

NEURO - CURSORS IN ENTREPRENEURIAL 'CHOICE MOSAIC'

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Abstract

This experiential paper, based on diary research, reflects upon entrepreneurial behavioural protocol via psychophysical approaches besides fundamental hematological systems. Linking choice data and processes, paper attempts to comprehending 'drivers' that underlie entrepreneurial behaviour and choice making, to discussing possible issues that emerge in neuro - behavioural scholarship. Attempt is to explore nature of decisions, identify methods to test causal relations, employ empirical cognitive and neural approach (es) to decision reasoning and establish a relation using hematological and biochemistry - management data to reveal neural paths in entrepreneurial choice making. Paper concludes with distinctive standpoints generated from theoretical 'choice mosaic' that best fits explanation.

Key Words: *Neuro Behavioural Cursors, 'Cranial Box', Choice Mosaic and 'Biochemistry Drivers'*

"Tying a knot is an ancient and frequently performed human action that is the epitome of everyday procedural knowledge, making it an excellent target for investigation."
..... Dr. Just (2020)

Introduction

'The human being makes decisions in a context of limited rationality, subject to biases and noises that lead him to behave sub optimally, from the point of view of what Neoclassical Economics prescribes' (Laza; 2019). Neuromanagement and individual entrepreneurial - managements have witnessed tremendous hematological and biochemistry - management advance since turn of this decade(s). Plotting neuronal - directed entrepreneurial hematological and biochemistry - management 'contour' is a complex management stroke. Business 'entrepreneurial actors' commonly count on heuristics in an air of implausibility. In real world, encountered with complex choice circumstances, individual entrepreneurial choices surface from complex, complicated, cognitively demanding and intertwined set of data and information. Hematological and biochemistry - based entrepreneurial choice 'contour' - oriented planning assists as 'catalyst' in terms of hematological and biochemistry - management cognitive behaviours. There is need to understand neurobiological (hematological and biochemistry - management) 'drivers' for investigating underlying neurocomputational formulation mechanisms (neuro - contours) that underlie neuro - based choice contour plotting ('natural' and 'logical' approach). These are skills to meet 'New Age' challenges. In this, scope is to understand how individual entrepreneurial traits diagramming reveal behavioural discernment.

The realistic lateral lies on inspection of available verifiable, reliable and significant information, filtering and sieving of available information and accessing expressive information. This is supplemented

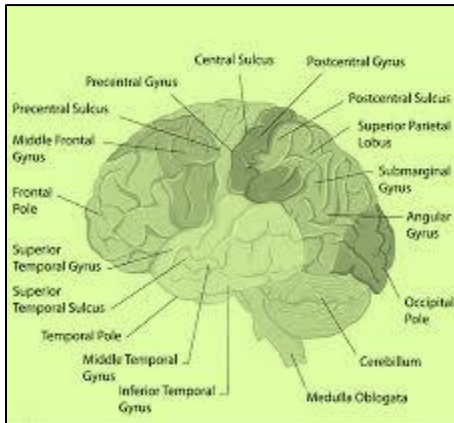
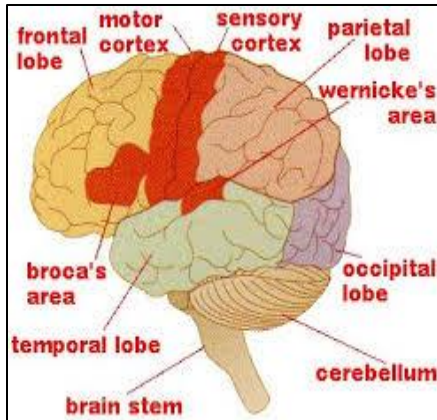
by actions of neuron transmitters to further process interactive - oriented actions. Perceptive procedures are principal 'drivers' to calculate diverse optimal alternatives to grasp an entrepreneurial choice. entrepreneurial 'neuro - drivers' transform on relatively short time gauge of minutes allied to psycho - based choice contour techniques. As representation for neural action, transdisciplinary 'hematological and biochemistry - drivers' aid in unification of entrepreneurial choice contour - mosaic. This 'driver' is for 'agent - oriented' sculpting and psycho - individual investigation efforts. Imaging tools have motivated individual 'neuro - drivers' conductance driver of internal hierarchy of hematological and biochemistry - based choice contour.

"New brain imaging technologies have motivated neuro - managerial science studies of the internal order of the mind and its links with the continuum of managerial (humanoid) choices from choice making among fixed gambles to choice making mediated by market and other institutional rules. We are only at the beginning of the enterprise, but its promise suggests a fundamental change in how we think, observe and model choice in all its contexts"

. Vernon Smith

Cranial Box

'Cranial box' is a bioelectric edifice. Entrepreneurial and neural scholarships share a mutual interest. Interaction between business and hematological and biochemistry scholarship is not smooth with misunderstanding or difference in expectations on either side. Attention theaters ubiquitous part in perception and reasoning. Entrepreneurial choice making, with cognition and assumptions that underpin, is critical for any individual entrepreneur when crafting and executing strategies. Causality plays central role in individual choice scholarships. What typifies notion of causation in scholarships of hematological and biochemistry and 'cranial box'? Are dissimilar notions a prerequisite for different experimental approaches? Are there variances in notions that are explicitly and obliquely presumed? What counts as causal evidence in individual choice scholarships? What role is played by evidence and hematological and biochemistry mechanisms in identifying causal claims of individual scholarships of mind and 'cranial box'? Documentation of hematological and biochemistry cursors precisely forecast rational physiognomies for comprehending cognitive and neural mechanisms of entrepreneurial choice making. An emerging new paradigm, through 'cranial box' cabling map, paper acmes potential cause - consequence linkage between entrepreneurial biology and management in explaining how Individuals deal in choice dynamics. Current lack of success and effort necessary for validating models are traced to weak theoretical representation of individual choice making in current hematological and biochemistry 'mosaic'.



Questions

Question is how ‘Smart Entrepreneurial Actors’ make choices in a climate of vicissitudes in ‘neuro - drivers’ conductance. How choices are carried out in hematological and biochemistry ‘neuro - drivers’ of ‘Smart Entrepreneurial Actors? Curiosity is on possibilities, philosophies, behaviours and stratagems that ‘Smart Entrepreneurial Actors uses to make choices. How do portions of ‘Smart Entrepreneurial Actors (‘neuro - drivers’) administer choice crafting, synchronise and engross in tactical elucidation while deciding? There are unsolved problems in ‘neurocontour’ where neuromanagement seeks to explain ‘behaviour shapes’ towards choice contour crafting (Satpathy; 2012)? This paper aims at exploring prospects and challenges in significant role of ‘neurronics’ in prototyping individual entrepreneurial hematological and biochemistry - based choice contour. Points of focus are on driving ‘hematological and biochemistry - agents’ and ‘hematological and biochemistry - elements’. What neuronal - strategic choices underpin hematological and biochemistry - based choice contour? Does systemic scrutiny reveal neuronal factors that contribute to explain effective mapping of hematological and biochemistry - based choice geometries? In a quasi - experiment, a set of individuals were chosen and subject to information based neuro - based choice contour mapping. Results indicate that ‘information - agents’ and ‘information - elements’ do have a positive influence on hematological and biochemistry - based choice contour edifice of hematological and biochemistry - based choice contour prototyping.

Experiential Configuration

“The human being makes decisions in a context of limited rationality, subject to biases and noises that lead him to behave sub optimally, from the point of view of what Neoclassical Economics prescribes”.

.... Sebastian Laza (*Neuroeconomics: The Disruptive Path*, Amazon KDP, 2018)

Wikipedia states, 'Blood is a body fluid in humans and other animals that delivers necessary substances such as nutrients and oxygen to the cells and transports metabolic waste products away from those same cells. Blood performs many important functions within the body, including, supply of oxygen to tissues (bound to hemoglobin, which is carried in red cells), supply of nutrients such as glucose, amino acids, and fatty acids (dissolved in the blood or bound to plasma proteins (e.g., blood lipids)), removal of waste such as carbon dioxide, urea, and lactic acid, immunological functions, including circulation of white blood cells, and detection of foreign material by antibodies, coagulation, the response to a broken blood vessel, the conversion of blood from a liquid to a semisolid gel to stop bleeding, messenger functions, including the transport of hormones and the signaling of tissue damage, regulation of core body temperature and hydraulic functions (Wikipedia). General passage of blood provides functional supply to all body tissues. It transmits oxygen to cells and picks up carbon dioxide and waste products. Systemic circulation carries oxygenated blood from left ventricle, through arteries, to capillaries in tissues of body. Blood carries oxygen to the brain. This oxygen nourishes neurons. Brain establishes an algorithm of costs and benefits when arranging a matrix for decision dynamics. Brain depends on blood supply to function properly. However, high blood pressure causes several problems to the brain thereby impairing decision processes.

Neuroscience is an accepted methodical study of entrepreneurial hematological and biochemistry system dynamics that conglomerates functions and mechanisms which work within a living system, configuration of organisms and their parts, molecular foundation of biological activity, process by which entrepreneurial organisms grow / develop, function of cell, systems using mathematical concepts and science of behaviour and mind. Such apparatuses are wholly attributable to vicissitudes within hematological and biochemistry management to explain human decision making. Therefore, entrepreneurial management is converging into a solitary, amalgamated discipline to afford a general theory on entrepreneurial comportment. Integration propositions building of 'spot on' models of decision making integrated with the milieu of hematological and biochemistry. This process is a 'mental process' or 'cognitive' process resulting in selection of course of action from several alternatives (Satpathy, 2012). Reference is drawn to hematological and biochemistry 'entrepreneurial agents' that influence cognitive choices based on numerous signals that back or contradict findings of how cognitive configurations influence choice indication. Hematological and biochemistry 'agent' decides in manifestation of potentially competitive makers cast an eye under lens of cognitive prisms in band of neurobiology of cognitive choice indication. Issues like how cognitive privileged processes transgress in brain pathways, how brain considers sources of neuro and what intrinsic hematological and biochemistry processes embody conflicting values are explored to design 'rational' cognitive choices.

Objective

The **objective** is;

- Identify individual entrepreneurs who were experiencing 'hypotension' or 'hypertension',
- Check out blood pressure signatures to catch significant alterations in decision making, and
- Check out hematological monikers in assessing response to various bio - functional situations.

Diary Examination

Behaviors are continually most evocative in their natural framework. Recorded sequentially over time , diary studies has been adopted as the methodology that collects rich subjective data by having subjects (cohort study) record entries about hematological and biochemistry details . This methodology uses longitudinal method that offers contextual information. This methodology enabled accumulating longitudinal and time - based data, recording hematological and biochemistry measures and practices in setting and shaping precursors, relationships and magnitudes for post - validation. A cross-sectional transverse study (cohort) has been adapted to hematological and biochemistry dissect data from an archetypal subset, at an explicit point in interval.

Design Factors

A total number of 80 (N = 80) individual entrepreneurs were selected for the study. They were casually chosen from, existing serving as well as retired administrators. The distribution of individuals as per cohort is as under:-

TABLE: 1
POPULATION MONIKERS

Age Profile (Years)	Gender	Population
25 - 40	Male	35
40 - 55	Male	12
55 - 70 +	Male	02
25 - 40	Female	14
40 - 55	Female	11
55 - 70 +	Female	06

Total (N) = 80

(Source: Satpathy, J. et.al; 2018)

Interpretation



Brain functioning depends on blood supply to function properly. However, high blood pressure causes several problems to the brain thereby impairing decision processes. It is detected that all the respondents who reported with case of hypertension were in the High-risk category. The male and female respondents I the age bracket of 25 – 40 years suffered the most. This is presumably due to professional pressures. This can be attributed to the race in the individual world to achieve targets, milestones and keep pace with globalisation. Respondents with case of hypertension reported that the pressure to achieve targets was taking a toll on their cognitive ability. Due to hypertension, they reportedly have muscular pains,

giddiness, headache, migraine, muscular - skeletal ache and related symptoms. All these added to their state of absenteeism or presenteeism. The bottom line is that their efficiency and effectiveness declined considerably and were unable to match their potential competency.

Hematological Signatures

CUMULATIVE DATA

ABNORMAL OBSERVATIONS

TABLE – 3				
ABNORMAL OBSERVATIONS : MALE SUBJECTS				
INVESTIGATION	25 - 40	40 – 55	55 - 70	NORMAL RANGE
	Years	Years	Years	
	RESULT	RESULT	RESULT	
Blood Sugar Fasting	50 mg / dl	51 mg / dl	54 mg / dl	60 - 100
Blood Sugar Post - Prandial	150 mg / dl	107 mg / dl	153 mg / dl	< 140
Blood Sugar Random	199 mg / dl	213 mg / dl	196 mg / dl	< 200
Urea	41 mg / dl	49 mg / dl	35 mg / dl	15 – 40
Creatine	0.3 mg / dl	1.6 mg / dl	1.9 mg / dl	0.5 – 1.0
Sodium	148 mEq / L	147 mEq / L	147 mEq / L	130 - 145
Potassium	3.1 mEq / L	5.7 mEq / L	5.9 mEq / L	3.5 – 5.0
Lipid T - Cholesterol	213 mg / dl	219 mg / dl	224 mg / dl	< 200
Lipid Tri - Glyceride	154 mg / dl	111 mg / dl	156 mg / dl	60 - 150
Low Density Lipo Protein	132 mg / dl	139 mg / dl	139 mg / dl	60 - 130
Very Low Density Lipo Protein	39 mg / dl	44 mg / dl	44 mg / dl	00 - 36
High Density Lipo Protein	64 mg / dl	68 mg / dl	63 mg / dl	40 - 60
S Bilirubin Total	1.9 mg / dl	1.7 mg / dl	1.5 mg / dl	0.1 - 1.2
S Bilirubin Direct	0.8 mg / dl	0.4 mg / dl	0.4 mg / dl	< 0.3
S Bilirubin Indirect	1.4 mg / dl	1.4 mg / dl	1.4 mg / dl	0.1 – 1.0
Aspartate Trans Amines (ALT)	44 IU / L	42 IU / L	41 IU / L	15 - 40
Alanine Trans Amines (ALP)	43 IU / L	49 IU / L	43 IU / L	15 - 40
Creatine Phosphate K	31	41	38	M : 6 - 37
CPK - Muscular / Brain	27	36	31	F : 5 - 27
GGT	12 IU / L	21 IU / L	21 IU / L	
T - Protein	7.3 g / dl	6.9 g / dl	8.4 g / dl	6 - 8
Albumin	5.9 g / dl	5.6 g / dl	5.7 g / dl	3.5 - 5.5
Globulin	3.9 g / dl	3.2 g / dl	3.7 g / dl	1.7 - 3.2

Source: (Source: Satpathy, J. et.al; 2018)

N = 35

N= 12

N=2

TABLE – 4
ABNORMAL OBSERVATIONS : FEMALE SUBJECTS
(COMPARATIVE ROUNDED - OFF AVERAGE RECORDINGS)

INVESTIGATION	25 – 40 Years	40 – 55 Years	55 – 70 Years	NORMAL RANGE
	RESULT	RESULT	RESULT	
Blood Sugar Fasting	56 mg / dl	52 mg / dl	47 mg / dl	60 - 100
Blood Sugar Post - Prandial	132 mg / dl	159 mg / dl	178 mg / dl	< 140
Blood Sugar Random	194 mg / dl	198 mg / dl	190 mg / dl	< 200
Urea	42 mg / dl	56 mg / dl	44 mg / dl	15 – 40
Creatine	1.4 mg / dl	1.6 mg / dl	1.4 mg / dl	0.5 – 1.0
Sodium	151 mEq / L	151 mEq / L	145 mEq / L	130 - 145
Potassium	5.1 mEq / L	5.2 mEq / L	5.1 mEq / L	3.5 – 5.0
Lipid T - Cholesterol	192 mg / dl	179 mg / dl	178 mg / dl	< 200
Lipid Tri - Glyceride	162 mg / dl	171 mg / dl	148 mg / dl	60 - 150
Low Density Lipo Protein	176 mg / dl	165 mg / dl	156 mg / dl	60 - 130
Very Low Density Lipo Protein	82 mg / dl	42 mg / dl	34 mg / dl	00 - 36
High Density Lipo Protein	63 mg / dl	51 mg / dl	69 mg / dl	40 - 60
S Bilirubin Total	1.7 mg / dl	1.4 mg / dl	1.3 mg / dl	0.1 - 1.2
S Bilirubin Direct	1.1 mg / dl	0.4 mg / dl	3.1 mg / dl	< 0.3
S Bilirubin Indirect	1.4 mg / dl	1.4 mg / dl	2.3 mg / dl	0.1 – 1.0
Aspartate Trans Amines (AST)	42 IU / L	42 IU / L	44 IU / L	15 - 40
Alanine Trans Amines (ALT)	41 IU / L	41 IU / L	43 IU / L	15 - 40
Creatine Phosphate K	47	47	45	M: 6 - 37
CPK - Muscular / Brain	28	29	34	F : 5 - 27
GGT	23 IU / L	12 IU / L	12 IU / L	
T - Protein	9 g / dl	9 g / dl	8.9 g / dl	6 - 8
Albumin	5.1 g / dl	5.6 g / dl	5.2 g / dl	3.5 - 5.5
Globulin	3.6 g / dl	3.9 g / dl	3.6 g / dl	1.7 - 3.2

Source: (Source: Satpathy, J. et.al; 2018)
N = 14 N= 11 N=06

Observations and Conclusion

Entrepreneurs are recognised to possess a sensitive aptitude and mindfulness for recognising and impudently manipulating commercial prospects. They persistently and continually seek opportunity-laden information in order to satisfy internal motivators such as need for achievement and the fulfilment of competitive urges. This entrepreneur is driven by business challenges that match and stretch his skills, knowledge, and abilities. It is apparent that respondents who described case of hypertension were in 'High-Risk' category. This is presumably due to 'professional gravities'. This can be attributed to competition in 'entrepreneurial domain' to achieve bull's eye, indicators and keep pace with globalisation. Respondents with case of hypertension reported that pressure to achieve targets was taking a toll on cognitive ability. Due to hypertension, they reportedly have muscular pains, giddiness, headache, migraine, muscular - skeletal ache and related symptoms. The bottom line is that their

productivity and efficacy deteriorated noticeably and were unable to match their potential skill (Satpathy, J. et. al.; 2018).

Fluctuating blood glucose levels affect decision making. Scholarship has indicated that there may be a connection in middle of blood glucose levels (body's energy) and thinking. Managing the degree of fluctuation in blood glucose may offer a possible means. There is a need to study the biological underpinnings of entrepreneurship. Researchers still know very little about how biology and the environment interact to shape entrepreneurial behavior, while additional research on psychological factors that mediate the relationship between biology and entrepreneurship is needed. There are also very few longitudinal studies, ambulatory/diary studies, and a dearth of research undertaking a neuroscientific investigation of the phenomenon. In addition, various biological factors are not mutually exclusive and it is unclear how they may interrelate (Nofal et al., 2018). There is little work on the relationship between biology and opportunity recognition, influence of biology at different phases of the start-up process, and in turn how being an entrepreneur may affect biological processes.

To provide a fundamental basis for understanding decision-making and decision confidence, this effort analysed blood samples concurrently with a decision - testing questionnaire was served to each subject. The sample was of those respondents with standing history of hypertension and was selected based on previous poor blood pressure control. It is detected that almost all the hematological signatures in the above table(s) reflect disturbing trends. Based on clinical tests, it is inferred that; decision making potential is bad when;

- Blood sugar fasting readings are detected as 'abnormal'.
- Blood sugar post – prandial readings are detected as 'abnormal'.
- Blood sugar random readings are detected as 'abnormal'.
- Urea readings are detected as 'abnormal'.
- Creatine readings are detected as 'abnormal'.
- Sodium readings are detected as 'abnormal'.
- Potassium readings are detected as 'abnormal'.
- S bilirubin direct readings are detected as 'abnormal'.
- S bilirubin indirect readings are detected as 'abnormal'.
- Aspartate trans amines AST readings are detected as 'abnormal'.
- Alanine trans amines alt readings are detected as 'abnormal'.
- Lipid T - cholesterol readings are detected as 'abnormal'.
- Lipid tri - glyceride readings are detected as 'abnormal'.
- Low-density lipo protein readings are detected as 'abnormal'.
- Very low-density lipo protein readings are detected as 'abnormal'.
- High density lipo protein readings are detected as 'abnormal'.
- S bilirubin total readings are detected as 'abnormal'.
- Creatine Phosphate K readings are detected as 'abnormal'.
- CPK - muscular / brain readings are detected as 'abnormal'.
- GGT readings are detected as 'abnormal'.
- T - Protein readings are detected as 'abnormal'.
- Albumin readings are detected as 'abnormal'.
- Globulin readings are detected as 'abnormal'.
- A: G ratio readings are detected as 'abnormal'.

New review prompts a re-think on what low sugar levels affects our thinking (Satpathy, J. et. al.; 2018). Notwithstanding wide-ranging research approaches in blood glucose literature, one finding stands conveyed clearly; blood glucose levels affect reasoning performance. There are many gaps in knowledge and the aim of the special issue is to discuss ways to take the field forward. There are also very few longitudinal studies, ambulatory/diary studies, and a dearth of research undertaking a neuroscientific investigation of the phenomenon. In addition, the various biological factors are not mutually exclusive and it is unclear how they may interact (Nofal et al., 2018). Researchers have tried to understand the factors that influence the tendency of people to engage in entrepreneurial activity. Recently, researchers have examined whether there is a hematological predisposition to entrepreneurship. There is also little work on the relationship between biology and opportunity recognition, the influence of biology at different phases of the start-up process, and in turn how being an entrepreneur may affect biological processes. Future research could incorporate evolutionary sensibility and interactive heredities.

The conclusion drawn is that when blood cursors are abnormal, then the decision making potential is bad.

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