Hematological Judgment In entrepreneurial Decision

Lt Col (Dr) J Satpathy
Faculty, National Defence Academy, Pune, India
Email jyotisatpathy@gmail.com
Dr. Banitamani Mallik
Faculty, Centurion University of Technology and Management, Odisha, India
Email banitamallik@gmail.com

Abstract- Change is capricious with transferences in global order, crossbreed comportment and strategic judgement making offering alternative methods to sculpting uncertainty. Firms are voyaging through impenetrable spells and sprouting continuously in hyperactive competition state. Focus is on forces of globalisation that affect condition considered constant viz. VUCA. Entrepreneurs make decisions based on paradigms that depart from traditional rationality and information processing models. Business decisions need to adopt 'real time' of changes likely to occur for a 'gap' between past understandings and future change. Cognitivism suggests that business decisions surface on preference ordering; what action to take, what characteristics of alternatives make decision difficult, how inconsistencies create prospects and challenges in behavioural decision-making etc. Can neurocommerce offer insights into behavioural decision making process? How do entrepreneurs engage to maintain behavioural decision control? Fresh neuro - based investigations promise assistances to understand entrepreneurialdecision-making at behavioral and neural echelons. This is vivacious in modern VUCA spectrum.Subject of paper entreaties to scholarship of entrepreneurial decision on cross - disciplinary methodologies. Paper adds to new findings, insights and knowledge by juxtaposing entrepreneurial decision with hematology. Paper intends to help entrepreneurs develop judgment in decision skills. Do they really have a choice? How do 'concepts' exist and influence? How solutions are integrated into 'entrepreneurial activity'? How can entrepreneurs change behavioural decision attitudes? Paper submits an experiment in exploring decision-making behaviour via haematological acuities. Administering a situation reaction test, in empirical part, aseries of clinical observations were administered to 150 subjects (n = 150; n = 80 Male subjects and n = 70 Female subjects). This design was favoured due to element of plasticity and variations in response to intervention effects.This was done toensure that subject serves as own control. Blood samples were drawn from one subject each from each blood group. Data have been calibrated and substantiated.An inter - correlational analysis has been conducted. This assured and ensured continuous assessment, reference point valuation and variability in data. Analysis reveals that blood groups do have a role in entrepreneurial decision dynamics. Results indicate role of '*hematological undercurrents'* in entrepreneurial decision making apparatus. Conclusion is sound and justified in that decision making of an entrepreneur are linked to biological and hematological aspects.

Keywords: VUCA, Entrepreneurial Decision Making, Neurocommerce Tools and Neuro– Haematology

1. INTRODUCTION

Change is capricious with transferences in global order, crossbreed comportment and strategic judgement making offering alternative methods to sculpting uncertainty. Firms are voyaging through impenetrable spells and sprouting continuously in hyperactive competition state. Focus is on forces of globalisation that affect condition considered constant viz. VUCA. Entrepreneurs make decisions based on paradigms that depart from traditional rationality and information processing models. Business decisions need to adopt 'real time' of changes likely to occur for a 'gap' between past understandings and future change. Cognitivism suggests that business decisions surface on preference ordering; what action to take, what characteristics of alternatives make decision difficult, how inconsistencies create prospects and challenges in behavioural decision-making etc. Can neurocommerce offer insights into behavioural decision making process? How do entrepreneurs engage to maintain behavioural decision control? Fresh neuro - based investigations promise assistances to understand entrepreneurialdecision-making at behavioral and neural echelons. This is vivacious in modern VUCA spectrum.

Decisions are basic entrepreneurial activity that play vital role in 'behaviour - based strategic judgement'.Globalisation has dismantled commercial mosaic proposing 'new orders''. Globalisation, glocalisation and cross -border activities offer challenges and opportunities in a boundary - less competitive environment. Horizon is disordered: high disparities, vulnerability, instability and unpredictability with consequences. Difficulty of rethinking conceptual models and decision patterns force relook at exploring emerging issues and challenges in business environments. Neuromanagement with neurocommerce has witnessed advance to describe decision behaviour that contest empirical results. Each reconsideration dependably challenges differing signals. This is outcome of compelling mix of volatility, uncertainty, complexity and ambiguity (VUCA). It is challenging to compare several courses of action and select one to be effected. Entrepreneur has to take decisions with inadequate information. Brain imaging technologies have stimulated neuro (entrepreneurial) studies of internal order of mind and links with bandwidth of entrepreneurial decisions. How is (entrepreneurial) decision processes carried out in brain? What are the limits as form of computing? How does previous experience alter behaviour? Do we interpret research findings when neuro (entrepreneurial) logical results conflict? There are unsolved problems in (entrepreneurial) cognition, although some of these problems have evidence supporting hypothesized solution, what are the general implications of neuro (entrepreneurial) management? How does entrepreneur decide in a state of vacillation, Risk and Probability? How does entrepreneur decide in state of VUCA? It is important to understand intricacy of entrepreneurial brain associated with entrepreneurial context from neurocommerce, experimental economics, behavioural economics and cognitive psychology. Is building models of cognition an efficient means of answering entrepreneurial decision questions under VUCA?

Genes influence decision making. Decision making is regarded as cognitive process resulting in selection of belief or course of action among possibilities. Developments in information technology and advances in socio - genetics present challenges to decision entrepreneurs in terms of providing informed consent. Socio - genetic mechanisms are complex and involve uncertainties. Why does decision making differ? It is noteworthy that certain proportions of entrepreneurs do not provide anomalous responses, choosing alternatives with higher expected utility, thus appearing to be 'rational.' All these pose possibility that entrepreneurs will not be 'informed' enough to facilitate good informed consent in decision-making (Satpathy, J. et. al.; 2018). Advances in science, commerce, philosophy, genetics, heredity, medicine and other fields are ushering in era of

'custom-made preclusion,' allowing exceptional exactitude in calculating careful thought and testing in decision making. Key questions arise about how decision aids can optimally present information. Some questions relate to how data should be accessible to inform choices. This implies that hard-wired genetic influences play an important role in determining decisions. Decision philosophies, as analysis of behaviour of entrepreneurs facing nonstrategic uncertainty, are scarce to date wherein interest in and use of genetic designs is increasing. 'Genetic locus' is the construct that combines multiple aspects (Satpathy and Mishra; 2018).

What are minds for? Human brain is the most complex thing that we know of within our own World. Perhaps it is the most complex thing in the universe! Why have we as a species been blessed with such a gift? What is it for?It's a question that's perplexed philosophers for centuries and scientists for decades,This is the old character versus nurture debate, Despite all the recent advances in the cognitive and neurosciences, there's still much about the human brain that we do not know, We are still quite a ways off from understanding how the brain produces phenomenal experience or qualia, It's what makes us the unique, self-reflective creatures that we are, Decision-making is a region of intense study in neuroscience, and cognitive neuroscience, In real, World decision processes, management decisions emerge from complexly interlinked, There is a need to explore how brain absorbs information, recognises and frames problematic situations, and chooses appropriate responses.

1. MOTIVATION

Decisions are basic entrepreneurial activity that play vital role in 'behaviour - based strategic judgement'.Globalisation has dismantled commercial mosaic proposing 'new orders''. Globalisation, glocalisation and cross -border activities offer challenges and opportunities in a boundary - less competitive environment. Horizon is disordered: high disparities, vulnerability, instability and unpredictability with consequences. Difficulty of rethinking conceptual models and decision patterns force relook at exploring emerging issues and challenges in business environments. Neuromanagement with neurocommerce has witnessed advance to describe decision behaviour that contest empirical results. Each reconsideration dependably challenges differing signals. This is outcome of compelling mix of volatility, uncertainty, complexity and ambiguity (VUCA). It is challenging to compare several courses of action and select one to be effected. Entrepreneur has to take decisions with inadequate information. Brain imaging technologies have stimulated neuro (entrepreneurial) studies of internal order of mind and links with bandwidth of entrepreneurial decisions. How is (entrepreneurial) decision processes carried out in brain? What are the limits as form of computing? How does previous experience alter behaviour? Do we interpret research findings when neuro (entrepreneurial) logical results conflict? There are unsolved problems in (entrepreneurial) cognition, although some of these problems have evidence supporting hypothesized solution, what are the general implications of neuro (entrepreneurial) management? How does entrepreneur decide in a state of vacillation, Risk and Probability? How does entrepreneur decide in state of VUCA? It is important to understand intricacy of entrepreneurial brain associated with entrepreneurial context from neurocommerce, experimental economics, behavioural economics and cognitive psychology. Is building models of cognition an efficient means of answering entrepreneurial decision questions under VUCA?

Entrepreneurial science has witnessed spread at dawn of this Century. Neuroscience combines disciplines to study entrepreneurial decision. Value representations describe decision behaviour that challenges empirical results. Each revision unswervingly goads differing evidence. This is reflection of mix of volatility, uncertainty, complexity and ambiguity (VUCA).

There are unsolved problems; how Entrepreneur decides in state of VUCA? Entrepreneur has to take decisions with inadequate information. It is important to understand intricacy of entrepreneurial in exploring how brain and eyes choose appropriate responses. In order to explain neural basis of decision making, ability to process alternatives and choose optimal course, research combines methods to build models for answering decision questions. Brain and eyes structure imaging technologies stimulate bandwidth of decisions. How is (entrepreneurial) decision making processes carried out (Satpathy, J. et. al.; 2018). ? The objective of this paper is to examine that blood monikers undergo substantial changes while an entrepreneuris in the process of *decision-making.*

2.1. Blood Indices

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. It is perceived that all the respondents who reported with case of hypertension were in the High-risk category. The male and female respondents suffered the most. This is presumably due to professional pressures. This can be attributed to the race in the entrepreneurial 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(Satpathy, J. et. al.; 2018).

Fluctuating blood glucose levels affect decision making. Studies have indicated that there may be a connection in the 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 the 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, the various biological factors are not mutually exclusive and it is unclear how they may interrelate (Nofal et al., 2018). 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.

1.2. Issues

What happens in brain or is activated when Entrepreneurs make decisions or are in the process of making decisions? Is study of decision-making via neuromanagement processes relevant for Entrepreneurs? Many Entrepreneurs seek information than required thereby causing delay because of time required to process information. This impairs effectiveness of decision. In this state, neuromanagement seeks to explain decision-making, ability to process multiple alternatives and choose optimal course of action. It studies how management behaviour shape understanding of brain and guide models of management. What are the coherent brain dynamics underlying prediction, control and decision making? Theoretical explanations posit that human brain accomplishes this through neural computations. Deciphering such transactions require understanding of neuro processes that implement value-dependent decision making. This leads to formulation of a 'neuro-management decision making paradox'. The goal is a speculation of how brain implements decisions that is tied to behaviour (Satpathy - 2016).

Entrepreneurs make (economic) decision makings in complex situations. Neuroentrepreneurial economic decision making needs a decision maker (Entrepreneur) responsible for economic decision making. This maker has number of alternatives and must choose the best alternative (or optimised combination). When this has been made, events may have occurred (maker has no control). Each (combination) of alternatives, followed by an event, leads to a result with some quantifiable significance. Cognitive neuroscience research suggests that diverse preference orderings and decisions possibly will surface depending on which brain circuits are activated. This perchance contradicts the microeconomic postulate that one complete preference ordering provides sufficient information to predict decision and behaviour. Interpretation of Entrepreneurial activity in terms of neuroscience is typically concerned with the neurophysiological underpinnings of Entrepreneurial neurodecision Entrepreneurial economic behaviours. One key insight is *modularity* of human brain (not all brain circuits get activated when executing response to given circumstances). Same stimuli may generate different behavioural responses depending on which brain circuits are activated. If hypothesis is accurate, different brain circuits can guide to different decisions depending on which brain structures and circuits are activated. Consequently, there would be various (possibly conflicting) preference orderings. Furthermore, if a particular brain circuit could act relatively insulated, distinctive preference ordering would result (Satpathy, et. al. 2016).

2. METHODOLOGY AND DESIGN PARAMETERS

Subject of paper entreaties to scholarship of entrepreneurial decision on cross-disciplinary methodologies. Paper adds to new findings, insights and knowledge by juxtaposing entrepreneurial decision with hematology. Paper intends to help entrepreneurs develop judgment in decision skills. Do they really have a choice? How do 'concepts' exist and influence? How solutions are integrated into 'entrepreneurial activity'? How can entrepreneurs change behavioural decision attitudes? Paper submits an experiment in exploring decision-making behaviour via haematological acuities. Administering a situation reaction test, in empirical part, aseries of clinical observations were administered to 150 subjects (n = 150; n = 80 Male subjects and n = 70

Female subjects). This design was favoured due to element of plasticity and variations in response to intervention effects.This was done toensure that subject serves as own control. Subjects were interviewed through a structured questionnaire and re – interviewed through a stress – oriented questionnaire. Those who reported cases of hypertension were requested to produce their (secondary) blood results. Blood samples were drawn from one subject each from each blood group. Data have been calibrated and substantiated. An inter-correlational analysis has been conducted. This assured and ensured continuous assessment, reference point valuation and variability in data. Analysis reveals that blood groups do have a role in entrepreneurial decision dynamics. Results indicate role of '*hematological undercurrents'* in entrepreneurial decision making apparatus. Conclusion is sound and justified in that decision making of an entrepreneur are linked to biological and hematological aspects.

3. OBSERVATIONS

The first set of data (Table - 1), presented below,pertains to 43 (out of 80) male subjects. It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. However, minor drops have been experiential in parameters like Creatine, CPK - Muscular / Brain, T – Protein, Albumin and Globulin.Question is whether the young male entrepreneurs have lack of 'perfect' resilience to absorb shocks in business. This is attempted in the general analysis.

Table – 1

MALE SUBJECTS (Aged : 25 - 40 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMAL	OBSN
	NO STRESS	STRESSED	VALUE	DURING STRESS
Blood Sugar Fasting	70 mg / dl	61 mg / dl	60 - 100	Drastic Drop
Blood Sugar Post - Prandial	110 mg / dl	90 mg / dl	< 140	Drastic Drop
Blood Sugar Random	179 mg / dl	159 mg / dl	< 200	Drastic Drop
Urea	27 mg / dl	21 mg / dl	15 – 40	Drastic Drop
Creatine	0.6 mg / dl	0.4 mg / dl	0.5 – 1.0	Minor Drop
Sodium	141 mEq / L	129 mEq / L	130 - 145	Drastic Drop
Potassium	3.9 mEq / L	3.2 mEq / L	3.5 – 5.0	Drastic Drop
Lipid T - Cholesterol	138 mg / dl	108 mg / dl	< 200	Drastic Drop
Lipid Tri - Glyceride	78 mg / dl	58 mg / dl	60 - 150	Drastic Drop
Low Density Lipo Protein	79 mg / dl	59 mg / dl	60 - 130	Drastic Drop
Very Low Density Lipo Protein	31 mg / dl	17 mg / dl	00 - 36	Drastic Drop
High Density Lipo Protein	56 mg / dl	36 mg / dl	40 - 60	Drastic Drop
S Bilirubin Total	0.9 mg / dl	0.4 mg / dl	0.1 - 1.2	Drastic Drop
S Bilirubin Direct	0.12 mg / dl	0.2 mg / dl	< 0.3	Drastic Drop

S Bilirubin Indirect	0.4 mg / dl	0.2 mg / dl	0.1 – 1.0	Drastic Drop
Aspartate Trans Amines	24 IU / L	16 IU / L	15 - 40	Drastic Drop
Alanine Trans Amines	23 IU / L	16 IU / L	15 - 40	Drastic Drop
Creatine Phosphate K	21	4	M : 6 - 37	Drastic Drop
CPK - Muscular / Brain	14	12	F : 5 - 27	Minor Drop
T - Protein	6.3 g / dl	5.3 g / dl	6 - 8	Minor Drop
Albumin	3.9 g / dl	3.4 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.9 g / dl	1.8 g / dl	1.7 - 3.2	Minor Drop
				N=43 Total Male=80 Total Subjects=150

The second set of data (Table – 2), presented below, pertains to 18 (out of 80) male subjects. It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. Question is whether the middle - aged male entrepreneurs have mixed - resilience to absorb shocks in business? This is attempted in the general analysis.

Table – 2

MALE SUBJECTS (Aged : 40 - 55 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMAL VALUE	OBSN DURING STRESS
	NO STRESS	STRESSED		
Blood Sugar Fasting	71 mg / dl	70 mg / dl	60 - 100	Minor Drop
Blood Sugar Post – Prandial	87 mg / dl	85 mg / dl	< 140	Minor Drop
Blood Sugar Random	113 mg / dl	111 mg / dl	< 200	Minor Drop
Urea	19 mg / dl	14 mg / dl	15 – 40	Minor Drop
Creatine	0.6 mg / dl	0.3 mg / dl	0.5 – 1.0	Drastic Drop
Sodium	141 mEq / L	131 mEq / L	130 - 145	Drastic Drop
Potassium	3.7 mEq / L	3.4 mEq / L	3.5 – 5.0	Minor Drop
Lipid T – Cholesterol	119 mg / dl	114 mg / dl	< 200	Drastic Drop
Lipid Tri – Glyceride	71 mg / dl	64 mg / dl	60 - 150	Drastic Drop
Low Density Lipo Protein	79 mg / dl	69 mg / dl	60 - 130	Drastic Drop

Very Low Density Lipo Protein	24 mg / dl	21 mg / dl	00 - 36	Minor Drop
High Density Lipo Protein	48 mg / dl	45 mg / dl	40 - 60	Minor Drop
S Bilirubin Total	0.8 mg / dl	0.5 mg / dl	0.1 - 1.2	Minor Drop
S Bilirubin Direct	0.13 mg / dl	0.10 mg / dl	< 0.3	Minor Drop
S Bilirubin Indirect	0.4 mg / dl	0.2 mg / dl	0.1 – 1.0	Drastic Drop
Aspartate Trans Amines (AST)	22 IU / L	19 IU / L	15 - 40	Minor Drop
Alanine Trans Amines (ALT)	19 IU / L	17 IU / L	15 - 40	Minor Drop
Creatine Phosphate K	21	18	M : 6 - 37	Minor Drop
CPK - Muscular / Brain	26	13	F : 5 - 27	Drastic Drop
T – Protein	6.7 g / dl	6.2 g / dl	6 - 8	Minor Drop
Albumin	3.6 g / dl	3.4 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.2 g / dl	1.0 g / dl	1.7 - 3.2	Minor Drop
				N=18 Total Male=80 Total Subjects=150

The third set of data (Table – 3), presented below, pertains to 19 (out of 80) male subjects. It is experiential that in a state of normalcy, hematological indices are normal within the near - normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. It is experiential that majority of the indices have registered minor drops. Question is whether the aged male entrepreneurs have heavy resilience to absorb shocks in business. This is attempted in the general analysis.

Table – 3

MALE SUBJECTS (Aged : 55 - 70 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMAL	OBSN
	NO STRESS	STRESSED	VALUE	DURING STRESS
Blood Sugar Fasting	74 mg / dl	73 mg / dl	60 - 100	Minor Drop
Blood Sugar Post - Prandial	113 mg / dl	111 mg / dl	< 140	Minor Drop
Blood Sugar Random	126 mg / dl	123 mg / dl	< 200	Minor Drop
Urea	25 mg / dl	22 mg / dl	15 – 40	Minor Drop
Creatine	0.9 mg / dl	0.7 mg / dl	0.5 – 1.0	Minor Drop
Sodium	137 mEq / L	131 mEq / L	130 - 145	Minor Drop

Potassium	3.9 mEq / L	3.1 mEq / L	3.5 – 5.0	Minor Drop
Lipid T - Cholesterol	124 mg / dl	120 mg / dl	< 200	Minor Drop
Lipid Tri - Glyceride	76 mg / dl	71 mg / dl	60 - 150	Minor Drop
Low Density Lipo Protein	79 mg / dl	73 mg / dl	60 - 130	Minor Drop
Very Low Density Lipo Protein	14 mg / dl	12 mg / dl	00 - 36	Minor Drop
High Density Lipo Protein	43 mg / dl	41 mg / dl	40 - 60	Minor Drop
S Bilirubin Total	0.5 mg / dl	0.6 mg / dl	0.1 - 1.2	Minor Rise
S Bilirubin Direct	0.1 mg / dl	0.2 mg / dl	< 0.3	Minor Rise
S Bilirubin Indirect	0.4 mg / dl	0.5 mg / dl	0.1 – 1.0	Minor Rise
Aspartate Trans Amines (AST)	21 IU / L	18 IU / L	15 - 40	Minor Drop
Alanine Trans Amines (ALT)	23 IU / L	21 IU / L	15 - 40	Minor Drop
Creatine Phosphate K	8	06	M : 6 - 37	Minor Drop
CPK - Muscular / Brain	11	08	F : 5 - 27	Minor Drop
T - Protein	6.4 g / dl	6.1 g / dl	6 - 8	Minor Drop
Albumin	3.7 g / dl	3.1 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.7 g / dl	1.3 g / dl	1.7 - 3.2	Minor Drop
				N=19 Total Male=80 Total Subjects=150

The fourth set of data (Table – 4), presented below, pertains to 31 (out of 70) female subjects. It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. It is experiential that majority of the indices have registered mixed drops. Question is whether the young female entrepreneurs have mixed resilience to absorb shocks in business. This is attempted in the general analysis.

Table – 4

FEMALE SUBJECTS (Aged : 25 - 40 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMAL	OBSN
	NO STRESS	STRESSED	VALUE	DURING STRESS
Blood Sugar Fasting	76 mg / dl	56 mg / dl	60 - 100	Drastic Drop
Blood Sugar Post - Prandial	112 mg / dl	98 mg / dl	< 140	Drastic Drop

Blood Sugar Random	124 mg / dl	100 mg / dl	< 200	Drastic Drop
Urea	22 mg / dl	12 mg / dl	15 – 40	Drastic Drop
Creatine	0.4 mg / dl	0.2 mg / dl	0.5 – 1.0	Drastic Drop
Sodium	121 mEq / L	101 mEq / L	130 - 145	Drastic Drop
Potassium	3.1 mEq / L	2.1 mEq / L	3.5 – 5.0	Drastic Drop
Lipid T - Cholesterol	102 mg / dl	92 mg / dl	< 200	Drastic Drop
Lipid Tri - Glyceride	62 mg / dl	61 mg / dl	60 - 150	Minor Drop
Low Density Lipo Protein	76 mg / dl	72 mg / dl	60 - 130	Minor Drop
Very Low Density Lipo Protein	12 mg / dl	11 mg / dl	00 - 36	Minor Drop
High Density Lipo Protein	43 mg / dl	37 mg / dl	40 - 60	Drastic Drop
S Bilirubin Total	0.7 mg / dl	0.4 mg / dl	0.1 - 1.2	Drastic Drop
S Bilirubin Direct	0.2 mg / dl	0.2 mg / dl	< 0.3	No Drop
S Bilirubin Indirect	0.4 mg / dl	0.4 mg / dl	0.1 – 1.0	No Drop
Aspartate Trans Amines (AST)	22 IU / L	18 IU / L	15 - 40	Minor Drop
Alanine Trans Amines (ALT)	21 IU / L	19 IU / L	15 - 40	Minor Drop
Creatine Phosphate K	7	4	M : 6 - 37	Minor Drop
CPK - Muscular / Brain	9	6	F : 5 - 27	Minor Drop
T - Protein	7 g / dl	6 g / dl	6 - 8	Minor Drop
Albumin	3.1 g / dl	30 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.6 g / dl	1.4 g / dl	1.7 - 3.2	Minor Drop
				N=31 Total Female=70 Total Subjects=150

The fifth set of data (Table – 5), presented below, pertains to 21 (out of 70) female subjects. It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. It is experiential that majority of the indices have registered minor drops. Question is whether the middle - aged female entrepreneurs have heavy (surprising results!) resilience to absorb shocks in business. This is attempted in the general analysis.

Table – 5

FEMALE SUBJECTS (Aged : 40 - 55 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMA	OBSN
	NO STRESS	STRESSED	VALUE	DURING STRESS
Blood Sugar Fasting	82 mg / dl	80 mg / dl	60 - 100	Minor Drop
Blood Sugar Post - Prandial	59 mg / dl	56 mg / dl	< 140	Minor Drop
Blood Sugar Random	98 mg / dl	94 mg / dl	< 200	Minor Drop
Urea	16 mg / dl	11 mg / dl	15 – 40	Minor Drop
Creatine	0.6 mg / dl	0.4 mg / dl	0.5 – 1.0	Minor Drop
Sodium	121 mEq / L	110 mEq / L	130 - 145	Minor Drop
Potassium	3.2 mEq / L	2.2 mEq / L	3.5 – 5.0	Minor Drop
Lipid T - Cholesterol	79 mg / dl	72 mg / dl	< 200	Minor Drop
Lipid Tri - Glyceride	71 mg / dl	68 mg / dl	60 - 150	Minor Drop
Low Density Lipo Protein	65 mg / dl	62 mg / dl	60 - 130	Minor Drop
Very Low Density Lipo Protein	12 mg / dl	09 mg / dl	00 - 36	Minor Drop
High Density Lipo Protein	41 mg / dl	38 mg / dl	40 - 60	Minor Drop
S Bilirubin Total	0.4 mg / dl	0.3 mg / dl	0.1 - 1.2	Minor Drop
S Bilirubin Direct	0.1 mg / dl	0.1 mg / dl	< 0.3	No Change
S Bilirubin Indirect	0.4 mg / dl	0.3 mg / dl	0.1 – 1.0	Minor Drop
Aspartate Trans Amines (AST)	22 IU / L	19 IU / L	15 - 40	Minor Drop
Alanine Trans Amines (ALT)	21 IU / L	18 IU / L	15 - 40	Minor Drop
Creatine Phosphate K	7	5	M : 6 - 37	Minor Drop
CPK - Muscular / Brain	9	7	F : 5 - 27	Minor Drop
T - Protein	7 g / dl	5 g / dl	6 - 8	Minor Drop
Albumin	3.6 g / dl	3.2 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.9 g / dl	1.7 g / dl	1.7 - 3.2	Minor Drop
				N=21 Total Female=70 Total Subjects=150

The sixth set of data (Table – 6), presented below, pertains to 18 (out of 70) female subjects. It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S

Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. It is experiential that majority of the indices have registered minor drops. Question is whether the aged female entrepreneurs have heavy (surprising results!) resilience to absorb shocks in business. This is attempted in the general analysis.

Table – 6

FEMALE SUBJECTS (Aged : 55 - 70 Years) (ROUNDED - OFF AVERAGE RECORDINGS)				
INDEX	RESULT		NORMAL	OBSN
	NO STRESS	STRESSED	VALUE	DURING STRESS
Blood Sugar Fasting	47 mg / dl	46 mg / dl	60 - 100	Minor Drop
Blood Sugar Post - Prandial	78 mg / dl	76 mg / dl	< 140	Minor Drop
Blood Sugar Random	110 mg / dl	100 mg / dl	< 200	Minor Drop
Urea	14 mg / dl	13 mg / dl	15 – 40	Minor Drop
Creatine	0.4 mg / dl	0.3 mg / dl	0.5 – 1.0	Minor Drop
Sodium	115 mEq / L	113 mEq / L	130 - 145	Minor Drop
Potassium	3.1 mEq / L	3.0 mEq / L	3.5 – 5.0	Minor Drop
Lipid T - Cholesterol	78 mg / dl	75 mg / dl	< 200	Minor Drop
Lipid Tri - Glyceride	48 mg / dl	45 mg / dl	60 - 150	Minor Drop
Low Density Lipo Protein	56 mg / dl	54 mg / dl	60 - 130	Minor Drop
Very Low Density Lipo Protein	24 mg / dl	22 mg / dl	00 - 36	Minor Drop
High Density Lipo Protein	39 mg / dl	37 mg / dl	40 - 60	Minor Drop
S Bilirubin Total	0.3 mg / dl	0.2 mg / dl	0.1 - 1.2	Minor Drop
S Bilirubin Direct	0.1 mg / dl	0.1 mg / dl	< 0.3	No Change
S Bilirubin Indirect	0.3 mg / dl	0.2 mg / dl	0.1 – 1.0	Minor Drop
Aspartate Trans Amines (AST)	14 IU / L	12 IU / L	15 - 40	Minor Drop
Alanine Trans Amines (ALT)	13 IU / L	11 IU / L	15 - 40	Minor Drop
Creatine Phosphate K	5	4	M : 6 - 37	Minor Drop
CPK - Muscular / Brain	4	3	F : 5 - 27	Minor Drop
T - Protein	4.9 g / dl	4.7 g / dl	6 - 8	Minor Drop
Albumin	3.2 g / dl	3.0 g / dl	3.5 - 5.5	Minor Drop
Globulin	1.6 g / dl	1.4 g / dl	1.7 - 3.2	Minor Drop
				N=18 Total Female=70 Total Subjects=150

4.1. Observations and analysis

OBSERVATION - 1

Drastic Drop is experiential in Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein and Albumin. Minor drop is experiential Creatine, CPK - Muscular / Brain, T – Protein, Globulin, Albumin and Globulin. Question is whether the young male entrepreneurs have lack of 'perfect' resilience to absorb shocks in business.In such a case, entrepreneurs feel a state of tiredness, weariness, exhaustion, overtiredness, lethargy, sluggishness, lassitude, debility, enervation, listlessness, prostration, lack of energy, lack of vitality, tired, wear out, drain, make weary, weary, wash out, tax, overtax, overtire, jade, make sleepy.May be, the race against time to achieve targets leads to stress symptoms that affect body, thoughts, feelings and behavior.

OBSERVATION - 2

It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post - Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T - Cholesterol, Lipid Tri - Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. Question is whether the middle - aged male entrepreneurs have mixed - resilience to absorb shocks in business.It is assumed that the entrepreneurs have put in some appreciable quantum of business – experience. They are by now well - versed with the dynamics of business in a complex but informative world. The middle - aged entrepreneurs have nearly consolidated in their business and entrepreneurial activities. May be, earning profits is no longer the macro – aim but consolidation of business in the roller coaster series of profit – loss enables them to absorb the drop in glucose levels and their associated effects. Hence, minor drop, in the indices.

OBSERVATION – 3

It is experiential that in a state of normalcy, hematological indices are normal within the near - normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post - Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T - Cholesterol, Lipid Tri - Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T - Protein, Albumin and Globulin. It is experiential that majority of the indices have registered minor drops. Question is whether the aged male entrepreneurs have heavy resilience to absorb shocks in business. In such a scenario, either the entrepreneur is cruising in his business after a long – period of seasoned business acumen, or (s)he has adopted his off - springs to his business activities. Wealth, in any form, accumulation must have been ensured or assured by now. Business shocks are no longer a deterring factor.

Ethical framework becomes no longer a burdensome constraint. Emphasis is on ethical integrity of the individual entrepreneurial - actors. A spiritual sense of satiety has perhaps been achieved.

OBSERVATION – 4, 5 AND 6

It is experiential that in a state of normalcy, hematological indices are normal within the normal range. However, in a stressful condition, there is a drastic drop, as well as minor drop, in the indices like Blood Sugar Fasting, Blood Sugar Post – Prandial, Blood Sugar Random, Urea, Creatine, Sodium, Potassium, Lipid T – Cholesterol, Lipid Tri – Glyceride, Low Density Lipo Protein, Very Low Density Lipo Protein, S Bilirubin Total, S Bilirubin Direct, S Bilirubin Indirect, Aspartate Trans Amines (AST), Alanine Trans Amines (ALT), Creatine Phosphate K, CPK - Muscular / Brain, T – Protein, Albumin and Globulin. It is experiential that majority of the indices have registered mixed drops. In contrast to their male counterparts, females have registered mixed fluctuations indicating good levels of tolerance. It can be safely assumed that they can tolerate (or survive within) a certain range of a particular factor, but cannot survive if there is too much or too little of the factor. They perhaps subscribe to an allowable departure from a specification or standard, considered non-harmful to the functioning of a part, process, or product over its life cycle. They have the ability to withstand high levels of stress or overloading without suffering irreparable harm.

4. CONCLUSION

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.

To provide a fundamental basis for understanding decision-making and decision confidence, we 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 perceived that almost all the Hematological Monikers in the above table(s) reflect disturbing trends. Based on clinical tests(Satpathy, J. et. al.; 2018), it is inferred that; Decision making potential is bad when;

- Blood sugar fasting readings are perceived as ‘abnormal’.
- Blood sugar post - prandial readings are perceived as ‘abnormal’.
- Blood sugar random readings are perceived as ‘abnormal’.
- Urea readings are perceived as ‘abnormal’.

- Creatine readings are perceived as ‘abnormal’.
- Sodium readings are perceived as ‘abnormal’.
- Potassium readings are perceived as ‘abnormal’.
- S bilirubin direct readings are perceived as ‘abnormal’.
- S bilirubin indirect readings are perceived as ‘abnormal’.
- Aspartate trans amines AST readings are perceived as ‘abnormal’.
- Alanine trans amines alt readings are perceived as ‘abnormal’.
- Lipid T - cholesterol readings are perceived as ‘abnormal’.
- Lipid tri - glyceride readings are perceived as ‘abnormal’.
- Low-density lipo protein readings are perceived as ‘abnormal’.
- Very low-density lipo protein readings are perceived as ‘abnormal’.
- High density lipo protein readings are perceived as ‘abnormal’.
- S bilirubin total readings are perceived as ‘abnormal’.
- Creatine Phosphate K readings are perceived as ‘abnormal’.
- CPK - muscular / brain readings are perceived as ‘abnormal’.
- GGT readings are perceived as ‘abnormal’.
- T - Protein readings are perceived as ‘abnormal’.
- Albumin readings are perceived as ‘abnormal’.
- Globulin readings are perceived as ‘abnormal’.
- A: G ratio readings are perceived as ‘abnormal’.

REFERENCES

[1]. Jacob L. Orquin, A Meta-Analysis of Blood Glucose Effects on Human Decision Making, Psychological Bulletin, American Psychological Association, Vol. 142, No. 5,(2016),Pp: 546–567, USA.

[2]. Satpathy, J. and Mishra, B.P.,Review on Neuroentrepreneurial Decision Crescendos, Imperial Journal of Interdisciplinary Research (IJIR), Vol. 3, Issue 9, (2017), ISSN: 2454 - 1362, Pp: 65 - 115, UAE (International)

[3]. Satpathy, J. and Hejmadi, A.,*Subhashree P. and Mishra, S.,* Decision Monikers in Entrepreneurial Eyes, Proceedings of International Conference on Contemporary Issues in Business Innovation, Technology and Social Sciences, Gautam Buddha University, 01 - 02 June 2018, June 2018, Noida (UP), India (International).