders for the patient because the thought processes are the ultimate driving force behind the recovery rate.

Placebos can also be addictive not in terms of the chemical composition as sometimes placebos are merely sugar pills but in psychological terms as the association of recovering is in the mind. Thus it makes withdrawal of pills difficult for patients. PET and MRI scans are being carried out to demystify the phenomenon of placebo and the phenomenon of mind over body.

Mind has always been a constant question of doubt but placebo phenomenon tends to affirm the presence of mind along with its interaction with body. Some researchers believe that placebo works on the phenomenon of Descartes' substance dualism phenomenon that states mind controls the body and that a two-way mind-body interaction leads to visible or observable activities that can benefit the body in various ways and that no experience (mind or body) can be reduced to a single explanation as the interaction causes a holistic experience.

Scientists also believe that the co-relation between brain activity and conscious experiences results into biological processes that help matter plasticity of the body that helps the body naturally restore default functions in case of an illness or dysfunction. Thus, a merger of various philosophies can be used to explain the placebo effect in detail.

There were various case studies mentioned in the books of homeopathy where placebo has worked wonders. I had read up and tried to understand the logic behind the effect and then went through the case studies to know the changing perceptions of doctors and scientists on these cases as in olden days they considered it a miracle of God or a supreme being where as philosophers have tried to logically explain them and also in recent time scientists and psychiatrists are trying to explain the placebo effect with the help of scientific tools like PET and MRI scans. Thus, irrespective of various viewpoints placebo-effect still manages to make a great difference in curing patients of the diseases and is effective almost 72% of the times, which makes it one of the most used methods. So next times you visit a doctor think, "Can my will-power and mind help me sail through this?" **P**

WHO AM I?
An Intrinsic Perspective of Oneself from the Mind

Malaika Fernandes
4 MPHR

Who are you? This is a question that we individuals are asked at several points of times in our lives depending on various situations or circumstances. Reality check, how many of us actually do justice to that question while answering it. When coming to think of, we see a lot of people asking us that question. But, do we stop for a minute or look face to face in the mirror and ask ourselves 'Who Am I?' Do we get an appropriate or satisfied answer to that question? Sometimes I feel like just sitting and telling myself about the person I actually am. Then I think about it and try understanding if I really know Who Am I. I then realize that I hardly found the time to get to know about myself, how I function or think. Drawing narrowly on how one knows who they are: Is it a picture? Is it a thought or is it a perception about oneself? According to me, the definition of oneself is what the individual perceives or thinks about themselves. It is all in the mind of the person.

Now coming to understand how one thinks or how one's mind functions, it comes down to all of the thousands of pages and millions of words devoted to the puzzle of the mind and the brain, to the mystery of how something as sublime and insubstantial as a thought or consciousness emerge from three pounds of gelatinous pudding inside the skull. It was some 2,500 years ago that Alcmaeon of Croton, an associate of the Pythagorean school of Philosophy, who is regarded as the founder of empirical psychology, proposed that conscious experiences and conscious thoughts originates from the matter present inside the brain. Today of
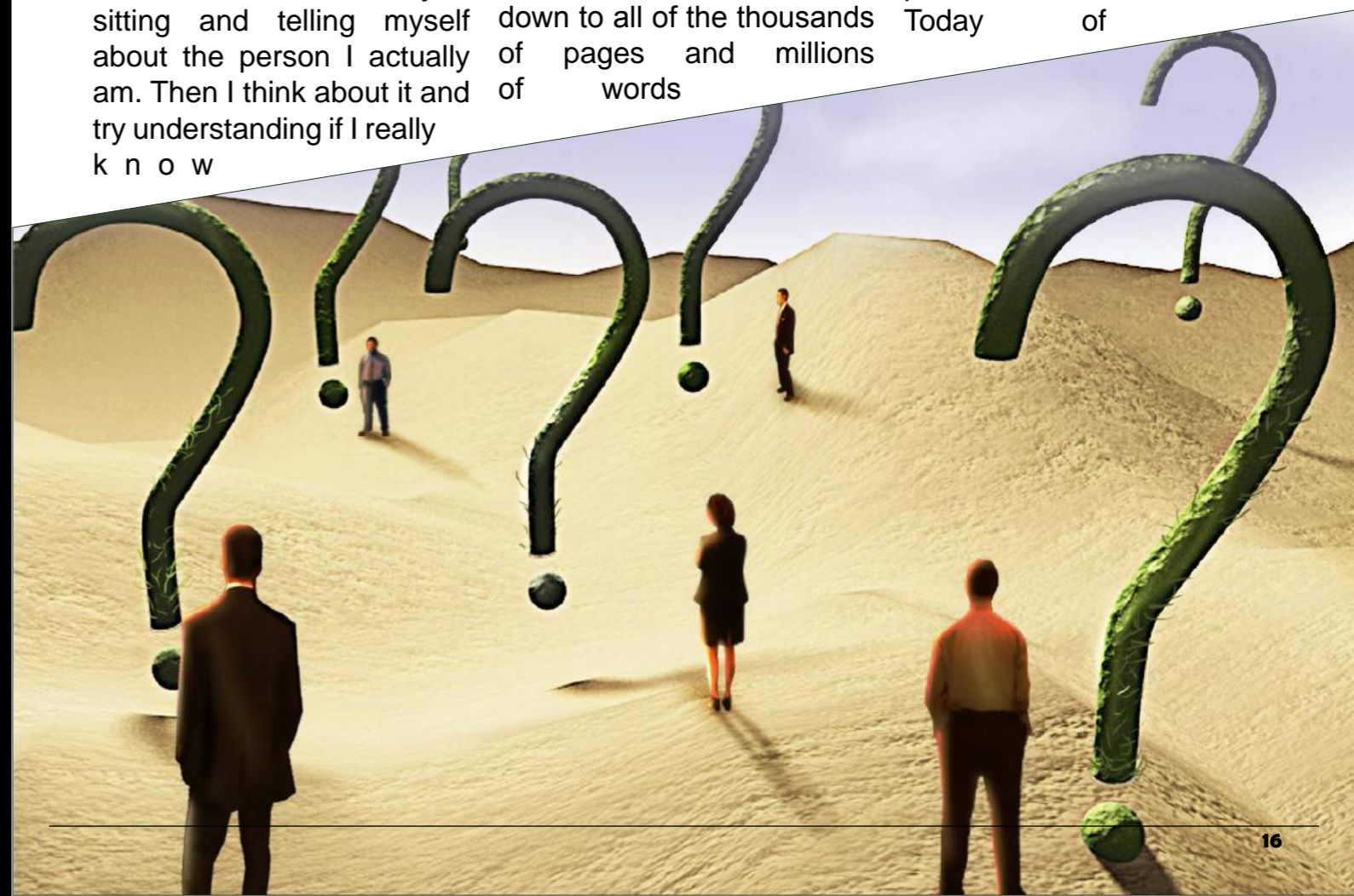
course things and concepts have become clearer and precise as scientists go beyond vague conclusions and do their mapping with brain imaging technologies such as 'Positron Emission Tomography' (PET) and 'Functional Magnetic Resonance Imagery' (FMRI), which pinpoint which brain neighbourhoods are active during any given mental activity. This has been one of the greatest triumphs of modern neuro- science, this mapping of whole worlds of conscious experience, from recognizing faces to feeling joy, from playing a violin to smelling a flower onto a particular cluster of neurons in the brain. Thus what we perceive all depends on what we think. French philosopher Rene Descartes was the first modern to present his views on the existence of two parallel yet separate domains of reality, that is the mental stuff and material are distinct. Even now centuries later his views still continue. But the question still lies whether we think from our mind or from the matter present inside our brain or do we use both to perceive and think about things happening around us.

Coming back to the question "Who I really am?" it is very difficult to define myself as a person. I believe that every individual evolves and changes with time. In the personality of an individual, few of the main dominant traits remain the same but the secondary traits develop and change with time as the individual comes to face various situations of life. While talking about the aptitude and potential of an individual, it lies within them and to be explored. We are sent to school, to college and further on to work and settle down in life.

How important do you think is the phase learning in everyone's life? Learning never stops. I define myself as a learner. My urge to learn increases every day, to me learning does boundary itself within books. But true learning is through experiences. I learn from all the people or individuals that come my way through this life. Every individual that I have met till date has inspired me in different ways. I do not aspire to become like each one of them, rather I take their experiences and try applying the lessons I have learnt, through their experiences. To me no one needs to be a great or a known personality to be inspired from, we can learn lessons and be inspired from every person irrespective who they are.

Personally I have been working with children who are specially abled, for the past four years of my life and they have taught me so much. Children have so much to teach you, especially lessons about love, openness and acceptance towards others. Apart from that I involve myself into theatre, singing and social service where I grasp most of the learning as well. My parents and family have nurtured me well to be an independent and a responsible individual. But I have done a lot of learning from the world I live in. Another part of personality that makes me complete is my inclination towards spirituality. To me this has been a great driving force that enhanced my aim to grow, learn and live for the life to see tomorrow. All these activities along with academics enrich not only my life and growth but also enhance me as person on the whole.

Lastly every person might have a different perception about you, but what remains important is what you think about yourself. Your scope for growth and enhancement of the skills, potential, aptitude and attitude that you possess, is in your hands. The choice is to be made by you, the thinker of your own life. All decisions are taken by the mind as it perceives the situations around and outside it. Hence the choice and question still lies whether we think and know about the individual we actually are or are we just pretend to be people or individuals who we are not. **P**

LINKED – PSYCHOLOGY AND BUSINESS

Monica Kamath & Rhea Gopal

2 MPHR

To be recognized in any field or career, is conventionally one's primary goal. It was no different for us, students of Human Resource Development and Management (HRDM). Ours is a course that is a breed apart and relatively new to the university and the corporate industry. A M.Sc. in HRDM refers to the amalgamation of the psychological element and the business sector. This is a rare combination and requires quite a bit of recognition in the world of business. In order to create awareness and a niche amongst the various corporates, on 14th of February, 2015 students of II MPHR organized the HR Workshop, an annual event that is the brainchild of the human resource students under the department of psychology. One could see the boys decked up in smart suits and the girls in pretty blue sarees ensuring that the event was going smoothly. A workshop on "Psychological interventions in executive coaching", was our primary marketing strategy. We were host to more than about 150 people that included various HR officials from across Bangalore, alumni from Christ University and the final-year and first-year students of HRDM.

The keynote speaker for the workshop was Mr. Ram Ramanathan. Mr. Ram, most popularly known as the mentor coach, is the founder of one of the most reputed coaching schools, Coacharya. He thoroughly engaged the crowd by continuously throwing questions and answering them from the audience. His main focus was on shifting from the phenomenon of mindfulness to mindlessness. He spoke extensively on enhancing the human potential through a transformative coaching process. What interested the audience the most was, him encapsulating few concepts of psychology that was not known to many. It interested them because the relevance of psychology in the business sector today was made very lucid. He also emphasized on sharpening one's skills and developing one's potentials by constantly being aware of what is happening.

Coaching helps equip one or rather sharpens one's abilities in a work environment. This will help one move up the ladder of success. It is very important to understand the needs of coaching a particular group of employees and be able to rightly gauge their requirements. By using the principles of psychology, coaching can certainly be more effective. This session by Mr. Ram not just gave every student new hope, but also led each one of us to think in terms of how we, as HR professionals would function in order to maintain stability and at the same time growth within the organization and to serve as a support system to the employees in the organization. Post Mr. Ram's session, we had a panel discussion.

We had an engaging panel discussion on a pressing issue that has been bothering every student on campus. The topic for the panel discussion was "Employability and Placement". The panel was graced with eminent scholars and business leaders such as Hemant Achaya, Manab Bose, Pallavi Bhadkamkar, Piyush D and moderated by Anand Christopher.

The panellists gave a realistic picture about the number of students graduating every year and thereby the amount of competition that we as candidates need to deal with, however they also emphasized the lack of employability among graduates. There is a huge gap between the skills required by the industry and the skills provided by the educational institutions. There is more emphasis on theoretical knowledge in the course structure of colleges, and that leads to lesser practical orientation among graduates. This gap needs to be redressed in order to improve our human capital substantially.

This brought an end to the workshop. The students of HRDM put together a video, which was very intriguing and captured the attention of the various HR officials, present there. Thereafter, the crowd moved to the birds' park for lunch. This interactive workshop was an eye-opener and motivated each of one of us to take the extra mile and learn from every driving force. **P**

About 10 years ago, a young Swedish researcher named TorkelKlingberg made a spectacular discovery. He designed computer games to boost the memory of a few children, and in time, the kids showed improvements not only in memory but in overall intellectual ability. Older psychological research suggestingthat training in one area could not bring benefits in other, unrelated areas was countered by this finding.
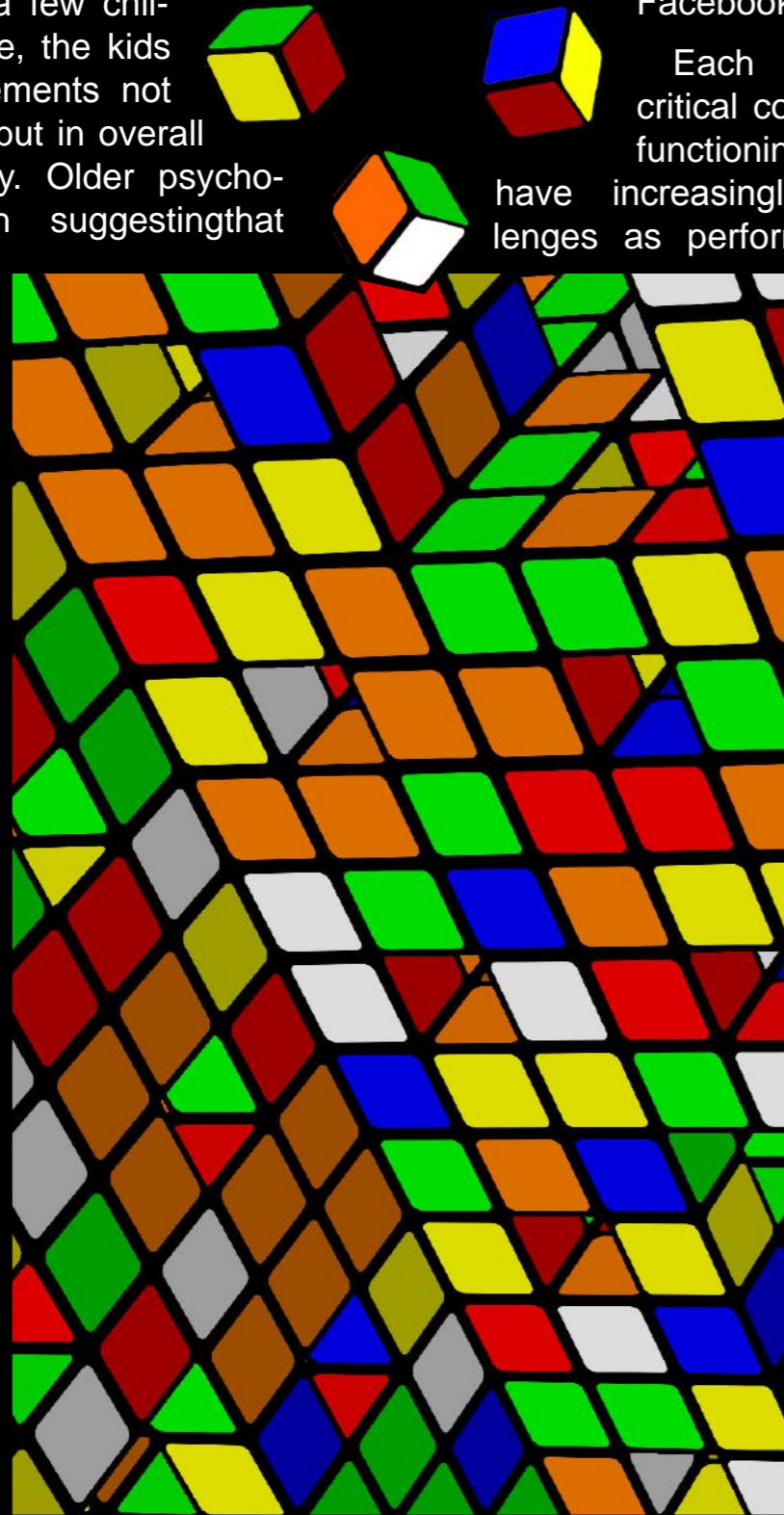
Applying this tosoftware technology,it was seen that training could be adapted to interactive multimedia, which could present specific task demands to individuals in a form that ishighly targeted, repeatable and adaptive. This advance in technologyhas led to an explosion usage of computer-based technology in brain training. Several-products of studies performed with targeted brain training programs that have achieved positive outcomes are now freely available and include Brain HQ, Lumosity, Brain Train and Brain Metrix available even on iPhone, Palm Pre, Facebook, and Yahoo!

Each game targets a critical component of brain functioning. The games have increasingly difficult challenges as performance improves, and decrease in difficulty when incorrect responses are made. The games are novel experiences challenging the brain in ways that encourage new connections and improved efficiency. Taken together, the entire suite of games represents a complete brain training system – an entire gym for the brain. There are games on training speed of attention, processing, problem solving and even mental flexibility.

By training on computer-based training tasks that challenge the children to remember a sequence of targets and hold on to and manipulate those memories, a variety of positive cognitive outcomes were achieved. Increased levels of activation in the prefrontal and parietal cortices (the parts of the brain most responsible for working memory and attention) were seen in children following training (Olesen et al.,2004). Improved mathematical reasoning performance has also been observed following training (Holmes et al., 2009).Results observed in studies conducted with the training on these web based brain training games show greater achievements in memory, attention, and executive function as seen in Baby Boomers. Cognitive performance and school preparedness have been bettered in middle school students. Genetically based learning challenges that affect children have been decreased in a variety of cognitive domains. These results demonstrate that these tools can have wide-ranging and critical impacts in cognitive performance across the lifespan, regardless of one's starting point.

We now begin to understand that the brain remains plastic throughout life and remains dynamically changeable. We understand that, whilegenetics do matterand everyone is different,there is a tremendous amount we can do to improve the way our brains function.

In spite of all these advantages there are a few concerns floating around about the fallacy of brain training software.There are reasons to be wary about such "brain branding" when commercial interests threaten to compromise scientific and clinical values. There could be three main concerns. The first, exemplified in drug development, is of the insidious effects of blurred boundaries between academia and industry. The second one is exemplified by the sale of brain fitness products and of commerce getting ahead of the motivating science. The third is exemplified by some functional imaging practices and looks at the misuse of neuroscience in marketing technology. The relative lack of control over the course of chronic diseases may dispose physicians and patients to believe claims made by companies that align themselves with neuroscience.

Therefore we must remain open to the arguments of either side. Although these programmes are not seen as harmful their effectiveness could be questioned. Yet on the other hand, what's the harm? One could argue that training of the working memory doesn't do any damage. These brain training games may not be marketed right but at least people can build on specific skills outlined by the game which is ultimately, a plus point.

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Brain games and cognition

Manaali Manoharan

PSEco. (3rd year)

Art activities provide children with sensory learning experiences they can master at their own rate.

A stickman figure family versus elaborate sceneries…

Art made by kids varies greatly in its detail, medium and quality and is not to be underestimated as mere drawings or productions of play. It is fascinating to delve into the depths of a child's cognition and perceive how kids express themselves in their art. Art activities provide children with sensory learning experiences they can master at their own rate. No major research has been done on the effect of art on cognition, critical thinking, and learning. Our current education system places great stress on academic achievement rather than creative expression. Many pertinent psychological theories underlie the illustrations of children. These include the cognitive, cognitive development, psychoanalytic, perceptual, and perceptual delineation theories.

According to the cognitive theory, children draw and portray what they've learned in terms of their level of detail of objects in visual art. In visual art, the distortions a child draws in size, shape, and form are believed to represent the child's level of thinking. Florence Goodenough's "Draw a Man Test" supports the concept that the quantity of detail and accuracy seen in children's drawings reflects their thinking (Goodenough, 1926). Thus cognitive theory suggests that as kids gain experience and grow in understanding, they increase their range of concepts or ideas and so their visual art will increase in both detail and accuracy.

A more recent proponent in the cluster of those endorsing cognitive theories of art is found within the book, The Hundred Languages of youngsters (Reggio Emilia, 1987). Reggio Emilia is acclaimed as one of the best educational institution academic systems in the world. Art islooked at like a language,another

The Cognition behind Children's Art

Manaali Manoharan
6 PSEco

way to communicate concepts, feelings, and emotions. Because producing art requires that children think of an experience, idea, or feeling, and then find symbols to express it, art is a highly symbolic activity, considered very serious work.

The cognitive development theory of Jean Piaget relates children's art to their ability to grasp the permanence of objects. Unless kids perceive that objects have a permanent existence, they have no image through which to evoke the past and anticipate the future. Representation of these symbols is the means by which human beings organize their experiences of the world to further understand it (Piaget, 1955).

Another theory, the psychoanalytic theory, claims that kids draw what they feel and that their art could be a reflection of deep inner emotions (Cole, 1960). This theory holds that children's artwork is influenced by emotions, feelings, and inner psychological drives. The reason kids draw daddy so tall isn't as a result of this can be what they understand, however because they feel begetter is therefore powerful and looms so large in their emotions. (can be made into 2 sentences)

The perceptual theory, on the other hand, suggests that kids draw what they see (or perceive), not what they know or feel. Arnheim (1954), one among this theory's supporters, believes that kids don't see objects as the total of observed elements, but that they see wholes or total images structured by the brain. To Arnheim, perception is learned, or at least can be improved, through coaching in visual discrimination. Thus, teachers should try to strengthen and improve children's visual perceptions by asking them to look at and observe their environment more closely.

Finally, a more comprehensive theory, the perceptual delineation theory has been advanced by McFee (1970) which believes kids draw as they do, not because of any one issue, however

because of many. One such issue is the child's readiness as well as physical development, intelligence, perceptual development, and cultural dispositions. A second issue is the psychological environment, within which the kid works, as well as the degree of threat or support, as well as the range and intensity of rewards and punishments present. A third issue relates to how kids handle information—the ability to handle details and to arrange and categorize information coming from the environment. A final issue deals with how children's drawings are influenced by their ability to control the art materials, as well as their artistic and creative ability.

Each of those theories derive support from different psychologists and have their own limitations with regard to how they perceive visual art produced by kids and its cognitive impact.

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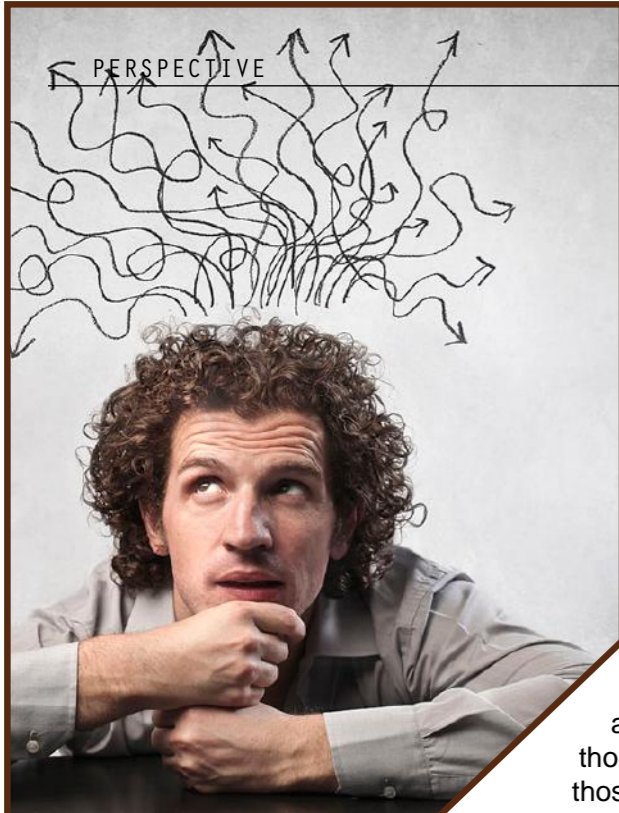
THOUGHT POWER
YOUR THOUGHTS CREATE YOUR REALITY

Dhanya G
4 MPHR

The aim of the article 'Thought Power – Your thoughts create your reality' is to make people aware of how powerful their thoughts can be and how one's own thoughts can transform one's life for the better. The article written by Tania Kostos speaks about how the outer world or circumstances surrounding an individual is created by his/her own dominant habitual thoughts.

The article does not have an abstract that gives a brief idea into the contents of the article. The article begins with a brief introduction about how one's thoughts create one's reality. The perceived physical world has its origin in the inner thoughts and beliefs. The author talks about how one can create their own destiny by controlling their thoughts and bringing in only those thoughts into the mind that they intend to have and experience in life. The introduction provides a very brief insight into the article and does not reveal much.

After the brief introduction, the author moves on to explain how thoughts can create reality. Every outside effect or instance has its roots within the person, his thoughts and beliefs. The power of thoughts is great that it can turn one's thoughts into reality. Whatever circumstance

a person is in, it is the result of his/her thoughts about that situation, i.e., when an individual thinks about a particular situation or has thoughts about a particular thing, those thoughts turn into reality. However people think it is their circumstance that creates thoughts, which is not true according to the author. By realising that one's thoughts can create one's reality, people can think of those thoughts that they want in life and create their own destiny.

The author continues to talk about the 'Universal Mind' which is a single intelligent consciousness that pervades the entire universe and how every individual's mind is a part of this Universal Mind. Being a part of the universal mind makes everyone's thoughts limitless. This is because the universal mind is present everywhere, and so the thoughts of an individual are limitless. Knowing that one's mind and thoughts are the only single source of power, one will be able to attain all that he/she wants in life.

The author does not explain these concepts in detail instead just provide a brief overview about them. Though the concepts invoke a sense of interest, it does not provide complete information that leaves the reader with an incomplete understanding of the whole concept.

The author divides the article into two components where first she talks about how thoughts can create one's reality and how people need to realise this and channelize their thoughts in the rights direction. The second part of the article talks

about how people can use their thought power to change their life and how not to be obsessed with one's thoughts instead be aware of them. The author talks about how the sub-conscious mind is the store-house of all thoughts and beliefs and only by programming and re-programming one can change their thoughts and beliefs and channelize them in the direction they desire. Also, the author talks about the technique of 'creative visualization' that requires one to imagine the situations they desire so that they turn into reality.

The article is not evidently divided into two parts, but the author starts with a brief insight into the concept and how it actually works. She only repeatedly talks about the concepts and certain key techniques to achieve what one desires using thought power. As the article progresses, the author gives few measures that can be followed to achieve positive thoughts, thoughts that will create a reality and help people achieve what they really want in life.

Criticisms:
1. Very brief introduction about the broad concept – thought power
2. Limited explanation of concepts
   - Concepts repeated several times
   - New terms used in the article are not explained adequately
   - Examples not provided for readers to get a better understanding of the concept

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Faculty Column

MINDFULNESS AND STRESS

Kishor Adhikari
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Stress is one of the common word that resonates in our daily life irrespective of profession, age-group and gender. Although biological mechanism of stress has evolutionary role in our life but when the optimal level of the stress is crossed, it becomes detrimental and consequently we might develop several physical and psychological problems. We are all aware of impact of stress, especially the chronic stress, in our health to the extent that we develop some fatal diseases. Similarly, stress among working people does not only have it's negative impact to the person himself or herself , it also impacts the overall performance of the company resulting in significant financial burden. Such is the impact stress, and unfortunately with the advancement of technology and busy lifestyle, especially in urban areas, stress is becoming pandemic. Several strategic and techniques are available to help people reduce the stress. Mindfulness is relatively

new field but it is emerging as a leading method in stress management.

What is mindfulness?

Mindfulness is a state of continuous awareness of experience as it happens while maintaining the equanimity. The three key aspects of stress are, 1) awareness of experience, 2) awareness as it occurs, and 3) awareness with objectivity. The concept of mindfulness has its root in Buddhism. According to the scripture, Buddha prescribed the path of samma satti (right mindfulness is the closest English translation) as one of the eightfold paths in the process of achieving nirvana. Satti in Pali language, the language Buddha spoke, means memory (smriti in sanskrit), however, it is not the memory of past or ability of memorizing things. It's the awareness of present. Now and here. Many people have contributed in its development, however John Zin-Kabat, was one of the early

scientists who borrowed the concept and researched and developed the secular form of mindfulness which can be practiced by people following any religion or faith. There are many methods which could be utilized to cultivate the mindfulness. Meditation one leading established technique which has been proved effective to harness the mindfulness. There are several traditions and forms of meditation. Meditation in general could be broadly divided into two classes, 1) concentration meditation (e.g., for example transcendental meditation) , and, 2) Insight oriented meditation (for example vipassana). Mindfulness based meditation falls in second category. Some meditation could serve both purposes of concentration and insight development (for example Anapana-awareness of incoming and outgoing of breath). Any type of meditation is useful in gaining relaxation but mindfulness based meditations are found to be more effective to cultivate

general level of mindfulness. Studies have shown its positive impact in central emotion processing system and default mode network of brain.

Benefits of mindfulness meditation training

One of the major benefit of mindfulness meditation is that it quieten the monkey mind and trains to utilize it for the betterment. Monkey mind is a reference to the nature of mind which jumps from one one topic to another topic forever. Several psychological and physiological benefits are reported based on scientific studies and clinical trials. Among them few are listed here:

- Increased attention and concentration

-Muscle relaxation

- Control in blood pressure

- Control of cortisol (the stress hormone in blood)

- Improvement in relationship

-Tranquility in life

- Better clarity and better problem solving

- Increased productivity

-Increased happiness and wellbeing

- Sense of loving kindness towards others

-Thickening of areas of brain which are responsible for processing of emotions

- Neuroplasticity

(Note: This is not an exhaustive list)

Mindfulness based wellness programs are becoming very popular among fortune 500 hundred companies. Research are demonstrating that these companies are performing better and consistently in comparison to their counterparts. The concept of mindful workplace is becoming popular among organizations and business.

How can one practice mindfulness?

There are many many techniques but meditation is a good beginning. As such there are 7-8 weeks structured courses to get the maximum benefits (for example mindfulness based stress reduction- MBSR), but one can start with simple mindful breathing exercise which can be practiced few minutes a day to several minutes depending on the time and place.

You can begin by sitting calm and quiet for sometime. Peaceful and calm place is preferable. Also try to quieten the mind and abstain from planning and thinking. Then start being aware of every breath that goes in and goes out. Straying of mind is inevitable but as soon as you are aware that your mind is wandering, gently bring it back to the awareness of breath and focus on incoming and outgoing off breath. It is important that you breathe naturally without any conscious change in pace of the breath. Also, don't feel frustrated when you fail to concentrate because it is natural that you will be distracted. This is just a simple exercise, but it is recommended that you learn the proper techniques from

the expert so that you get the maximum benefit.

Alternatively, many guided mindfulness breathing exercises can be downloaded free of cost and follow the instructions. Also techniques like mindful walk, mindful eating etc., can also be practiced.

P

The Human Mind
- A Hidden Treasure

There is a place inside the human brain
It is a hidden place
The tasks that it can do
Is really hard to measure

It can transfer rhythmic movements
To the body through a dance technique
Or bring words and melody together
To create soulful music

It can transform many brush strokes
Into a colourful scenery
Add rhyme, meter and verse to words
And turn sentences to poetry

In times of hardship on curved and confused roads
It enlightens people with a solution
And provide a lifelong abode
To loads of information

It is a hometown
Of new ideas, discoveries and inventions
It also helps state the causes
Of human behaviours and tensions

It is the gateway to
The door of attitude formation in society
And is the root cause of
The actions people perform in reality

You can't really tell the tasks it can do
It can create, retain and even find
So complex is this part and its functions
A hidden treasure called the human mind

By
ChristalFerrao
2 CEP

Attention Blink!
Have you experienced it?

Devika

4 MPCL

Attention is so easily knocked for half a second, even in young healthy individual

Attention takes half as second to recover from processing one thing before it can next

Human beings are generally believed to have a limited span of attention. We all experience a fundamental bottle neck while we process the information. We need a gap of at least half a second to process the new upcoming information to recover from the processing of the pre existing information. We call this phenomenon the attention blink. According to this phenomenon if the second stimulus is presented in a time span less than 500 milliseconds after the presentation of first stimulus, and then the second target is always missed. This means that there is a time lag in processing the information because our cognitive requisites will be busy processing the first information. All relevant theories stress limited cognitive resources as the cause of attentional blink. Olivers presents us with an interesting paradox. As per the first account, target detection triggers an episode during which attentional resources are strongly reduced. And according to second, target detection triggers an episode during which attentional resources are being recruited. That is, the human attention span is enhanced following a significantly important event. And it results in the enhanced perception of relevant events and minimized perception of the irrelevant information.

There are several other factors limiting our attention span, thus causing attention blink. The psychological state of a person, physiological conditions like arousal or any diseased condition like schizophrenia, Alzheimer's, Parkinson's , Dyslexia, Depression, ADHD(Attention Deficit Hyperactivity Disorder) can decrease the attention.

In this paper, you will see me quoting to and depending on the work of Oliver (2007), 'The time course of attention. It is better than we thought'. The present paper majorly talks about the human attention and the concept o attention blink.

Attention is so easily knocked for half a second, even in young healthy individual. Oliver reasons the above statement by stating that 'attention takes half as second to recover from processing one thing before it can next'. The phenomenon Attentional blink (AB) can be observed in rapid serial visual presentation (RSVP). When we are presented with a sequence of visual stimuli in rapid succession at the same spatial location on a screen, a participant will often fail to detect a second salient target occurring in succession if it is presented between 150-450 ms after the first one.

Attentional blink suggests a temporary reduction in attention following an important event, other research suggests exactly the opposite, that the performance temporarily improves after encountering events. Oliver (2007) also states that attention blink according to reaction suppression account is not a phenomena occurs for the entire stimulus. It can vary with the stimulus characteristics. If the a distracter is presented instead of the target, preceding the target stimulus, then the chances of occurring the attentional blink was found to be significantly higher. Instead of the distracter, if two or three successive target stimuli are presented then the chances of having an attentional blink was found to be significantly lower.

As a concluding note the researcher suggests that even though human beings experience attentional blinks we need not consider the phenomenon as a shortcoming. Because following a temporary drop I attention, temporary attention spurt will increase the efficiency of a person engaged in one task. One of the limitations of the present study is that these experiments on attention are conducted in the laboratory setting and we need not necessarily have validity outside. After all, the researcher says that we should understand the fact that research is done on one of the cognitive system, which never sits still.

CRITICALLY ANALYZING THE CONCEPT

Human beings are said to have limited cognitive capacities and we all experiences Attention Blink. Therefore, according to this concept, people have only a certain amount of mental energy to devote to all the possible tasks, so they selectively attend to certain information. This is somewhat similar to bottle neck theory where it states that all incoming information are subjected to some level of processing before a portion of it selected for attention. That is the quantity of the incoming information is narrowed like the neck of a bottle.

It is impossible for me to agree to the fact that there is only limited capacity for our attention. If so, how do you still recognize your name being called out even when you are seriously concentrating in solving a complex mathematical problem or when you are attending a loud party where you engage in conversations with other groups? This is known as cocktail party effect. He said the important materials can penetrate the filter set up to block unattended messages. So, it is evident that we don't totally ignore the world put aside. It is just that "we have turned down the volume" of unattended messages and the meaningful information in the unattended messages might be still available even it was hard to recover. The support to this can drawn from Treisman(1960). Attenuation Theory which states that information that is not attended this processed through at a shallower level of processing than the information receiving attention.

Further evidence can also be drawn from Cherry's classic theory on dichotic listening task where both the message played at a normal speed. The subjects were able to answer the questions related to the unattended, non shadowed message. These evidences clearly the idea of having limited capacity

Attention cannot be easy easily knocked out for all. There are individual differences in attention span. Some people have a higher attention span but other have very low span of attention. Daniel Kahnenman

> **If you are crossing a road, you reached somewhere the midway of one of the sides. You saw a friend on the other side of the road and you waved her. Suddenly you get your focus back to the road and you see yourself going to be hit by a car.**
>
> **There are chances that the person go completely ' blank' and find no cognitive resource to help her solve the problem when the person experience a traumatic event. The person feels completely drained following a relevant event supports attentional blink phenomenon.**

(1973) said that the more complex the stimulus the harder the processing and therefore the more resources are engaged. The type and difficulty also determines the attention span of a particular individual.

For example, during the examination or before meeting the deadlines individual attention span is generally high. This may be because

of the high level of arousal produced by the body due to the physiological arousal. Arousal thus affects our capacity for the tasks (Kahanman 1973). An optimal amount of arousal can enhance the performance. So it is impossible for us to say that attention span is easily knocked out for half a second even in an healthy individual. The amount of attention we spare a particular event is explicitly related to the situation, complexity of the task, physiological arousal following a task and the motivation to perform such a task.

Attentional blink suggests a temporary reduction in attention following an important event; other research suggests exactly the opposite. Our performance temporarily improves after encountering events.

Instead of having a sudden drop of attention following attentional blink, individuals might experience a spurt of attention because of the bodily arousal and the activation of all possible Schemas, which helps us in reaching at a better solution. Our focus would be too sharp after a pertinent event. For example, if you are crossing a road, you reached somewhere the midway of one of the sides. You saw a friend on the other side of the road and you waved her. Suddenly you get your focus back to the road and you see yourself going to be hit by a car.

According to the supporters of attentional blink theorists, you won't be able to process what you should be doing, following an important event (a speedy car approaching you) as your attention is temporarily lost and you might get crashed by the car. But as per the present theorists, as people experience an "adrenaline rush" following an important event (perceiving a fast car approaching you) and thereby the neurophysiological correlate of attention is temporarily increased. Following the activation of locus coeruleus and the cortical release of action enhancing neurotransmitters noradrenaline (Aston- Jones Rajkowiki & Cohen 2000), making you move away from the speedy car, thus saving your life. We can support the above event by using Zeigarnik Effect as the medium of explanation. Zeigarniksays that the incomplete task is better memorized than a complete task. Here, the person hasn't completed the task of crossing the road. So here, since the task is an incomplete event, there are more chances that the person focuses better attention and thus better chances of completing tasks once the subject sees a car rushing towards him or her. So there are more chances of her completing the act of crossing the road than not crossing it. Therefore, I agree with the researchers' view that there would be a temporary attention enhancement following the encounter of the relevant events.

But, it is not necessary that everyone who has confronted with a relevant event would have

a temporary improvement in the performance. For example, in the above instance there are chances that the person go completely ' blank' and find no cognitive resource to help her solve the problem when the person experience a traumatic event. The person feels completely drained following a relevant event supports attentional blink phenomenon. This is not congruent with the 'temporary attentional enhancement model' – we also can't avoid the occurrence of the above phenomenon.

Further evidences can be drawn by the Stroops Effect by Stroop in 1935, which is famous demonstration of the effect of practice on the performance of a cognitive task. For a literate adult to read quickly and effortlessly that NOT reading the words is hard. (Stroop,1935)Subjects always encounter the attention blink following the presentation of the name of the colour in a different colour, which further supports our argument.

Most of the temporary attention enhancement experiments have been done in the laboratory setting. Therefore we can't generalize this to the external world directly. That is in the world outside, it is not necessary to experience temporary attention enhancement following a significant event.

CONCLUSION

The paper tries to explain that the phenomenon of attention blink is not always the drawback of the attentional

process but is a useful phenomenon. This is true because human beings would not have survived this long had their attentional requisites knock out every millisecond. The researcher finds attentional blink as a tool to investigate the dynamics of attention. In our critical evaluation we critically analyzed the concepts that researcher used to study the concept of attention blink and the course of attention. It gave us a better understanding and gave us an opportunity to evaluate and understand the concepts better.

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Lucid Dreaming is the art of becoming more conscious during the dream. Usually, when we are dreaming, we actually tend to believe that the events happening in the dream are true. Our brain tricks us into believing our dreams. But on the contrary, the state of knowing that we are dreaming and that we are actually lying down and our body is relaxed is called Lucid Dreaming. In lucid dreaming we look around and know that they are just our imagination. Sometimes it is as interesting as waking life. It is almost similar to being in a virtual reality. Sometimes lucid dreaming occurs without any effort from the dreamer. A sudden realization that it is just a dream may hit the dreamer at some point of time, turning a normal dream to lucidity. But the actual practice of lucid dreaming and mastering it takes practice. Various techniques have been developed to learn it. Some even learnt to master it to an extent of lucid dreaming every day. Often, Lucid Dreaming occurs in the middle of a regular dream. There is no one way to practice lucid dreaming. Over the years, many cultures and scholars try various methods in which lucid dreaming can be learnt. Still, there are a few steps which are commonly accepted in the practice.

Dream On
Lucid Dreaming & Cognition

Anusha. V
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One question that always intrigues people is, 'how can one be asleep and aware simultaneously?', whereas the simple answer is being awake and aware are two different concepts.

Paul Tholey came up with seven conditions a dream must fulfill to be qualified as a lucid dream.
1. Awareness of the dream state (orientation)
2. Awareness of the capacity to make decisions
3. Awareness of memory functions
4. Awareness of identity
5. Awareness of the dream environment
6. Awareness of the meaning of the dream
7. Awareness of concentration and focus (the subjective clarity of that state)

Scientists claim that the 'lucidity' in normal dreams is highly overlooked. If that is the case, why is lucid dreaming so rare? They try to explain this by comparing dreaming with language. Though we all speak our language with ease, we wouldn't be as fluent and as comfortable in speaking if no one taught us our language. Similarly, no one actually teaches us to dream. Thus, dreams are over looked and lucid dreaming is quite uncommon.

Over the years, many cultures and scholars try various methods in which lucid dreaming can be learnt. A number of books and articles on the Internet show tips and step by step procedures for practicing lucid dreaming. Some video game companies also come up with headband like accessories, which claim to induce lucid dreaming. Ursula Voss, a psychology professor at Frankfurt University published an article saying they were able to induce lucid dreaming, through mild electrical stimulation in people who had never or rarely had the experience before.

Following this, the question of how lucid dreaming is involved with cognition was raised. Neuroscientists have discovered that the anterior prefrontal cortex, the area of the brain that controls conscious cognitive processes and plays an important role in the capability of self-reflection, is larger in lucid dreamers.

Psychologists at the University of Lincoln in England found that people with frequent lucid dreams are better at cognitive tasks that involve insight, like problem-solving. Experiments conducted with coin toss and dart games have proved that lucid dreamers perform better after practicing the game in their dreams, when compared to non

lucid dreamers. Frequent lucid dreamers were significantly better at solving brain puzzles than non-lucid dreamers. Occasional dreamers fell in the middle but weren't statistically different from either of the other two groups.

Kahan T.L and LaBerge S. in their paper found the high levels of rational and reflective thinking and intentional action in lucid dreamers. They also stress the importance of focusing the attention more on the metacognition in lucid dreaming. The difference in the volume of brain in lucid dreamers and non-lucid dreamers prove the connection between lucid dreaming and metacognition. They found that the cognitive process during lucid dreaming is almost similar to that of waking cognition.

Gathering evidence from further more researches and experiments, it has been proved that lucid dreaming plays a significant role in cognition. That being said, lucid dreaming is a very interesting topic to learn about and practice. But one should also know that it doesn't come easily and needs a lot of patience and regular practice. Also, one must know the limits of the practice and practice it properly, to avoid other mental or sleep related problems.

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ATTRIBUTION

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'To err is human. To forgive is divine but to repeat is stupid.'

With this comes the beauty of studying Psychology. This subject helps us to identify, become aware of human errors and rectify them in the process. Some such errors are called the fundamental attribution error and self-serving bias that stem from the attribution theory.

Attribution talks about the process of inferring causes of events or behaviors. It deals with how the social perceiver understands surrounding information present in the environment to attach a cause to an event. For example, when you get a poor grade on a quiz, you might blame the teacher for not adequately explaining the material, completely dismissing the fact that you didn't study. When a classmate gets a great grade on the same quiz, you might attribute his good performance to luck thus neglecting the fact that he has excellent study habits. This leads us to elaborate on the self-serving bias and fundamental attribution error.

When it comes to other people, we tend to attribute causes to internal factors such as personality characteristics and ignore or minimize external variables. This phenomenon tends to be very widespread, particularly among individualistic cultures. This is referred to as the fundamental attribution error; even though situational variables are very likely to be present, we automatically attribute the cause to internal characteristics. The fundamental attribution error explains why people often blame other people for things over which they usually have no control. The term "blaming the

victim" is often used by social psychologists to describe a phenomenon in which people blame innocent victims of crimes for their misfortune. In such cases, people may accuse the victim of failing to protect themselves from the event by behaving in a certain manner or not taking specific precautionary steps to avoid or prevent the event.

When we do well in an exam, we often attribute our success to internal factors; such as "I did well because I am smart" or "I did well because I studied and was well-prepared" are two common explanations we may use to justify our test performance.

What happens when you receive a poor grade, though? Social psychologists have found that in this situation, we are more likely to attribute our failure to external forces such as "I failed because

the teacher included trick questions" or "The classroom was so hot that I couldn't concentrate" are certain examples. This is referred to as the self-serving bias. Researchers believe that blaming external factors for failures and disappointments helps protect our easily breakable self-esteem.

Stability attributions affect our predictions about the future; controllability affects our persistence on task; causality attributions affect our affective (emotional) reactions to success and failure (the more the individual feels that his/her behavior is under conscious control, the greater the affective

can consciously make a choice to not make such errors.

Usually, fundamental attribution error and self-serving bias are also seen in organizations. For example, employees tend to blame their employers or other external circumstances if their performance at the

> "I did well because I am smart"

> "I did well because I studied and was well-prepared"

Weiner's model of achievement attribution deals with the aspect of how an individual's causal attributions of achievement affects subsequent achievement behaviors and motivation; future achievement expectancies; persistence at similar tasks; pride or shame felt following success or failure.

Three dimensions:
- Stability (stable and unstable)
- Locus of causality (internal and external)
- Control (controllable or uncontrollable)

response). The four attributional factors are effort, task difficulty , luck and ability determine expectations of future performance, shame, pride, etc.

It is important to understand that we as humans are easily capable of making such errors to meet our needs helps in not repeating them. One

job is bad. A number of circumstances stand as a witness to these biased errors. What we need to do is become aware of them and consequently rectify so that we understand ourselves and others better in the process of becoming better individuals. **P**

Account of problem solving experience
The Process of Saying "Hi"

Amrita Soman
2 JPEng

Subjects are approaching. ETA is under 10 seconds.

Let's assess the situation in this brief window of time.

Location: Bleachers, Food Court, Christ College.

Temperature: Roughly 31 degree Celsius.

No sight of clouds, no chance of rains.

Exit routes: The food court entrance

Now let's look at our subjects

Subject 1: Female, 5'4", Dark-haired, eyes narrowed by the raising of cheek muscles, a broad smile disclosing 16 sparkling white teeth, walks in long strides, each accompanied by a periodical bounce. Characteristics suggestive of a content and happy person. Highly likely to strike up a conversation.

Subject 2: Male, walks in a slow pace with short strides, eyes locked on his phone. He is preoccupied and seems likely to completely ignore me.

Subject 3: Female, head facing straight, obstacles in path have no affect on her. She stands between Subjects 1 and 2 which suggests she feels superior. Walks with quick and short strides. She is likely to be the leader of the group and is likely to make me feel most uncomfortable.

A quick assessment of this situation suggests two possible modes of action for me. One, I temporarily consign to oblivion my true persona and wear one of the many that have managed to help me make it through the day and this I consecutively end up making small talk with the group. Two, make a run for it while I still can.

They're coming. oh! They're coming! What do I do? Somebody kill me right now. Wait. Have they seen me yet? No, I don't think so. No, no they haven't. Okay, good. Now look around for something to hide yourself with. Come on. Hurry! What's this? A hoodie! Quick. Put it on.

One swift action of the hands and I'm a cat drinking milk with closed eyes. Subjects walk right towards me, swerve to the right and seat themselves. I'm invisible. And that, for you, is my process of saying "hi". **P**

A Mind on its Own
A short reflection on the mind
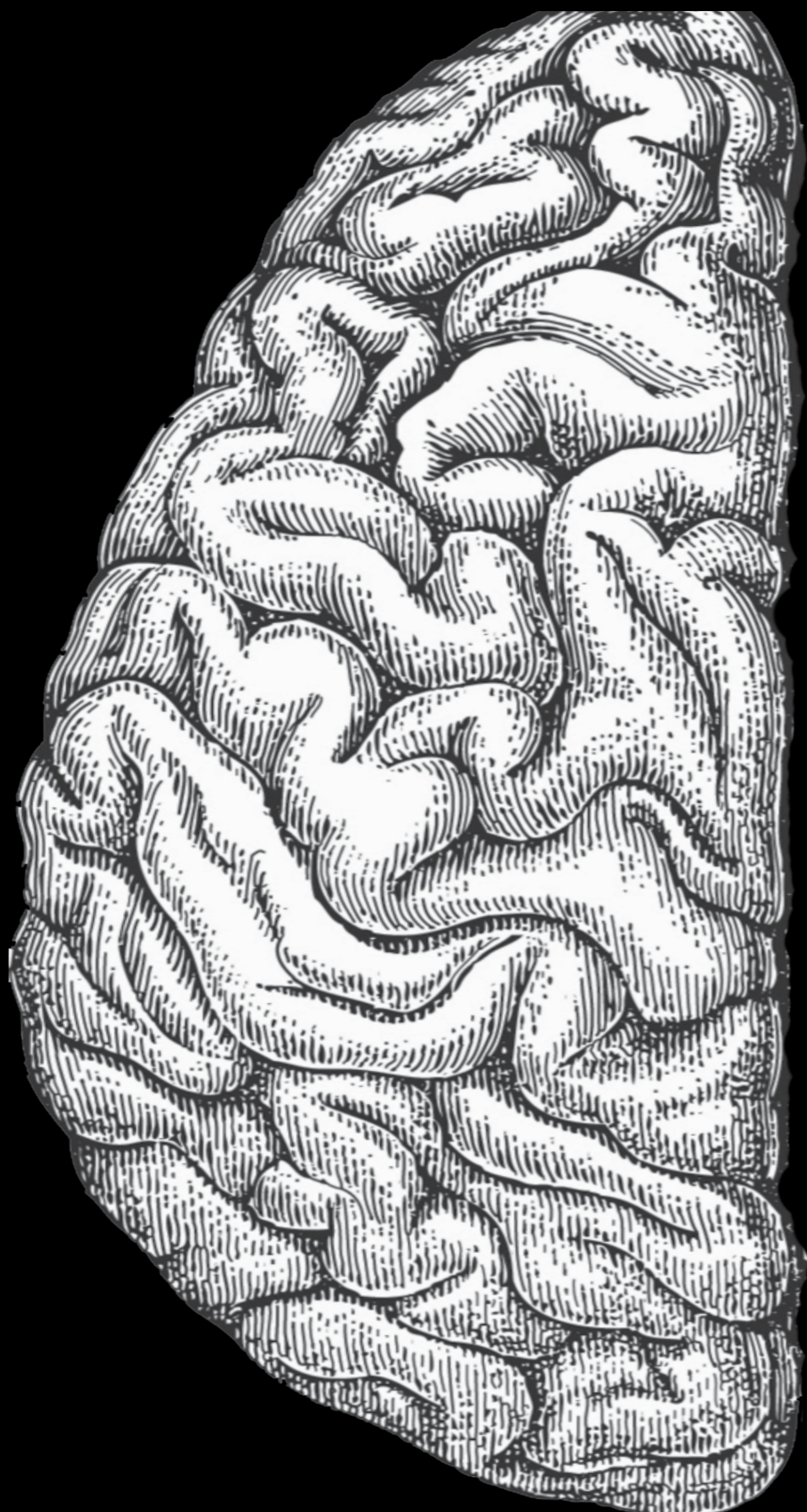
Mind, Body and Cognition
Prarthana Ghosh, 4 MPHR

There is much on the mind as one embarks upon the rather cumbersome task (if not a ludicrous one in its over-ambitiousness) of studying and understanding the daunting yet entrancing depths of the mind. Is it truly possible to study "something" that is both the object of study and the tool it is to be studied with? Can the phenomenon and its instrument of measurement be one and the same, united in conjugal bliss or must they essentially be forever divorced? The matters of the mind have intrigued many across geographies and across centuries and are yet largely unresolved and it is perhaps in this irresolution that the beauty of the matter dwells and continues to enchant us. The question of putting mind over matter cannot be answered unless we know what the matter of the mind is. We all seem to have a shared perception of the mind when we refer to it colloquially. There is seldom any gap in communication when we talk of losing one's mind, of engaging in mindless activities, of mindful living or even when our Facebook status box asks us rather intrusively 'what's on your mind?'

The persistent debates on the nature, the locus and the function of the mind, from Descartes' dualism to Nietzsche's vehemently nihilistic philosophy to the ideologies of Locke and Russell to the age-old concepts of the Yin-yang and the Satchitananda, though quite opposed to one another in certain key aspects, are probably all united in their essential belief in the existence of the mind and also in their ultimate inability to independently elucidate everything that there might be to know about the mind.

The mind has often been reduced, as it were, to simple neural functions relying heavily on the topographical arrangement of activities across an ever active grid of neurons. Mind mapping today is used as a reference for all other maps. However, if the mind was simply engendered by and limited to the brain, the various instances of the presence of an extended consciousness in spite of brain death survived by many patients remains largely unexplained and demanding reason. The

disappearance of neural activity does not therefore either presuppose or predict the disappearance of the conscious mind.

The continuity of the mind seems to rest on the duality that though it seems to be incredibly dynamic, it also seems to maintain

> **There is seldom any gap in communication when we talk of losing one's mind, of engaging in mindless activities, of mindful living or even when our Facebook status box asks us rather intrusively "what's on your mind?"**

some sort of a status quo across multiple planes.

The concepts of the consciousness and that of the self greatly overlap with that of the mind. A concept of the self (both the constructed and the known) and the functions of the proto self, the core self and the autobiographical self are intertwined with the workings of the mind. The

idea of a collective mind cannot however be negated just like the collective unconscious posited by Jung.

Whether the mind has an independent existence of its own outside the known realms of our existence or whether it is what drives our existence internally is yet unknown. Rather than trying so hard for an out-of-body (ex statio) experience maybe we should focus more on an inside body experience as the astral plane may just as well be within than without.

We should probably not be impetuous and rush to conclusions about a phenomenon that revels in the shroud of mystery that protects it from the cardinal intellectual flaw of over-simplification as that would probably just lead us to indulging in our hamartia. **P**

Is mind a concept in modern cognitive psychology?

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What are mind and its role in modern cognitive psychology? Is mind, a divisible matter within the body or indivisible and irreducible entity like any invisible soul or simply a term designated for some unexplorable feelings that we experience? Alternatively, is mind something metaphysical which is beyond the human perception which invisibly drives the behaviour? The realm of cognitive psychology relies on experiences communicated in the form of behaviour which is observable through different metaphors of mind. In this regard, decades back, Gilbert Ryle critically demystified Descartes, centuries long, mind and body distinction, as ghost in the machine where probabilities of making category mistake were immense. The category mistake, as pointed by Ryle, occurs in many instances where structure of any entity, such as, mind, is searched in the same format as any other observable and tangible matter. This is a kind of error of classifying an object as belonging to a wrong logical type (see, Feser, 2005; Jacquette, 2009; Ryle, 1949).

Contrary to dualistic perspective as viewed by Descartes, eliminativists' perceive mind as nothing but irreducible entity, for example, brain, which creates sets of thought and conscious experience. The modern cognitive psychology, however, moved into the terrains of sensation, perception, learning, memory and thinking, probing the mechanism of information processing. Cognitive psychologists took the eliminativists and reductivists stance locating the cause behind any action in the mind. The efforts are made while studying it to come out with the reliable methodology which may be helpful in understanding the concept of mind. Mind in some of the philosophical quests was considered as originator of one's existence in terms of behaviour, where both mind and body were considered as substance. The present cognitive psychology with its methods tries to characterize human information processing as universal process where the first person viewpoints seem to be missing. In the emerging new field of cognitive

neuroscience which is an offshoot of cognitive psychology, the question of existence of mind and consciousness is dealt in a more sophisticated way by placing its roots in complex terrains of brain.

Brain was considered to be a regulatory mechanism for one's own consciousness, which in turn, from time to time, labelled as mind (see Damasio, 2012; see also Searle, 1980) . The philosophers tried to call it as epiphenomenalism, where brain is considered to be the causal factor behind mind and consciousness. Mind was understood through varieties of perspectives, social, anthropological, physical, neuroscientific etc. Looking mind as an active concept from the Kantian proposition, mind is unempirical, is matter of reflection which was not at all coming into the peripheries of scientific investigation or scientifically orientated psychological investigation. If going by the side of this perspective, mind is not a variable to understand through physical sciences methods. The existence of mind and

consciousness are debatable issues because the facts obtained through observation have its manifestations in observable behaviour only. However, there are instances when emotional contents were cognitively accessed, matched but that too picked up scientifically in terms of reliability of observation and confirmation. As pointed by Damasio (2012) in "self comes to mind" (P. 4) "without consciousness, that is, a mind endowed with subjectivity-you have no way of knowing that you exist". But how then existence matters even we are aware that we are conscious? Does one's existence in the materialistic propositions, sits on the citadel of matters, that is, brain? The approach of neuroscientists accounted the wonders of nerve cells in the brain that lead to various states of cognition and that is very important part of mind. But to my knowledge they have actually failed to solve the mystery of something existing after the brain working. The basic question always comes that "why brain function that way? And was that the only process in which brain functions leading to number of human activities in the context? Why human brain doesn't function in any other way like some imaginative alien or may be like snail?

The debates in the history of various disciplines often get stuck when something invisible is located scientifically. Exactly, it did happen in the pre modern times where concepts like mind were understood through different categories of methodological quests. The questions concerning the existence of mind in the time and space and its association with our behaviour became one of the essentialist probe to come out with authentic picture of mind. However, the only problem was the tool to capture that. In the modern positivistic era, it was understood through some mechanism which showed its alignment with the dominant disciplines like physics. But it doesn't give us the confidence of identifying mind by its operationalized definition because operationalization itself was the problem. The mind and it measurement came out with multifaceted pictures. Some placed it in the category of purity and connection with the cosmos and some highlighted its politicized face emanating from the garb of society having theological motivations (Rolli, 2004).

The mind got many pragmatic extensions such as consciousness and its antinomy such as unconsciousness. In cognitive psychology the term mind was captured through its ingredients and essence such as one's preoccupation with his/her conscious limits. These conscious limits are the boundaries of experiences which eventually gets blurred in its transitions from past to present. According to Thomas Nagel (1974) in his important paper "What is it like to be a bat" distinguished between our phenomenal experience and its perfect theoretical description. Thus, Nagel asserted that not even the best theory could make us understand what it like is "to be a bat from a bats perspective". This actually limits the boast of cognitive psychology of capturing the essence of mind. This is more like a claim when one have feeling of transcendence from one's body to the astral space which we don't have much observational support. Mind as an important concept in cognition, need to be explored through different methodological perspective. As a catcher in the rye, mind exploration can always be the process, as its definition, nature and spatial and temporal location, experientially, shall be diverted across the time. According to Jacquette (2009), mind, the ontology of mental phenomenon, is the fundamental problem in the philosophy of mind. The ontology of mind, in answering the mind-body problem has direct implications for whether the mind is or is like a machine, whether it is immortal, whether there are immaterial particulars, whether there is more than one kind of substance, whether experience is private or public, and whether there can be free will and moral responsibilities (see Jacquette, 2009).

Descartes basic contention was the irreducible nature of mind to the brain or matter. Now the question is "Is it brain responsible for our consciousness of identity?" The problem of personal identity is the problem of explaining what it is that accounts for the fact that a person remains the same person over time despite dramatic change in his/ her bodily and psychological characteristics (see Feser, 2005, p.212). Is thinking follows the universal patterns? Are every process of understanding mind follows the same patterns/ methodology? What about other viewpoints? What about rationality which had become irrational under the comparative realm of dominant rationalities? If mind/consciousness and other related attributes of being are separated from the body than why we get fatigued or tired and out body muscle pinch after long hours of sleeplessness? This I encountered personally while in the feeling of thinking late at night. This corresponds to the matter as major causal factors behind my tiredness. However, then one question again emerges out that "Are they not just feeling or consciousness of being tired, fatigued or burnout? Why do I feel that I am tired? What is origination point of this feeling? Or possibly, I have not slept and my brain got overworked through firing of the brain cells, utilizing the glucose of body, and made me feel the reality of being burnout or tired. When we speak of the mind, do we refer only to the living brain or functioning of the brain, together with the activity of the central and peripheral nervous system? Alternatively, as many people and many religion teach, is there and immaterial spiritual self or soul that inhibits or uses and directs the body, but is not itself physical or material and may survive bodily death?

To claim that mind does not exists usually means that it is impossible to account for psychological properties exclusively by means of third person observational and experimental science. The concept of mind is dispensable if cognitive phenomenons are more correctly explained by eliminating references to the mind and speaking instead of behaviour, brain events or information processing. Mind can be better placed in the category of consciousness, where immutable category of brain is more situated into the cultural context, together with its interconnectedness and awareness with the space and time (See Gergen, 2010). The categorization of mind as an entity in itself and the motif to locate its cause in the brain is asymptotic and simply tautological, unless it is closely observed, under the umbrella of varieties of tests. The notions of evolution of mind (see also Dennett, 1995) in the history can also be deconstructed through variants of contexts such language development, movement in the spatial contexts, sociopolitical systems and the constructed history. Mind is very difficult to be interpreted by the modern tools of cognitive psychology because the semantics and syntaxes associated with the observable behaviour in any context changes. Also, mind was addressed by William James as stream of consciousness which is in flux, transition and doesn't get stagnated. Mind, it seems cannot be apart from the substance and social context. Thus, it may the case that we assume it to be something tangible and visible, for example, consciousness, as a first frontier (Robinson, 2010), to understand and reinterpret it. From the above discussion, we can infer to some extent that mind is still standing on the citadel of confusion with immense scope of inquiry in the future. The mind is still a concept in modern cognitive psychology and making it a construct or legitimate entity will only create frictions in the progress of discipline and its alignment with other related discipline.

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Derrida and Feminism
Recasting the Question of Women

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In this book, many of Derrida's works have been interpreted by female theorists along with his interpretations own interpretations, and a crossing over between the two perspectives. The gender has been deconstructed and his works regarding gender has been analysed and broken down with respect to feminist paradigms.

The first work of his "Flirting with the truth" interpreted by Ellen K. Feder and Emily Zakin. Derrida talks about how Woman and Truth have been interpreted as the opposite sides of the same coin. Here, the duality of truth and the female have been explained using logocentrism. Logocentrism, by Derrida: a reliance on presuppositions of the spiritual realms of the society (as explained by him as being "transcendental"). It means that to humans concepts and logic that is universal in nature exists within the human cognition even before actual processes of thought occurs. The concept of logocentrism has a close relation to phonocentrism that emphasises more on auditory stimulations and verbatim than written form to explain the semantic nature of language. This is because the specific nature of language can be determined in speech while the written format takes into more metaphorical sense.

Derrida has explained it as the truth not being always physically present but being produced as being made present. This fact of presenting the truth as an arbitrary element is what philosophy does. The very "presence" of truth itself has been seen as having shades of "absences" that actually mould and change the nature of the truth itself.

According to the Lacanian view of phallocentrism, Derrida explained the phallus as been been a complete apparent structure in males, while it being a castrated entity in females whose absence needs to be recovered from. The Lacanian concepts proceeds to view that castration be made for both the male and female as neither can possess it. However, Deridian explanations views that Males consider the penis as the phallus, and hence consider the females as castrated, since they are devoid of them. however, this inequality has been built on the concepts of castration anxiety suffered by males, which can be termed as the fear of the loss of the penis, and that is formed by the denial of the man's own shortcomings to the phallic Law.

In terms of Freudian concept, where the phallic desires are rooted to and from an infantile stage, "Femininity" has been described as "the little girl is a little man" (Freud, 1933) . The implication here is that feminization itself starts as a process due to the Oedipal complex, and the woman shares a masculine libido with the man, which fails to separate her from the man. This process is later altered by her own psyche. Feminization was thus considered as a process where a woman separates herself from her desires, which might not always yield to a loss of pleasure for her however. In "Spurs", Derrida has addressed the question of woman as a conceptual and pre conceptual phenomenon that can be formalized in a set of values, institutions, figures or practices.

Feminism and Deconstruction cannot be implied as being equal and cannot be limited by Derrida's analysis of considering the differences in sexes as being nullified. Derrida has been misunderstood as positioning the identity of women as an invisible entity in a patriarchal society. This has lead him being criticised by many female critics. Derrida's paradigm of anti-essentialism, which removes attributing a specific traits to the idea of woman, as he denies there is no salient truth of women, which has gained him such criticism. The interpretation by Spivak on Derrida's view of women in "Spurs" is far from truth or an identity, but as a dissembling, aesthetic protrusion in the society.

These concepts of Feminism and feminist approach can have its place in today's organization. The female entity, is still a minority and is still constantly been seen as an entity that is striving to rub shoulders with men, and not as an equal co-partner in the organization. The glass ceiling effect which occurs in most organization today, is a form of discrimination, arising from long rooted prejudices of men, as owning women to an inferior an uninvited guest in what is considered as the masculine den of the corporate. A lot of Derridian influences on viewing women, still exists, on a subliminal level, and this brings us to challenge the conceptions of the same.

The social identity theory by Tajfel , a social cognitive theory, which talks about how the self-concept is an amalgamation of one's personal beliefs about his or her own self and what the identity the person attaches to themselves due as members of a particular group. A sense of positive identity elevates the self-esteem and a positive self-perception leads to people conforming to the stereotypical attributes of their in-group and refraining from exploring their own individuality.

The opposite happens for groups of lower status. The social identity theory is highly applicable in today's organizational context where there are enormous implications of cognitions, conations and affections of gender related issues and differences in the workplace. The social identity of a woman within the organization leads to a dichotomy between a woman, who is termed as "traditional" and adheres to her societal expectations, and the other being a "feminist", who basically is deviant from the societal norms expected from her and tries to fill the shoes of a man. For the more "traditional" woman, the societal expectations of a woman being synonymous with nurturing, caring, warm and unassertive, acts as a stark contrast to the managerial roles expected within the organization that require strong need for power and assertiveness, which acts as a cognitive dissonance. Thus, women themselves question their own capability to fill positions of the top level management as their own self-conception is determined by what the society expects them to be. This just aggravates the glass-ceiling effect, and makes it easier for dominant male groups to decrease the female representation in upper tiers of the organization.

Also from the male perspective, with respect to the social identity theory, studies by Thomas (1990), show that a stronger pro-feministic attitude of men, acts like a breach of masculinity in terms of individual beliefs and the societal stereotypes. This deters a lot of men within the organization to have a more gender-sensitive approach towards women and affects their decision making process. Also, as mentioned earlier, the groups with positive and a higher social class (in this case, men), enables its members to stick to the stereotypical attributes of the group and also protect its dominance from other lower out-groups (women in the present context). This leads to the gender gap within the organization that impedes diversity and gender sensitization and better female representation in the upper strata of most corporates.

The social constructs and the role of social identity theory acting in women has led to the emergence of the "feminist therapy" that deals with empowering women to view themselves as equal shareholders in the society and to reduce the effects of gender determined roles and characters that they cognitively attribute themselves to. Such initiatives is causing a gradual shift from strict gender roles to more flexible egalitarian roles for women, by causing cognitive changes of perceptions and stereotypes among women themselves.

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How many of us like shopping? Do you remember the feeling when you think you got more stuff for less price? It's great! But we might have got tricked into believing we have made good deal. Wondering when?

Here is the thing. Sometimes, when you feel like eating an ice cream with the little pocket money you get and you run to the parlour. With great difficulty, you make a decision regarding which flavour to choose. It doesn't end there for you still continue in thinking how much you could spend, the quantity you could eat i.e., a cup ice cream, or single scope cone or maybe a double scope cone?

If given only two choices like between a plain 'small cup ice cream at Rs 50/-' and a 'double scope cone ice cream with dry fruit toppings at Rs 85/-' it's pretty easy to decide. If you want to spend less and don't like dry fruits, you choose the small cup ice cream and if you want to have a blast, you go for a double scope cone ice cream at Rs 85/-, Simple.

But when there is a third option to choose from, which is a 'single scope cone with dry fruit topping at Rs 70/-'. You break your head. Remember you want to make a good deal.

When compared the third option with the plain cup ice cream, the decision is still easy. But when comparing the third option which is 'single scope cone with dry fruit topping at Rs 70/-'with 'double scope cone ice cream with dry fruit toppings at Rs 85/-'. You think twice. Because you know, with just 15 more Rs, you get a double scoop. And you want to be benefitted with the deal, so you end up buying the costly one.

The owner of the parlour hence manages to get more people buy the costly one by just giving the people the third option. Does this situation ring a bell? It's called the 'Decoy Effect' or 'Asymmetric dominance' in psychological terms.

So the next time you are ready to throw money on some stuff, think thrice! The decoy effect may be working on you. **P**

THE DECOY EFFECT

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Michel Foucault's
"The Archaeology of Knowledge"
A Critical Review

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L'Archeologie du savoir, authored by the French philosopher Michele Foucault, was first published in the year 1969 by Editions Gallimard. The English edition was published and translated, for the first time, in United Kingdom in 1972 by Tavistok Publications Limited. This edition that I reviewed was published in Routledge Classics in the year 2002.

In this book, Foucault conducts an analytical, methodological treatise that he terms as the "archaeological method". In his previous works, Madness and Civilizations, The Order of Things and Discipline and Punish: The Birth of the Prison System, he adopted a similar technique of archaeological analysis of investigating and studying the discourse. His approach to discourse analysis is central to his works. For Foucault, a discourse is a "way of speaking". Thus, in all its communications and alterations, archaeological analysis seeks to describe the history of discourse.

Foucauldian discourse analysis highlights the hegemonic use of language and practices to wield power in societies. It seeks to examine how the social world, articulated through language, is influenced by various power structures. This analysis discards all presumptions about historical unity or continuity, explaining instead the procedures of discourse in all their disruptions, thresholds, differences and discontinuities.

Looking at the title, 'The Archaeology of Knowledge' there has been a wide convergence among researchers on its meaning and intent. As one of the researchers puts it, 'Discourse in the Foucauldian sense is less about everyday linguistic interaction, and more about historically developed systems of ideas that forms institutionalized and authoritative ways of addressing a topic, to "regimes of truth"' (Alvesson & Kärreman, 2011; P. 1129)

An "Archaeology tries to outline particular configurations" (Foucault, 1972, p. 157) in order to reveal "relations between discursive formations and non-discursive domains (institutional, political events, economic practices and processes)" (p. 162).

Hopwood, 1987: 230

Thus, as Hopwood points out succinctly, the basic foundation of this book is based on the premise that arrangement and classification of thoughts and knowledge are governed by rules and decrees. These rules, which can either be explicit or implicit in nature, reside and function in the unconscious of individuals. As a consequence, a system of theoretical potentialities evolves that establishes the limits to the use of thought and language in a given period.

Contextualizing and extending Foucault's work to organizations, what becomes evident is the concept of hegemonic power. In organizations, this power can be expressed in terms of the casualness with which many employees exert power or are subjected to it, without fully being aware of this form of influence (Burawoy, 1979; Bocock, 1986; Clegg, 1989; Mumby and Stohl, 1991; Barker, 1993; Clegg, Kornberger and Pitsis, 2005).

This form of influence is not based on the use of violence or coercion, but on the normal and easy 'way things go' in the organization. 'It is the sheer taken-for-granted of hegemony that yields its full effects - the 'naturalness' of a way of thinking about social, economic, political and ethical issues' (Bocock, 1986: 8). These power processes continue as customary routines, successfully adapting to the daily workflows and interactions in organizations, without being overtly challenged or questioned at the surface.

The greatest exercise of this hegemonic power in organizations can be understood from Foucault's knowledge-power analyses. It can be viewed as an ongoing and contiguous process of meaning and identity formation. Hegemonic power processes transpire in 'discursive fields' (Bourdieu, 1991), in which people (re)invent and (re)unite their universally shared sense of social reality. Meaning formations thus represent a person's identity formation and an identification to this entails the approval of the overt and covert rules and norms of organizational positions and authority.

In the organizational context, Foucault's work on knowledge-power analyses is symbolic of the process of knowledge management whereby there is a generation, codification, transfer and application of individual knowledge in the process of value generation. The process of knowledge management operates as a hegemonic power structure and as Alvesson and Karreman point out, knowledge and management are both contradictory terms and cannot be used together.

The analysis of hegemonic power in the process of knowledge management necessitates a microscopic examination of social categories of gender, race, class, caste, age, sexuality and so on as categories which are invariably linked in the generation of social practices of inclusion and exclusion. All of these social categories operate widely in organizational institutions that have a drastic influence on the entire process of knowledge management, carried out and regulated by the dominant hegemonic groups of people. One of the important subsets of knowledge management process that is the transfer of tacit knowledge is a utopia in an organizational context. Tacit knowledge can be understood as that form of knowledge which cannot be verbally or codified or documented. Hence, as Foucault puts it, these non-discursive domains (institutional and organizational structures and events) are configured by the discursive formations that are echoed by hierarchical and authoritative power relations in organizations.

Thus, after contextualizing Foucault's work in an organizational setting, there are certain critiques that I will highlight in this section. First, because this book was originally written in French, due to the literal translation, the basic underlying meaning of certain themes and concepts are defeated. Second, there is much ambiguity in terms of Foucault's critique of the structural paradigm. While critiquing most of the structural domains, he seems to have adopted a structural paradigm for understanding the power-knowledge relationship. Hence, his defence of this position is unclear. Lastly, the language used in this book is highly complicated and elusive which can lead to multiple interpretations of his work, as well as misinterpretations.

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FALSE MEMORIES

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How do you recall the name of a person you met two days ago? The ability to store and retrieve information as and when required helps us sustain social interaction. This is achieved through 'memory' Memory is the process in which information is received from an external stimulus (encoding), maintained in the brain (storing), and recollected the stored information (retrieving) for specific use.

"Most people, probably, are in doubt about certain matters ascribed to their past. They may have seen them, may have said them, done them or they may only have dreamed or imagined they did so." –William James

We often believe that our memories are absolute and true. In fact, many of our memories have been manipulated, we hold on to them despite the fact that they may even be flawed or blemished. After an event occurs, memories related to it can be reconstructed in diverse ways, making them susceptible to distortion. A false memory is a fictitious or untrue recollection of an event that did not actually occur. An individual may feel that an event that occurred during his childhood might be truthful but there may be external evidences proving otherwise. What are the factors that cause false memories? If the memory, when it is being encoded is erroneous, it is highly likely that we may remember the event differently. False memories can be created by gathering the content of suggestions received by parents, peers and so on. For instance, Jean Piaget, child psychologist, alleged that he was nearly kidnapped at the age of 2, as he provided vivid details of watching the nurse protect herself against the kidnapper and claimed that he saw scratches on the nurse's face. However, it was confirmed that it never happened when, thirteen years later, Piaget's former nurse wrote to his parents to confess that she had created the entire story.

Misattribution of sources and faces to the wrong context are also seen as one of the causes for creating false memories. One of the most consequential instances was when a woman accused memory expert Dr. Donald Thompson for sexually molesting her. Thompson was seen at a live interview for a television program just before the rape occurred. The woman had watched the interview and "apparently confused her memory of him from the television screen with her memory of the rapist." False memories can also be formed through 'recovered memory therapy'- traumatic memories that are made to recall but had been forgotten or remained unknown in the past. The accuracy of childhood abuse and creation of false memories through this therapy are in correlation and are perpetual debates which have found no solution. In several extreme cases, therapists may entice ideas suggestive of sexual abuse in the minds of people making them believe that they might have been victims of sexual abuse.

False memories, if exaggerated, can cause behavioural changes among individuals. It can further lead to False Memory Syndrome; where an individual's habitual activities are affected as he strongly believes his fanciful memories to be true.

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ARTICLE REVIEW

Involuntary Autobiographical Memories

By: Dorthe Bernsten (1996)

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This research article deals with how autobiographical memories spring effortlessly to mind. The researcher used Diary method to study and understand this phenomenon. This research article tries to bring mental life of every day into cognitive psychology. The main objective to study this concept of the mind was to strengthen the link between clinical psychology and cognitive psychology.

Introduction

In this research article the researcher-Bernsten, has defined autobiographical memory as a personal experience that is brought to consciousness without any attempts of trying to retrieve a long forgotten memory. For instance, a certain kind of smell may remind us of our grandmother. These kinds of memories seem to be an everyday phenomenon for many.

Autobiographical memories have been neglected in Cognitive Psychology most of the studies that use memories as a part of their data collection process use voluntary techniques to measure memory. Priming is one such technique in recent times.

Some cognitive psychologists have tried to explore this phenomenon and have come up with some suggestions as to how such memories are elicited. Since these suggestions are not a result of any authentic research, these cannot be considered and are most often overlooked.

One well-known theory in this field is the Schank's theory (1982). He gave a theory of episodic reminding. His theory propagates how some memories are brought to consciousness which is triggered by a certain aspect of the present situation. Schank says that the cause of such occurrence could be triggered because of a certain concrete features such as specific- sounds, words, smells, etc. This theory of Schank does not speak about episodic reminding, in general. More so, involuntary memories of every day are not studied.

Bernsten tries to study if voluntary episodic memories differ from recollection of past events voluntarily. She has tried to study this phenomenon in relation to Post-traumatic Stress Disorder, through Diary Method where autobiographical memories are recorded in a diary.

Involuntary memories as Defense mechanism

Spence states that involuntary memories act as defense mechanisms. He says that these memories are a manifestation of threatening or disturbing memories and that these involuntary memories protect one from a past or present situation that one would not like to encounter. These memories are triggered by specific cues in one's surroundings; these cues cannot be easily spotted.

Involuntary memories as a response to stress

In a clinical setting, these involuntary memories or these repetitive memories are triggered by a highly negative event. Such memories serve as a basis for diagnosis of Post-traumatic Stress Disorder. Horowitz has described such thoughts as intrusive thoughts. After having conducted a number of experiments Horowitz has come to conclude that intrusive thoughts are a result of stress. Psychoanalysis by Freud also talks about how repressed thoughts are manifested in the form of Involuntary Memories and that they are connected with a disturbing past event, and they are not elicited by any external cues.

Methodology of the study

The researcher, Bernsten conducted a study on this issue on 14 Danish students. The students were asked to record 50 voluntary memories, with a maximum of two memories on any day. The subjects finished this task within a span of 6 weeks. The subjects were also asked to fill out a questionnaire that dealt with questions that questioned every aspect of this involuntarily triggered memory. At the end of the research the subjects were asked to pick out these events that were more frequent in occurrence than the fewer frequent memories. The results of the study showed that- all of them had an occurrence of more than two involuntary memories in one day.

Most of the subjects also mentioned that they would have had more than three involuntary memory occurrences that they did not pay attention to. The study's findings show that these involuntary memories are elicited by the current situation and the remembered event. Also, the current mood of the individual may also elicit such response. Thus, we can say that such memories are elicited by identifiable cues in the surrounding. From the study conducted, the results do not validate that involuntary memories are a result of stress.

Results in relation to Post Traumatic Stress Disorder emphasize that when an individual goes through a traumatic event he/she is bound to have repetitive negative emotions due to their mood. However, as weeks-months pass by, the individual tends to have less frequent memories and this can be called as "Recency Effect."

Critical Analysis

The researcher chose a very good topic, but she should not have studied it in terms of Post Traumatic Stress Disorder. The findings state that the subjects will absolutely face the recency effect and may experience involuntary memories which would affect their daily functioning. The subjects having gone through traumatic events are definitely affected and are bound to be recurrent for them and decrease as the days pass.

This is a very common phenomenon not only for patients but to any individuals who go through a negative event. It tends to be recurring and affecting their mood. However, this has brought to light a phenomenon that has not been studied much, this paves way for researchers to take up this issue and research more about this phenomenon and come out with interesting findings, however it is quite challenging as its related to memory and recollecting the memory which at times could be subjective and biased, sometimes their memories could be distorted. However, it is quite an area where many studies can be conducted and explored. P

Life is Beautiful

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Life is beautiful. Is that an empirical statement? Dictionary meaning of the word 'empirical' means "verifiable by observation or experience rather than theory or pure logic." Observation necessarily means applying all our senses to perceive ourselves and our surroundings. Accurate response to the problem statement "is life beautiful?" would have two parts to it. First is that we accurately perceive or attend to what is happening around us, from the outside in. Second is to consolidate these experiences into a personal reflection of the problem, inside out.

In the interest of brevity, this article focuses only on a handful of the many such possible experiences (scenarios) to answer the life is beautiful question.

Scenario 1: Attending at a railway ticketing counter

Typical characteristics: extremely high volume; error free ticketing; operational efficiency;

(Attending) Emphasis: is on transaction rather than the client. The staffer may not even look at you and even if she does speak, it is through a pigeon hole!

Is life beautiful?: Anyone who has faced the situation of "Closed for lunch" signboard, just as you reached the ticketing counter, will not have any difficulty in answering the question. After you have proudly flourished the 1,000 rupee note, "Change please" is another request, which makes us think "Why don't you change first?" No wonder to make life more beautiful, you have so many portals and apps to serve the tech savvy population! But what about the common man. Can we just theologically point him to an after-life and forget him in the here and now?

Scenario 2: Attending at a bank counter

Typical characteristics: significant volume; fraud prevention controls; cross-selling of products; personal banking for High Net-worth Individual (HNI) clients;

(Attending) Emphasis: only on those clients making unusual transactions and/or on those clients where there is a possibility of increasing the client's wallet share so as to earn higher incentives for staffer and higher margins for bank.

Is life beautiful?: If you are a HNI, you demand being fawned over. But if you are not, just like the see-saw, the plight of the average investor is dependent on the bulls and bears. While a child usually enjoys the simple pleasures of the see-saw, the roughs and tides of financial markets can be a prime cause for insomnia. An obsessive compulsive interest in financial markets, is also one of the common occasions for gender roleplaying. Men like watching news, reading magazine and newspapers full of the latest financial news. If that is not enough the man of the house does not mind entertaining strangers (financial consultants) who promise to double your investments in one eighth of the usual time. Is life beautiful? In this context we should possible ask the question to the fairer sex.

Scenario 3 : Attending at a restaurant

Typical characteristics: low volume; waiter is attentive to client's every look, move, gesture and request;

(Attending) Emphasis: personal service, not just for you the client - but every other member of your family.

"Mam, would you like it in black sauce or white sauce?"

"Oh no sir, that would be too spicy for the kids"

"Here's a free balloon for your child. He is so cute!"

"Oh don't worry, we will get someone to clean it up"

"How did you find the food sir?"

"Sir, do you need anything else?"

"Here is a complimentary discount coupon that you can use on your next visit"

"Please visit us again!"

Is life beautiful?: In the good old days, going out to restaurants was an occasional treat, but now it is a status symbol. People usually like to talk about the restaurants that they visit, the service, the exotic menu and of course the price. When someone is narrating their weekend getaway, most of us appear starry eyed and think wow life must be really beautiful for them. But when the gaze goes from the heavenly to the earthly and more precisely to the belly, then one tries to intellectualize and rationalize, that may be life is not as beautiful after all. The hypothesis is confirmed, when we see the gentleman in question holding his head in one hand and the credit card statement in the other.

Scenario 4: Attending at home

Typical characteristics: single child nuclear families; helicopter parents;

(Attending) Emphasis: what the child says or does not say matters a big deal. Discrepancies are dealt and not ignored. Visual, Vocal, Verbal and Body language are scrutinized and interrogated.

"Why did you not finish your lunch box"

"Show me your diary work"

"Looks like you had a lot of fun today!"

"What are these stains on your uniform?"

"Let me apply some medicine on your wound. It looks bad."

"I know that you can do better than what you performed this semester"

"You swam well and deserved the medal. I am proud of you."

"Who is that boy?"

Is life beautiful?: Families have been the traditional strongholds for the battle weary. The spouse's peck on the cheek, the rush of children to welcome you back home, the dining table flooded with conversations and food makes it one of the most enjoyable experiences of life. But research and stats are showing that families are breaking down. What was supposedly to be a beautiful experience is now increasingly turning to be a nightmare. Extra marital relationships, incest, violence, materialism have eroded the traditional values of true love and sacrifice.

Conclusion:

We looked at just a handful of scenarios in a person's life. In most of the scenarios, our subjective experience dictates the answer to the question. If the experience was pleasant, we feel like top of the world; if not, then life is a drag. Life is much more richer than limiting it to the scenarios listed above. But the point of this article is that one needs to be really in tune to whats happening around us and find true meaning in it. This existential mindset is perhaps the only way to bring sense into, at times polarizing dimensions of, life. Life is short, but beautiful. There is no theory or logic to back that up. But when all is said and done, you finally end up with the ultimate question. What is your life worth? Others have more graphically asked the question, "What would you like to see written on your tombstone". Man thats powerful. To think of life through the filter of death. Perhaps that thought should spur us to be a good Samaritan and make some needy person's life beautiful.

Sleep deficit will affect our cognitive performance

R.VIGNASHWARAN

2 JPENG

Bangalore is one of the fast emerging cities in the field of information technology sector in India. Most of the employees' works in the IT sectors are pretentious by the sleep deficit.

Studies say that one should sleep for eight hours for the proper functioning of the brain. Attention and main peak observation are deliberately calculated through our cognitive performance. When one doesn't get a sufficient amount of sleep, it will certainly affect the cognitive performance.

The employees in this sector sleep only for hour of four or five. Due, to this, the performance of the brain is getting affected which is in turn impairing our cognitive performance. Sleep deprivation is not only an individual problem but also a social problem. This might occur when one has had an occupational injury and thisdriver fatigue due to loss of sleep it affects one's cognition and also leads to physical impairment.

When one fore goes sleep during the night, it will reduce the attention and alertness and this will be decrease in the speed in processing information. According to studies, 24 hours without sleep or a week of sleeping four or five hours a night induces an impairment equivalent to a blood alcohol level of .1%.

Sleep deficit or a lack of proper sleep when required will affect our circadian rhythm. Bad sleeping habits can be attributed when one is posed with a deadline of submitting projects and assignments.

How can we get sufficient sleep and avoid sleep deficit? .Psychiatrists advice takinga warm bath, listening to soothing music and a few minutes of meditation per day can work well in solving the problem. Watching an action movie on television may over-stimulate the brain while on the contrary, watching something soothing like a musical program could help in better ways. In addition, bedtime reading works well in relaxing the brain and ensuring that a person gets good sleep. Sleep is essential for a person to function well in the society, to be a better individual and in fostering better relationships with fellow beings. **P**

The Idea of a Virtual Afterlife

Prakruthi. K

4 MPHR

In his article 'The Digital Soul', Patrick Stokes from the Department of Philosophy, Deakin University, talks about the idea of a virtual afterlife. He begins by addressing one of the primary questions that philosophers, throughout history, have engaged themselves in asking –'is there life after death and if yes, how can it be?'He writes, "For centuries, the idea of the soul had provided an elegant solution to a pressing problem: how could humans, with their fragile, compostable bodies, survive death?"

Man has always tried to find explanations for the things that happen to him – the things he sees, experiences, understands to be part of his existence – and this effort has yielded numerous theories over the years. Questions about our origin, our existence and the purpose behind it all, or if there is any purpose at all, have been the main preoccupation of several thinkers and philosophers. Even before Aristotle, Plato or Socrates, humans tried to understand the nature, the human mind, phenomena out of their control and had all sorts of belief systems about existence and the afterlife. Different religions upheld differing views on the origin of humans, the nature of the soul, mind and consciousness. With the various theories that have emerged in so many years as humans have existed, it is undeniable that mankind has progressed in its understanding of the nature of mind and consciousness through the advancements in medical science and technology. And yet, like novelist Andrew Crumey puts it, "the vast majority of ideas are recycled – and it is when we fail to recognise this, as we eternally do, that we commit folly" (Crumey, 2014). Explaining his 'principle of eternal folly', he points out that "in nearly every era there arises, in some form, nearly every idea of which humans are capable." He intends to say that conventional wisdom and armchair philosophers gave way to empiricism and hard sciences and yet, the ideas behind all of it were similar. This is not to say that the thinkers of old were utterly wrong or misguided. In the field of philosophical inquiry specifically of the mind, it is not merely about being right or wrong. It is about furthering the thought and understanding of thought and understanding itself.

Going back to Stokes, he begins his article with the mention of John Locke, a 17thcentury English philosopher who destroyed any comforting notion regarding the existence of the soul. Theologians and the early church Fathers struggled with the explanation for an afterlife when the body was so obviously a perishable entity. Then came the Cartesian theory that spoke about an immaterial soul made of immaterial substance that survives the passing of the physical body. Locke denied that the soul was the central part of human existence; he proposed that it was consciousness that defined someone's identity and mind. This led to a pluralistic conception of the self – the physical, the psychological, the

animal, the narrative and the embodied self, to name a few. Modern philosophers agree that a person's identity can be constituted of several selves. Taking Locke's theory further, they have differentiated not just between different selves a person could identify with but also between the concept of a person and self. The animal or physical self is clearly established in spatial boundaries, but the self – the centre of consciousness – cannot be located unless, of course, consciousness is reduced to brain structure and processes. Stokes maintains that this kind of reduction would be pointless and compares it talking about individual paint molecules instead of Mona Lisa's smile.

What then is a person? It is not just an individual's personal experience but also the way he or she is perceived by the social world. Our moral, social and practical identities render us part of the great network of consciousness that exists. A person, the author says, is "a being that acts, has responsibilities and is recognised by, and relates to, others. […] It is who you are to other people, not just how it feels to be yourself."

All this brings us to the focus of the article – how does the internet affect the personal identity of an individual? Today, people do not just exist in physical space; they are also entities in cyberspace. Although it may not be a completely embodied space, the internet is being increasingly integrated into our "real-life" existence. Individuals establish online identities for themselves complete with physical images of themselves so that these virtual identities are closely related to their so called real

selves. A few years ago, and even today to a certain extent, the internet is a forum for people to create pseudo identities and mislead others through impersonation, identity theft or plain and simple deception. However, as more users are beginning to upload their real identities (names, personalities, locations, work information, etc.), the line between offline and online seems to be fading quickly. Gamers even lend their real voices to their online avatars, Stokes says.

How much of these online identities are true reflections of our real selves is a big question mark. The author discusses the inevitability of idealising our online selves. Citing 'Identity Construction on Facebook', a piece of research done by Shanyang Zhao and fellow sociologists at Temple University, Philadelphia in 2008, Stokes supports his argument that people tend to "dress up" their online selves to an extent where there are great dissimilarities between the virtual and the real. It was found that the users' profiles were not strictly identical with their offline identities and were instead "identities they would like to establish in the offline world, but have not yet been able to." Stokes writes, "This illustrates how the online identity that most of us use is, to borrow a phrase from the American philosopher Stanley Cavell, our 'next self'. Dress your avatar for the life you want, not the life you have." Although this kind of idealisation – the editing, polishing and tidying up we do – can lead to a somewhat narcissistic self-delusion, Stokes claims that this is not necessarily a bad thing. Our idealised conception also acts as our inspirational self, a better

version of who we are, someone we aspire to be but haven't yet become.

Stokes goes on to talk about how Facebook and other social media platforms have led to online social identities that consist of our embodiment in the memories and thoughts of others as shaped by the images, content, ideas, dialogues, announcements and pieces of our life we share for others to behold. This sort of extension of one's identity, Stokes explains, is akin to what the French philosopher Jean-Paul Sartre called your 'being-for-others'. The online personas are now not mere reflections of you; they are part of you. (This may not be true for every online user but for those who are heavily invested in their online lives, what the author says makes sense.)

The emergence of the online identity has led some clever developers to create applications like LiveOn and Virtual Eternity. The former analyses a user's Twitter account and learning from their syntax and word usage creates new tweets that sound just like that person so that they can "live on" even after their physical death. The latter is a company that develops animated avatars of people so that years later, their distant descendants can interact with them. These kinds of artificial intelligence efforts have not added up to much yet, but it is important that they do not go unnoticed. As advancements in technology have had resounding implications for the spheres of medicine, business, governance and technology itself, the social sciences are not to be forgotten. There has been a far-reaching impact on human psychology, social life and philosophy as technology and the internet,

specifically, have changed the nature of existence, thought and consciousness.

Another company called LifeNaut claims that it can collect and store all of the data that makes you who you are. At the risk of sounding extremely far-fetched, the company's website explains that their 'long-term goal is to test whether, given a comprehensive database, saturated with the most relevant aspects of an individual's personality, future intelligent software will be able to replicate an individual's consciousness'. Stokes advises his readers to take this with more than just a pinch of salt.

While artificial intelligence has advanced to dizzying heights, it can only be mimicry. However complex it may become it cannot replace or overtake human consciousness or even animal consciousness for that matter. Brandon Keim in his article "I, Cockroach" takes help from the Evolution of Nervous Systems in Invertebrates (2007) by neuroscientists Randolf Menzel, Björn Brembs and Martin Giurfa to support this point. They "argue that, even if we've tended to assume that insects solve life's challenges mechanistically and without thought, there's now 'considerable evidence against such an understanding'. Cognition is only one facet of mental activity, and not a stand-in for rich inner experience, but underlying honeybee cognition is small but sophisticated brain, with structures that effectively perform similar functions as the mammalian cortex and thalamus — systems considered fundamental to human consciousness."

Even if artificial intelligence systems reach the complexity

of the human brain, they cannot ensure the immortality of humans themselves and this is Stokes' problem with the idea of the digital afterlife. So what if the computer can maintain his online identity and recreate his personality? He is not going survive death and be there to see it happen. It might be a comfort to his friends and family to see his face and hear his voice long after he is gone. However, his consciousness, as he knows it now, will not be in the picture. Therefore, one cannot exist for oneself, but through the digital self, one could exist for others. Does that qualify as existence, even though the self is no longer there? – Another philosophical question raised by the article.

"Personal identity connects with things we care about in a very fundamental, unavoidable way. We care about what happens to our self in a distinctive way, especially when it comes to our survival", says Stokes. This is why researchers are so concerned about personal identity, and this is also the flaw in the virtual self – however large or well-developed one's digital identity may be, it does not ensure their survival in any way apart from a virtual existence. According to the author, Mark Johnston notes in Surviving Death (2010), "two ways of fearing death: a fear that there will be no one to carry out my projects and live my life, and a fear that this subject, this field of experience that I am right now, this 'arena of presence and action' as Johnston puts it, won't exist anymore."

To the existing questions about mind, consciousness, being and understanding the world within and around us, this article adds another vital aspect,

that of the digital self. What are we creating by transferring our entire lives and identities onto the internet and how has it affected our perceptions of existence? These are worth looking into. Patrick Stokes reiterates that no one has been able to answer neatly the question about what we are and such attempts have led to dozens of different and even incompatible ways of being. But he suggests a way forward – "we are not objects or brains or persons or selves or human animals, however of all of these, all linked to different perspectives, none reducible to any of the others. The task now is to understand how these interact. Our new ways of living and dying online suggest that the task might not be one we can afford to avoid."

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What Do Dreams Mean?

Priyanka Prakash
4 MPHR

Have we ever wondered why do we dream? What are dreams to us? How do we actually give them a meaning? And do we really believe that they will come true?

Well, the answers to all these or the attempts to answer are indeed quite interesting. The more I reflect on how dreams take place the more insight I get on the same. Our dreams can prove to be very puzzling but at the same time, giving it a meaning or trying to understand what they mean can be mysterious. As we all know, we experience dreams of various kinds, from the smallest thing to the most important thing, all of which can also vanish in a moment, leaving us wondering as to what exactly happened, with all those weird images around us. And at times the gut feeling is so strong that we actually begin to believe that there is some reason we had this particular dream and hence we witnessed it. Dreams can be that persuasive.

There have been a lot of attempts to understand why we dream, but there has hardly been any progress on that so far. Also, some viewpoints say that dreams have no specific purpose and they just occur. But I feel, the whole idea of understanding dreams is just so fascinating and gaining importance today so as to understand the human mind. I would not be wrong if I say that dreams might have a deeper meaning.

Which dream do we consider meaningful and which are the dreams that we feel are not important? Suppose I had a dream in which I fight for my friend and help her in trouble and another dream in which that very friend of mine goes to my best friend and says terrible things about me. Which dream would I consider more seriously? They are indeed difficult to answer and to imagine too. Research says that people gave more importance to negative dreams if they consisted of a person they disliked and more importance to positive dreams if they consisted of a person they liked. I feel that this is what happens in real life, people are so aware of the people they dislike and the people they like that they manifest in their dreams.

Considering Sigmund Freud's book, The Interpretation of dreams, he was of the opinion that when a person dreams he looks forward to completing his wishes through them. Since that is the only way a person handles or paves his/her intrinsic world, the person's unconscious wishes tend to be portrayed in the form of dreams. Now, I personally believe that this might be a possibility too. People are so busy living their lives, working so hard, it might be that they may have unfulfilled wishes and they are so caught up in things that they tend to devote time for these wishes in the form of dreams. And hence they feel that these dreams might just turn into reality someday.

There is another thing that is very importantly expressed, till the time a person finds his/her dream really interesting it is said to be in a positive state, but if you do not see it to be motivating or interesting or

fun, then it is as good as not having a dream.

Jung was more of the opinion that our dreams basically reveal more than just the wishes we might have. Our dreams balance the framework of our psyche that maybe under developed. Hall was of the opinion that the traits that human beings exhibit while they in their senses are exactly the same as those they express while dreaming. Dreams actually say a lot about the person having the dream than the dream itself. That is one way to be aware of what kind of a person he/she is.

In a doctor's opinion, it might not be such a good idea to let the other person (loved ones) be aware of what you dreamt about him/her, your dream might just let them know your impressions and feelings about them.

Well, as we see, that understanding dreams is quite flexible and people do it in different ways. That is how people take decisions. And then there are also thoughts expressed that, people can learn from the dreams of others, isn't that interesting?

Maybe it does happen, maybe we are not aware. Dreams may make people work hard for their desires and wishes. Considering the positive side of it, it can also happen that dreams may lead to negative incidents too.

As we conclude, I feel people think differently and hence the varied opinions exist. That is the reason there can never be one answer, is it? There are so many books that have come up for helping people to interpret their dreams and that makes it a little easier for them. Paying attention

to dreams, symptoms of the same, everything has just been at the finger tips of people and therefore the increasing popularity of dream interpretations. The research in dreams and their mysteries will continue to go on and on because this is one topic which can never have a definite conclusion.

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"A dream is a work of art which requires of the dreamer no particular talent, special training, or technical competence. Dreaming is a creative enterprise in which all may and most do participate."

– Clark S. Hall

ARTICLE REVIEW

THE EFFECT OF MINDFULNESS-BASED THERAPY ON ANXIETY AND DEPRESSION

A META-ANALYTIC REVIEW

TANYA JAMES

4 MPHR

The present paper on Effect of Mindfulness-based Therapy on Anxiety and depression is a Meta-Analytic Review, conducted by four authors namely Stefan G. Hofmann, Alice T. Sawyer, Ashley A.Witt, and Diana Oh from the University of Boston. The article in selected from a Journal of Consulting and Clinical Psychology and published by the American Psychologist Association in the year 2010. (Hofmann, 2010)

By reviewing the present article, it is found that mindfulness-based therapy (MBT) is a promising intervention for treating depression and anxiety problems. In the recent times, MBT has become popular in treating stress and other mood disorders in contemporary psychotherapy. According to (vollestad, 2011) "In mindfulness-based therapy, the people focuses on the bodily

sensations that arise when he or she remains present and fully experiences the symptoms of anxiety." It involves an orientation towards the present and self-regulation of attention. The objective of the study is to conduct an effective intervention to check the anxiety and mood symptoms in clinical samples. The study is important as it is beneficial to reduce stress, anxiety and depression associated with psychosomatic illness or physical illness.

There are various other qualitative research studies conducted on Mindfulness based therapy (MBT). In the present article, they have conducted a quantitative meta-analytic review of the efficacy of MBT to improve mood symptoms and anxiety in clinical populations. According to research, the result shows that MBT is an effective treatment to reduce these symptoms

and also reduces symptoms of chronic medical conditions such as cancer.

For the qualitative data various relevant studies were identified from database searches. 727 articles were identified that were found to be potentially relevant, 39 studies met the selection criteria that were included in the meta-analysis. Since they included clinical sample, they had a sample of 1,140 adult patients from 18-65 years of age who received MBT. The common disorders that were studied were cancer, chronic pain, panic disorder, stroke, insomnia, ATHD, mood disorder, heterogeneous anxiety disorder.

The statistical tool used for the study to measure the effect sizes, as a function of study characteristics, was meta-regression analysis. Correlation was used to measure anxiety and depression using pre-post treatment differences for controlled and uncontrolled studies. To summarise the statistics, random effect model was used.

The MBT is becoming a popular therapy treatment to reduce anxiety and depression. The results and discussions of the study show that MBT treatment in patients with anxiety and depression has an effect on their symptoms. For patients with a high level of anxiety and depression, and individual with disorders other than anxiety and depression but showing the symptoms, MBT was moderately strong. The result shows that it is greater in lower levels of these symptoms. The studies say that MBT improves symptoms of anxiety and depression across a wide range of severity even if it is associated with other disorders such as medical problems. Hence, MBT has a general applicability. Further studies are required to directly compare the Efficacy, cost-effectiveness, patient (and therapist) preference, treatment acceptability, and attrition of conventional cognitive behavioural therapy and MBT.

Limitations of the study

• The study technique is limited to meta-analysis technique and, therefore, is dependent on the study selection criteria.

• The participants were randomly chosen.

• Since the effect size was analyzed using random effect model using Jada criteria, the scores cannot be directly compared with other meta-analytic scores.

• The included studies differ in disorders target and their methodological quality.

• The effect size estimates were not reliable because of a considerable publication bias.

• The criteria for the selection of each sample is not mentioned in the paper

• The study does not have a proper theoretical framework although there were many articles that were found related to mindfulness and its effect on depression and anxiety.

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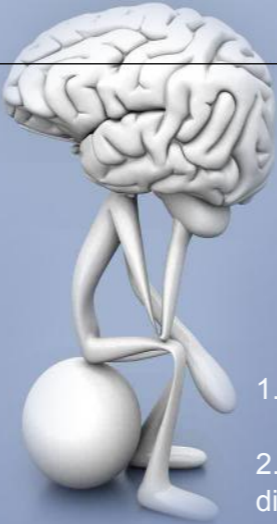
You think you are smart? Think again...

1. What word describes a woman who doesn't have all her fingers on one hand?

2. A man killed his mother, was born before his father and married 100 women without divorcing. Yet he was considered normal. How?

3.   M E
     A L

4. Two girls were born to the same mother, on the same day, at the same time, in the same year. However they are not twins. How can this be?

5. A man lives on the tenth floor of a building. Everyday he takes the elevator to go to the ground floor to go to work. When he returns he takes the elevator only till the seventh floor and walks up the stairs to get to his apartment. He hates walking, so why does he do it?

6. YOU
   JUST
   ME

7. There was a car accident in Paris. Every single person died. Two people survived. How can both these statements go together and make sense?

8. In British Columbia, you cannot take a picture of a man with a wooden leg. Why?

9. Which is correct?
"The yolk of the egg is white" or "The yolk of the egg are white?"

10. amUous

Answers!

1. A normal woman. Nobody has all their fingers on one hand

2. His mother died in labour. His father watched his birth. And he was a priest who married 100 women to 100 men.

3. A square meal

4. They have another sister and thus form triplets. Not twins.

5. He is a dwarf. He cannot reach up to press the tenth floor's button.

6. Just between you and me

7. The survivors were married. So they are not 'Single'

8. It is not possible to take a picture anywhere with a wooden leg. You need a camera

9. Neither. Egg yolk is yellow.

10. Ambiguous (am.BIG-U.ous)

Think Positive

THINK DO BE
POSITIVE

The Power Of Positive Thinking

HOPE FAITH PEACE LOVE BELIEVE

KEEP CALM AND THINK POSITIVE!

HALF-FULL VS HALF-EMPTY

Negative THINK Positive

happy expressive peaceful admirable humble intelligent successful intuitive positive healthy inspiration thinking involved forgive gentle enterprising optimists friendly empathetic good goodnatured interested strong energetic gratified faithful beautiful independent

I CAN

"Shoot for the moon! Even if you miss, you will land among the stars"

SOUMYA 4 MPHR

Positive psychology is one of the emerging fields of psychology. It is all about how positive attitudes and perceptions lead to positive aspects of life. It brightens up life, induces hope, brings happiness and creates a positive vibe around us. Positive thinking is one of the ways of understanding positive psychology. Positive thinking is a mental and emotional attitude that concentrates on the brilliant side of existence and expects positive outcome."

A strong belief can cause anything; it can either construct or destruct. Positive thinking also induces hope and optimism. It is sure that a strong belief can get the work done, but, however there are a few people who do not agree with this. They believe that it is just the things and the way plan gets the work done. My intensions and attitudes regarding positive thinking was even more strengthened through 2 articles – "The power of positive thinking" and "Your thoughts can release your abilities beyond normal limits." Both articles show how changing the way of thinking and perceiving can aim at better success.

The article "The power of positive thinking" illustrates a story of 2 persons where one is an anxious person, who does not possess self confidence looses the interview and another person who is confident and goes with positive attitude wins the job. This shows how it is very important to have positive perspective towards anything in life. It is highly needed in every point of life. Positivity induces more energy and reduces stress thus making an organism perform better.

Positive thinking might be a formal field of knowledge in the modern era of sciences but however, its roots lie in the traditional philosophies which are practiced from ages. Every philosophy/religion, practices positive thinking and asks us to keep away from negativity. Most philosophies/religions like Hinduism, contrasts positivity and negativity through symbols or colours. Positivity is depicted in the form of God and negativity can be depicted in the form of demons or sometimes it is depicted in colours like positivity in white and negativity in black thereby indicating that it's difficult to get rid of negativity once we have surrendered to it. Thus, positivity fosters happiness in contrast to negativity.

Even at work place, positive thinking is highly important because positive thinking not only creates happiness and hope but it creates better interpersonal relationships and helps in maintaining oneself and others. it is a kind of chain reaction, where positivity leads to happiness and happiness leads to better performance and good relationships which inturn helps in gaining success.

This article focuses on themes like "positivity is a way of life" and "positivity and negativity is contagious." It is rightly said in the article that positivity is a way of life because, when we start thinking positive, we implement it in our behaviour, behaviour when practiced becomes habits and habits are attached with values. Habits along with values are precisely the way of life one leads. These values create positive vibes around, attracting people towards us and give a lot of happiness. Thus, positivity is a belief system and as well a way of life. It is contagious because, people tend to be happy around happy people. For example, at weddings, birthdays etc. people are happy. They smile and laugh which will elicit the smile and laughter on the opposite person. Let alone the reasons for happiness, but it is contagious. Another example of happiness being contagious is, most of the times, when we just smile at an unknown person, they return us a smile too or when we are watching a happy scene in a movie or a play, we tend to smile along with the characters. These show that, happiness is contagious and similarly is the negativity.

Another article "Your thoughts can release your abilities beyond normal limits" speaks about a lot of research done in the field of positive thinking and its effects. In one of the illustrations, illustrate how people tend to lose body weight just by altering their though process and believing it (Atasoy, 2013). Similarly the author, draws examples from various researches. One other example illustrates how positive thinking motivates people to perform better. The author has cited many similar such facts in his article. He concludes by quoting "As this line of research advances, we will likely discover new ways of taking control of our mindsets. Weger and Loughnan, the researchers who improved people's knowledge test results with a bogus prime, wrote, "People have significant psychological resources to improve their well-being and performance, but these resources often go unused and could be better harnessed." The mind and body are not separate; our thoughts have remarkable control over our bodies; and our mindsets are capable of improving our brains' performance."

Thus, to conclude, positive thinking is the skill that has to be developed if one wants to make it a habit, a way of life. Theory classes can give the bookish knowledge on this facet of psychology but, true knowledge of this can be understood in full essence only when we implement and practice it. Out of experience, I am confident to say that positive thinking is true and does work. It makes us more confident, happier and also fills a lot of hope. There might not be a formal way to find the cause and effect relationship, but still, it works. I would say it is MAGICAL!! I usually practice positive thinking but one instance I would like to quote is when I attended the interview at Christ University for my Post Graduation. My friends who had attended the interview much before me had told me that it is highly difficult to crack the interview and will be stressful. They started preparing for the interview from a month before. They also added that questions are usually practical based and noting much from text books. Though I was a little scared about it, I prepared myself, built in confidence, motivated myself and said "I will give my best." I did not go through any notes or text books neither did I prepare from a month before. I went in with full confidence, and faced the interview. I was asked to answer a practical question and few normal questions. I made sure that I portray myself as smart and intelligent and not degrade myself or give up at any level. The self confidence and motivation along with positive thinking made me achieve my goal. Thus, positive thinking has helped me through out to be happy, has instilled hope and confidence and achieve my goals. It has also helped me to find solutions to various problems I face. It has one way contributed to manage my emotions and temper. Thus, positive thinking has various benefits and should be practiced at every instance possible.

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- http://www. successconsciousness. com/index_000009.htm

> "People have significant psychological resources to improve their well-being and performance, but these resources often go unused and could be better harnessed"

There are many surveys that show that there is dualistic attitude towards mind and brain relationship, and it is seen that this attitude is very common. However, on the other hand the scientific studies show that the mind and the body have an intimate relationship. As an example we can take the beliefs of a religion, where it says that mind (soul) and body are separate, and it's a strong belief in religions that the soul or spiritual part survives even after death, separate from the body. It was reported that 40% of the people or population believe in God and life after death or souls.

Dualism view developed by Decartes, he says that the mind and the brain belong to different worlds, but still they are closely related to each other, on the other hand, functionalism views that mind and brain is not separate. In Reductive Materialism also know as Identity Theory says that mind cannot be separated from the brain and focuses more on brain, which resulted in a drawback, as mind was not considered.

In this study was conducted in two Universities; University Edinburgh, UK and University of Liege, Belgium, where attitudes towards mind and brain relationship were surveyed. The participants were given or presented four key statements;

1. The mind and brain are two separate things;

2. The mind is fundamentally physical;

3. Some spiritual part of us survives after death; and

4. Each of us has a soul that is separate from the body

ARTICLE REVIEW

DUALISM PERSISTS IN THE SCIENCE OF MIND

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The sample size of University of Edinburgh was 250, where students were from 8 different backgrounds with an average age of 20. In the survey, 56% were men and 44% were women. The results showed that 67% of participants

agreed that"mind and brain are two separate things", 64% disputed the statement that"the mind is fundamentally physical"; 65% agreed that "each of us has a soul that is separate from the body," and 70% agreed that some spiritual part of us survives after death, and 63% believed in the existence of God. It was also seen that women more likely believed in the concept of soul over men and belief in God was associated with a soul and spiritual being.

It was also seen that humanities students believed that mind in non-physical being over science students.

Leigh had a sample of 1858 participants, where majority of the participants were European, but there were participants form other countries as well. The sample consisted 49% of women and 45% of men and the average age of the participants was 41 years. The results showed that 42% of participants agreed that "mind and brain are two separate things," 41% disputed the statement that "the mind is fundamentally

physical"; 40% agreed to the statement "each of us has a soul that is separate from the body," and 40% agreed to some spiritual part of us survives after death. It was also seen that participants of middle age and older age and mostly religious participants supported the statement "the mind and brain are two separate things". On the other had non-religious people and men mostly supported the statement "the mind is purely physical." It was the religious people who supported and agreed to the third statement "some spiritual part of us survives after death"; and they also supported the fourth statement "each of us has a soul that is separate from the body".

From the results, it can be seen that participants from the Edinburgh had a dualistic view of the relationship between mind and brain, and they held the view that mind and body are separate. The participants also believed in soul and endorsed that soul is separate from the body and survives even after death. On the other hand the Leigh survey showed that the participants were less dualistic and mostly did not believe that mind and brain are separate and it was seen that religious participants were more dualistic, and it was also seen that women

more then men supported and endorsed dualism.

This article provides information and survey of the attitudes of the population towards dualism of mind and brain. I feel there are significant drawbacks in the study, as, even though, a large sample with different groups were taken, they could have taken a sample with broader range of cultural, differential background would actually help to throw more light on dualism. Another drawback was that the participants were given a questionnaire where the questionnaire was in the form of close-ended questions which forced the participants to agree or disagree which would not give details on why they agreed and what exactly the views are behind their answer. Open-ended questionnaire, even though, lengthy and time-consuming would be more appropriate tool for the survey as it would through light on more information and give clear answers. Also in the article or the research there was no explanation as to why women are more dualistic then men, which is also a major drawback.

It's seen that the medical practitioners believed in dualism, god and life after death, but scientists did not believe in dualism. It can be also seen in clinical

settings where most of the patients have a dualistic view about mind and body. Most patients accept physical symptoms but cannot accept psychological symptoms, as having psychological systems is termed as a stigma in the society. Studies have even shown that dualism exists in neurosciences as well.

There is still a lot of research that needs to be done, as still the philosophers and scientists mostly make the assumptions and do not have any concrete proof as such about the relationship between mind and brain. It is a challenge to them as the assumptions and answers they have cannot do justice to the relationship the mind and the brain share.

"WE ACCEPT THE REALITY OF THE WORLD WITH WHICH WE ARE PRESENTED. IT'S AS SIMPLE AS THAT."

NAINI SHARMA

4 MPHR

The Truman Show Delusion which is commonly referred to as the Truman Syndrome is a delusional disorder in which the person believes that the reality television show is his actual reality. This was introduced by two brothers Joel and Ian Gold after being inspired by the movie. The Golds (a psychiatrist and a neuro-philosopher) after their interactions with a few patients found that the exhibited symptoms very similar to what the movie showed. Truman Syndrome is not given a provision in the Diagnostic and Statistical Manual of the American Psychiatric Association. However, it is recognized as a persecutory type delusional disorder.

Directed by Peter Weir and written by Andrew Niccol, the Truman Show (1998) captures the live of Truman Bank (played by Jim Carrey) who comes to realize that his life is actually constructed by the director of a reality television show and he has been observed round the clock right from the time he was conceived. When Truman discovers the truth, he tries to find a way to escape this controlled life.

Though the film is based on a very intense subject, it has been presented with a light tone through the wittiness of Truman Burbank who looks at every serious incident in a comic manner. When we probe deeper into the content of the movie we understand how we as individuals perceive situations just the way they are presented to us.

The story revolves around Truman Burbank, who at a very young age sees his father fall of a boat and die. Since then he has a phobia of travelling over water. Even though, he wishes to go around the world and explore it is this fear that stops him. It is in this process that he feels like something is wrong as he feels that everyone is following him. Little does he know that his whole life is being broadcasted live and every person in his life is actually a paid actor by the director Christof who at all odds do not want Truman to know the truth of his life as it would affect the authenticity of the show. Every time Truman comes closer to discovering the truth; Christof adds some element to stop him. Truman's wife, friend and even mother are not his real family but are a part of the show. When Truman finally decides to escape, even if it involves travelling through water, Christof mechanically creates storms to scare him off. Truman fights his fears and finally escapes the stimulated world when he finds out the truth.

There are a lot of important themes covered in the film. These include:

1. The Effect of Pop Culture – Today, the influence of media on us is immense. We look up to TV stars and many of us try to emulate them to a large extent. There are times when we even virtually play the scenes in our lives. The effect on media on us is so strong, that we have started looking at too much of it as our reality. Quite often, we hear women discussing soaps with so much passion as though they were a part of it or the death of a character in the show affected them emotionally. People have gone to the extent of scheduling their lives around TV shows.

2. Classical Conditioning – Here, Truman's fear of travelling was conditioned by the director Christof so that every time he came close to escaping the virtual reality his fear would stem out. He would be reminded of the storm and the way his father died falling off the boat. Unknown to him is the fact that this was also a part of the Truman Show's script. Fear and travel were the two stimuli that caused fear and, even though, one was presented first, the response would always be fear. He exhibits generalization and discrimination in the movie. Generalization in the sense that it is not just travelling on a boat that he is afraid of but he also fears travelling over any form of water body. However, he does not fear every situation that involves water like bathing or any other daily activity. Even in the end when Truman escapes, Christof thinks of making him come back by creating a storm.

3. Christof and Truman – The names Truman and Christof are very significant. Truman can be broken down to True Man which could probably indicate his search for his true self and a reality which is not false. Constantly throughout the movie we find him trying to understand something that he knows is going wrong with him. Christof, on the other hand could indicate Christ Off, which shows the negative side of the character who goes out of his way to keep the authenticity of the show and stop Truman from finding out the truth.

4. Stages of Development –The movie subtly shows the stages of development as proposed by Eric Erikson. Through flashbacks, we see each of these stages, and that too is manipulated by Christof. Truman during his college years falls in love with Sylvia, who is actually an actor. This is an example of the intimacy vs. isolation stage. Though Truman wants to get intimate with her, Christof removes her from the show because she tries to show Truman the truth about himself. The part of identity vs. role confusion is also depicted well in the movie. According to Erikson, an identity is formed after testing different roles. Here, Christof does not give Truman a chance to do the same. In turn, Christof actually gives Truman his identity.

5. Identity Crisis – As mentioned above the movie shows Truman's search for his own identity. His identity is completely shaped by
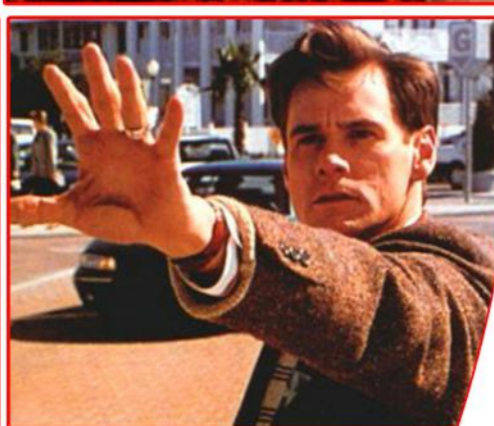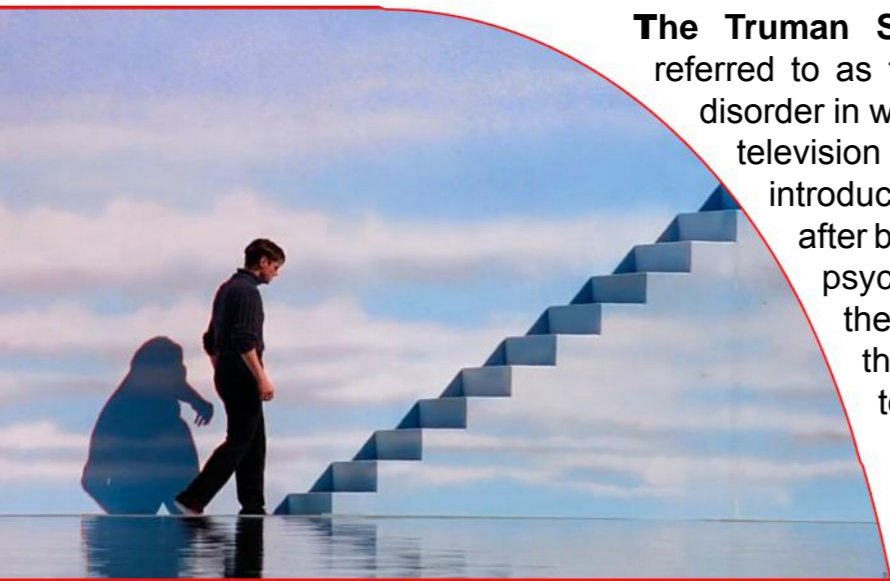
Christof. Everything including his family and friends is actually constructed by him. Truman throughout his life has never had the chance to create his own identity nor has he had the opportunity to decide anything related to his life. In the end, when he realizes that ever since he was born, he was controlled, and his environment was stimulated by Christof, he looks for an escape and tries to find his own self.

6. Free Will – Freud and many other psychologists spoke about the importance of free will vs determinism during the upbringing of a child. In the movie, Truman's life is determined and not based on free will. Everything in his life, including his marriage is actually determined by Christof, which in reality is only a TV show. It is like a world within the world. In the end, Truman establishes free will when he leaves the world that is created by the show.

7. Privacy – With the advent of technology and the rise of IT, our world is becoming an unsafe place as anyone has access to anyone's life. In Truman Show, Truman's life is captured in 500 cameras and every moment of his life is monitored and broadcasted to the audience. He does not even have privacy when he is in the bathroom! Today with the amount of technology available, every aspect of our life is open to everyone. Even though the use of technology has made life easy, it is at the cost of our privacy.

8. Bystander Effect – The bystander effect occurs when an audience is a part of an event and does not really go forward to help a person when he is in need of his assistance. In this movie, the whole world knows that

the situation Truman is actually is not right. The only person who wants to help Truman know what is really happening is Sylvia. When Christof finds out that Sylvia is trying to help Truman, he removes her from the show and tries his best to see to that Sylvia and Truman does not meet each other again. Even though, the rest of the world is watching the way in which Truman's life is being controlled, and no one does intervene and help him understand what is actually happening.

9. Phobia –The fear of travelling and sailboats is the best example of a phobia being exhibited. In the beginning, we see how the fear towards sailing is rational as he has had a negative experience when his father dies during the storm. However, when he even fears crossing the plank to get onto the ship we find that it is an irrational fear and at the cost of losing his job he does not cross the plank showing that this fear is affecting his daily functioning.

10. Reciprocal Determinism – It is believed that though our parents play an integral role in shaping our personalities, external factors play an equally important role in the same. The social cognitive theory emphasizes on this phenomenon and refers to it as reciprocal determinism. In this movie, we see that factors like Truman's friends, the events that are happening influence him. It is through these events that Truman actually realizes that his life is being controlled.

Thus, this movie does a brilliant job of depicting many psychological phenomena. It has explored delusion and has presented to us a face of psychology that never really existed. The actors have acted very well and done justice to their roles. **P**

POSTSCRIPT

*"Cogito ergo sum" – **Rene Descartes***

The above Latin phrase most famously used by Rene Descartes to demystify mind-body dualism, translates into "I think therefore I am." How true is it? If are definitely beings of higher mental processes. The field of psychology has had a long tussle to establish itself as a "scientific" discipline. For many years scholars from different schools of thought had varied and very divisive views on what the discipline should study. Right from the reductionist approach of psycho-physics to the introspective methods adopted by Wundt. One can however clearly view how behaviourism had dominated the field for almost half a century until the cognitive revolution. The focus of this sub discipline was to primarily discern thought processes. This issue covers the expansive and developing field of cognitive psychology. We received a lot of article and book reviews showcasing the intense academic rigour. We hope this issue has enriched the understanding of our readers and has enthused them to pursue topics for further exploration.

We are grateful to the contributors of our magazine, for their laborious research and fruitful insights. Lastly dear readers, we are thankful for your patronage. Hope to see you soon with our next issue!

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