



Connecting Thinkers...

Editors' Message



Every August we welcome a new batch of researchers to the Jain University Research Family. This year too, a small group of highly motivated researchers were selected to pursue their Ph.D. and M.Phil. This will be the first issue of THINKLET reaching all of them. A warm WELCOME and wish you all a successful, eventful and fulfilling research experience. For the new batch of research students, the first year is going to be a unique journey of discovery as you delve into the depths of course work. The enthusiasm and energy with which the researcher starts the journey is critical. This is what sustains them through the many highs and lows they would experience in the months and years ahead. Those who have gone through the grill would know that research often involves revisiting material studied and experiments conducted. One may return to books and journal articles several times to get a grasp of issues and draw new inferences. Though research is a never ending process, the researcher's interest and passion for the subject is what keeps them going. Carrying forward the thoughts presented in the last two editorials, at the start of this academic year, we wish you renewed enthusiasm, a greater passion for learning and a reassertion of a commitment to fulfilling your research goals. Strive for progress, perfection will naturally follow.

We would also like to welcome Ms. Purna Radhakrishna and Ms. Aparna Ramaswamy to our research team at CERSSE. Purna and Aparna are Research Assistants at the Centre and are also pursuing their M.Phil. in Psychology at Jain University. They are a part of the Thinklet editorial team as well and we look forward to working with them.

Activities

- Jain University and University of Bolton, U.K are entering into a Memorandum of Understanding on the theme of Positive Psychology. To formally announce the same, a 3-day event is being held from September 1st to 3rd. MoU signing will take place on the first day, followed by two special lectures by guests from University of Bolton- Dr. Jerome Carson and Ms. Chaturika Kannagara. On the second day, two workshops are being held for registered practitioners on 'Positive Mental Health'. The third day sees Ms. Chaturika addressing the students of Psychology department on a variety of topics related to positive psychology.
- School of Commerce Studies, Jain University is organizing a Faculty Development Programme on 3rd September 2015 for all commerce lecturers to get insights about what is largely changing from an academic delivery point of view. The lecture also focuses on enabling one to continuously update self with the available web resources.
- IJAEM, Jain University and SIATI is organising a 3 day short course on "Aerospace Materials" from 10th to 12th September 2015. The course covers conventional advanced materials used in Aerospace structures as well as Aerospace engines.

Inside the Issue

<i>Guide's Column</i>	2
<i>Article by Deepti S.</i>	3
<i>Article by Madhavi R.</i>	3
<i>Article by Dr. Swarlipi Nandi</i>	4
<i>Article by Dr. Srividya Shivakumar</i>	4
<i>Article by Dr. Uma Warriar</i>	5
<i>Article by Janardhan G. Shetty</i>	5
<i>Recent Projects by CET</i>	6
<i>Report on Inaugural Meet of Research Scholars 2015</i>	6
<i>Notification of Ph.D. Awards</i>	7
<i>Ph.D. Comic</i>	7

GUIDE'S COLUMN

RESEARCH ON MENTAL HEALTH

The concept of mental health was earlier linked to merely the absence of mental illness. The focus was to work within a disease model which involved discovering deficits in human behavior and finding ways to repair this damage. This definition has been transformed today to something beyond illness. According to the WHO, "mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." In this context, a key factor that emerges is our ability to enjoy our life by seeking meaning in our life experiences. Martin Seligman who is considered to be a pioneer researcher in positive psychology, arrives at a conclusion that happiness has three dimensions that can be cultivated: the Pleasant Life, the Good Life, and the Meaningful Life. Pleasure is the "feel good" part of happiness. Engagement refers to living a life that is connected to one's work, family, friends and hobbies. Meaning refers to the deep sense of fulfillment by living for a purpose greater than oneself. The three lives are not completely contradictory, and a balanced life can contain elements of all the three. However, of all the three, engagement and meaning are most important to stay happy.

Research on happiness has highlighted some interesting data:

1. Researchers like Sonja Lyubomirsk have identified three basic sources of happiness- Genetics including temperament and personality; Life circumstances like wealth and health and finally our own choices. About 50% of our happiness is preset by our genes, 10% by life circumstances. Almost 40% of our happiness level is determined by our own choices and actions. That means that we can work towards feeling happier.
2. Externalizing happiness does not necessarily help us. In other words, we often tell ourselves, "I will be happy when.....". Waiting for events to happen or goals to be fulfilled and then associating it with happiness is counterproductive. Happier people are the ones who tend to enjoy the journey and not just wait for the destination.
3. The happiest people are the individuals who are engaged with others and least wrapped up in their own problems. Happy people are more likely to express positive emotions like gratitude, altruism and forgiveness. This is connected to the importance of staying engaged meaningfully with people and issues close to our heart.
4. It has been found that older people report higher levels of happiness than young adults. This interesting phenomenon is linked to the fact that as people grow older they tend to experience less negative emotions that are also less intense. This, is also dependent on the external circumstances influencing the individual.
5. There is an interesting connection between money and happiness. Having enough income to meet the basic needs is important to feel happy. Beyond that, however research suggests that more wealth does not automatically increase the perception of happiness.

Ed Diener's words can summarize it all, "... happiness is not just a place, but also a process....happiness is an ongoing process of fresh challenges, and...it takes the right attitudes and activities to continue to be happy". In this context, Jain University in collaboration with University of Bolton, is launching a project to understand the cross-cultural conceptualization of happiness. The formal launch of the project is slated for the first of September.

Dr. Shailaja Shastri

Head of Department and Research Guide in Psychology

Email: shaila.s2003@gmail.com

Identity Research in Psychology

If there is one topic that has dominated Social Science research by being present in almost all of its domains, it's the concept of Identity. It has been a concept discussed from almost primordial times. From Philosophy to Psychology, domains have been working towards the understanding of the term 'Identity' from various perspectives. In the current article, the psychological explorations on the topic are being elucidated. Identity-especially the social aspects of the concept are one component which has been explored in detail in the field of Social Psychology. Since experimental studies are a major method used in Social Psychology, a lot of field experiments have been conducted to help understand the concept from a psychological perspective. Initially, research in this area concentrated on understanding the two aspects of Identity- Personal and Social. Next, it attempted to understand the definition of these two facets of identity. Deriving from that, experiments were conducted to understand how particular or specific identities influenced people to make biased decisions on behalf of their own groups in spite of not having met members of their group at all. Most notable researchers in the area include the pioneers Henri Tajfel and John Turner. Now the focus of research has shifted towards understanding the application value of understanding identities- including in the areas of Gerontology, Medicine, Mental Health and Political Science. My own doctoral study focuses on understanding commitment towards sub-identities and then taking it further to apply it for the individuals themselves.

From Philosophy to Psychology, domains have been working towards the understanding of the term 'Identity' from various perspectives

*Deepti S.
Doctoral Student in Psychology and Lecturer, Dept of Psychology
Email: deeptiswamy.8911@gmail.com*

The 'Operational Definition' Journey

We all, as researchers, have faced challenges. One such area is giving the operational definition. When the same word can mean many things in many ways, how does one zero down on a definition that's most appropriate to one's work's needs? Any standard term would have received considerable attention and would have gained a crystallised meaning in the academic and research world. For example, the term 'Productivity' or 'Emotional Intelligence' are all understood similarly across academia. For my research, I had to come out with an operational definition for 'Spirituality'. This felt like stepping into the unknown. Why? Because it does not have a common or standardised definition accepted across the research world.

When the same word can mean many things in many ways, how does one zero down on a definition that's most appropriate to one's work's needs

I spoke to a few psychology friends and students and all were impressed with the element of Spirituality applied in management. All were happy to know that Spirituality is a key element in my research. Yet, no word on definition. So, my Ph.D co-guide Dr. Shailaja Shastri came to my rescue and suggested I conduct in-depth interviews of academicians on the concept from different disciplines. Finally voila, I had it ready for my synopsis presentation.

Though it required some extra work on my part, the learning experience is something I cherish. The responses and facial expressions of the respondents was worth looking at. People mostly paused and then smiled before responding. It was a journey that began with ambiguity and ended with clarity, which will now be the foundation stone to take my work ahead!

*Madhavi R
Ph.D Scholar in Commerce and Faculty, Dept of Commerce
Email: madhu4ratna@gmail.com*

My Research Interests

I specialize in postcolonial literatures and theory, with particular emphasis on postcolonialism in the context of contemporary globalization. My research engages with the cultural as well as the socio-economic materialist aspects of globalization within the context of the postcolonial nation state and the diaspora, and studies the way these issues get thematized in the new genre of what Hamid Mohsin calls as “the post-postcolonial literature”. My PhD dissertation studied the representation of economic globalization in the new postcolonial literatures, mainly through a close reading of contemporary Indian Anglophone novels. Exploring the concepts of post-globalization nationhood, gender anxieties, environmental activism, and urban restructuring in the context of global capitalism, I analyze how the novels address the complex material and cultural effects of globalization on the lives of the socio-economic and gendered marginalities in the postcolonial nations and diasporas of South Asia. I am currently working on an interdisciplinary project titled that aims to study notions of race, transnational identities and “affective cosmopolitanism” in contemporary literary (and cinematic) narratives that recount the migrant experience of South Asian undocumented aliens, working class migrants and laborers in low wage jobs in various global economic centers of the US, Europe, Asia and the oil rich Middle East. Apart from my primary research areas, my scholarly interests range widely from areas in Comparative Literature and Translation Studies, Film Studies, Science Fiction, Critical pedagogy and Travel writing.

My research engages with the cultural as well as the socio-economic materialist aspects of globalization within the context of the postcolonial nation state and the diaspora.

*Dr. Swaralipi Nandi
Assistant Professor and Research Guide in English
Email: swaralipin@gmail.com*

Research in Microbiology: Industrial Applications of Microbial Metabolites

My research interests at CPGS are aimed at industrial applications of microbial metabolites and endeavor to produce products that can be commercialized. Currently six Ph.D. scholars and one M.Phil. student are pursuing their research in this domain. Gulshan Khaliq is working on microbial amylases for textile desizing and has identified a suitable bacterial strain with constitutive and calcium independent amylase harboring effective desizing capacity at lower temperatures and shorter time (55°C and 20 minutes) as

Research at CPGS is aimed at industrial applications of microbial metabolites and endeavor to produce products that can be commercialized.

against the currently available amylases (90°C, 60-90 minutes) in successfully meeting the requirement of textile industry. A national Patent has been filed in this regard. Neetu Israni and Vaishnavi Gowda are exploring cost effective measures to produce microbial bioplastics, viz. Polyhydroxyalkanoates (PHAs), which are currently the most attractive alternatives to petrochemically derived recalcitrant plastics. Chaynika Prakash and Meena Ravuri's study involve production of Lovastatin, an anti-cholesterol

drug from soil and endophytic fungi. They attempt to optimize the growth and nutrition conditions for maximizing the lovastatin yield from the selected fungi. Jyoti Williams is developing a microbial consortia for the effective biocontrol of certain fungal phytopathogens causing damping-off disease in Brassicaceae family. She has developed a consortia based on the compatibility of the microbial strains with multifarious plant growth promoting traits and efficient antagonistic potential. Some of the above research has resulted in publications in peer reviewed National and International journals and presentations in various National and International conferences. The work on microbial amylases has been filed for Indian and Sri Lankan patent.

*Dr. Srividya Shivakumar
Professor and Research Guide in Biotechnology
Email: sk.srividya@jainuniversity.ac.in*

Research Linking Human Resources Management to Psychology

At Jain University, research in the field of contemporary areas is always encouraged, keeping in mind the industry/relevant social sector needs. My experience of guiding research at Jain University has shown that the identification of research topic is not purely based on applicability of the study but also the feasibility of study, coupled with research rigor and aptitude of the researcher. Given the domain I work in, linking research on Human Resources Management and Industrial Psychology will be the focus of attention over the next quarter century. Owing to the fact that Human Resources Management (HRM) and Psychology intertwine in many of

Successful organizations use predictive HR analytics to combat the organizational challenges arising out of high attrition, managing multi generation workforce, need for expatriate assignments, urgent hiring targets and the like.

the functional areas of HRM, be it recruitment, selection, training, performance appraisal and, most importantly employee retention, this research domain assumes added significance. Successful organizations use predictive HR analytics to combat the organizational challenges arising out of high attrition, managing multi generation workforce, need for expatriate assignments, urgent hiring targets and the like. The use of psychometric tools along with other employee selection tools has become the norm of the day.

Emotional Intelligence is another emerging field of study which has been the focus of my own doctoral work. We at Jain University are exploring the possibility of research in the field of Emotional Intelligence at campus and corporate level for factoring attributes which are essential for academics as well as at the workplace. We intend to develop a scale of Emotional Intelligence which could be standardized and can be used extensively in Indian college campuses to understand the Emotional Intelligence level of students. Some of the M.Phil and Ph.D students selected as part of the August 2015 batch, intend to do research in personality, emotional intelligence and other allied areas which draw input from human resource management and industrial psychology.

*Dr. Uma Warriar
Faculty and Research Guide in Management
Email: warriar.uma@gmail.com*

Trust in Health Care

Trust is an essential attribute in health care. The person who is sick seeks the help of the health care provider to heal their illness. This treatment seeking behaviour entails a level of trust in the provider. The patient places utmost trust in the provider that they will do the best according to their knowledge and ability to help them heal. Health care involves a certain amount of vulnerability and uncertainty. Trust in health care is usually defined as a set of expectations that the patient has from the doctor and the health

Trust in health care is usually defined as a set of expectations that the patient has from the doctor and the health care system to help them heal.

care system to help them heal. This set of expectations includes appropriate and accurate diagnosis, economical and correct treatment, non-exploitation, and genuine interest in the welfare of the patient, involvement of patient in healthcare management and transparent disclosure of all information. Thus trust is like a forward looking covenant and agreement between the doctor and the patient. Several scholars have tried to describe the dimensions

of trust in physician, trust in health facilities, trust in health insurers etc. In an elegant summary of the dimensions of trust in health care Hall et al, describe fidelity, competence, honesty, confidentiality and global trust.

Fidelity has been described as respect to the patients' agency as a person and keeping the welfare of the patient in mind at all stages of the doctor-patient interaction. Competence in diagnosis and treatment has been emphasized as essential for trust building. Being honest and transparent and maintaining confidentiality of the patient information has also been described as dimensions of trust. Global trust is the umbrella term for the aspect of trust which cannot be classified into any of these dimensions. It is intended to capture to holistic aspect of trust which cannot be described by the above mentioned dimensions.

*Janardhan G. Shetty
Ph.D Student in Management
Email: janardhanshetty@gmail.com*

Recent Research Projects taken up by Centre for Emerging Technology (CET)

Developing a Biodegradable and Inexpensive Mask for Filtering Particulate Matter in the Environment

Exposure to the environment is reported to lead to several diseases including asthma in young children to senior citizens. Therefore, there is a need to design and develop new masks that are biodegradable, inexpensive and efficient in filtering particulate matter. Developing such a mask will immensely benefit the public especially those exposed to vehicular emissions and working in polluted areas. Wearing the mask could reduce or eliminate the particulate matter entering the body and therefore provide immediate health benefits. In addition, the masks developed in this project will be biodegradable and reduce the burden on the environment.

Compatibility Pongamiapinnata biodiesel and its diesel blends on Elastomeric Materials

Determining the degradation of elastomers in biodiesel & biodiesel blends by mass loss method Static immersion test for storage and rotating cage to simulate pipeline flow under laboratory condition and analysing the surface morphology through Optical microscope, Scanning electron. This project is proposed to study the corrosivity of Pongamiapinnata biodiesel and its different blends with commercial diesel on elastomers which are used in automobile engine parts.

Identifying Unique Properties of Proteins in non-edible oil meals.

Meals obtained as co-products during production of oil from non-edible seeds such as neem, Jatropha and pongamia contain high amounts of proteins that may have unique properties. Currently, oil meals obtained from non-edible seeds do not have industrial uses and are disposed as fertilizer at low cost. In this project, proteins were extracted from different types of non-edible oil seed meals and develop films from the proteins. Films formed will be used to evaluate the antibacterial, antimicrobial and anti cancer properties using standard techniques.

Production of Fatty Acid Methyl Ester from non-edible Oilseeds using different techniques- A comparison.

There has been no work carried out on the comparison of these methods for better understanding on biodiesel production. The aim of this project is to significantly increase the production capacity and product quality while reducing cost and human interaction. Hence the present project is proposed to produce biodiesel from available non edible oil seed by conventional transesterification process, ultrasonic and microwave processes.

Inaugural Meet for the M.Phil. and Ph.D. Scholars of August 2015 Batch

The inaugural function for the M.Phil. and Ph.D programmes for the batch of 2015 was held on 27th August 2015 at the Knowledge Campus in Jayanagar. 45 students for Ph.D. and 30 Students for M.Phil. have joined the University this year. Dr. Sandeep Shastri, Pro Vice Chancellor of the University welcomed all present to the function and introduced the dignitaries who had graced the meet. The President of the Jain Trust, Dr. Chenraj Roychand delivered the inaugural lecture in which he stressed on the need to pursue research as a passion. He highlighted the importance of prioritizing research in our schedules and felt that proper planning of activities would allow every researcher to do justice to their professional and personal commitments. Dr. N. Sundararajan in his Presidential remarks shared motivational stories and personal experiences. The vote of thanks was given by Dr. Mythili P. Rao, Dean of Languages and Coordinator of the Research Programme. Classes for the new batch will commence on 4th September 2015.

Notification of the Ph.D. Awards

Five Scholars were awarded the Doctoral degree last month in Jain University. The names and the topics of study are as follows:

- *Muzzamil Ahamed S.* in the subject of Mechanical Engineering on “Experimental investigations of chilled & alloyed cast Iron”.
- *Mallikarjunaswamy S.* in the subject of Electrical and Electronics Engineering on “Design of High Speed Re-configurable Co-Processor for Next Generation Communication Platform”.
- *Lakshmikanth S.* in the subject of Electrical and Electronics Engineering on “A Novel Approach for Noise Cancellation In Industrial Environment”.
- *D. Maheshkumar* in the subject of Electrical Engineering on “Assessment of Autonomic Nervous System by Analysis of Heart Rate Variability (HRV) for Various Addictive and Life Style Modifying Disorders”.
- *Mahesh K.* in the subject of Computer Science Engineering on “Intelligent Schemes for Wind Data Analysis”.

Congratulations to all the scholars. All the best for your future endeavors.

I have no special talent. I am only passionately curious.

- Albert Einstein



Team Thinklet

Chief Editors: Dr. Mythili Rao and Dr. Reetika Syal
Editorial Team: Perna Radhakrishna and Aparna Ramaswamy

ARTICLES FOR NEXT ISSUE SHOULD BE
SENT BY
**September 20, 2015 WITH NOT MORE THAN
250 WORDS**

Phone: 080 23545246/48

Mail articles to: thinklet@jainuniversity.ac.in