

Psychological Barriers Playing Key Role in Impinging Research Excellence

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Psychological comfort and peace of mind play a significant role in research excellence. Although the world is divided into various continents and countries, research and technologies are shared widely in the world and somewhere connect each part on a common platform. Technologists and researchers globally face many difficulties and challenges in pursuit of excellence. A few leave the journey midway, and a few continue the marathon till the end. Sustainability of research is a phenomenon worthy of our attention, and this article focuses on various issues that are impinging research excellence.

Keywords: Research; Psychological barriers; Innovations; Publications

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The word ‘research’ has been derived from the old French word “recherche”, meaning quest, pursuit, and search for truth. In today’s scenario, researchers all over the world are aggressively engaged in research and publications. The publication platform has been vastly available to the researchers and scientists. Most of the latest innovations and inventions in science are the product of hard work and day-and-night efforts of the researchers and technologists. However, the pace at which new innovations are occurring might be just 40% of what is possible based on the available resources and their optimized utilization. There are many psychological pressures that are deep-seated in the minds of researchers, wherever they may be. Researchers all around the globe face many challenges in the marathon of their research, such as timely publication of work, availability of funds and resources, appropriate guidance, interaction and support during failures, and many more. This editorial tries to address some of these issues.

Lack of scientific training before initiating the research is a giant barrier that causes hindrance in achieving excellence in the research. Most researchers join a research effort without getting well equipped with the required understanding and knowledge related to the research area. Such deficiencies become evident while handling instruments, data analysis, and applying optimization tools. These problems not only delay the results, but the authenticity of the work also comes under check. Right and well established scientific expression of research findings is a mandatory tool with which each researcher should be well trained.

‘Publish or perish’ is a globally accepted phrase in the journey of research. Researchers face many difficulties in achieving this goal. Currently the publication of research papers in peer reviewed / indexed/ impact factor carrying journals is a major challenge faced by a researcher. Any innovations carried out in laboratories need to be shared widely in the world for better applicability and implementations. The long and vigorous process of peer review not only de-motivates the researchers, but the lethargy in

the review process further worsens the conditions. The delayed process opens a chance where the novelty of the work can be lost.

Unavailability of required funds and resources are such issues faced by every laboratory in the world. The allocation of funds and budgeting as per the requirements and meeting all the needs is a very cumbersome activity. Shortage of resources in terms of chemicals, analytical instruments, and various technical supports are major interferences. A major portion of time and attention of a researcher is lost while they are busy in arranging such resources.

Timely interaction, guidance, and support are certain key soft skills that are always needed by a researcher from his/her mentor. A disciplined code of conduct is needed in research. There is an urgent need to blow off the psychological pressure being carried out by researchers in terms of experimental failures, publication rejections or revisions, as well as delayed outcomes. Each researcher must devote effort to maintain correct expression, to remain confident, to sustain a patient approach, and to develop appropriate writing skills. The mentor needs to be very observant and skilled to extract the best out of the researcher. Harmony between the work and comfort has to be built up.

The issues and concerns addressed above are a few of the difficulties that need to rise to the surface for attention, as well as appropriate solutions. The publication process is required to be squeezed short for timely publication and sharing novelties with the world. Proper formulation of a problem prior to the initiation of research and designing of certain study modules and technical training of researcher not only will help the researcher to work in a better way, but also the outcomes will be more authentic. Budgeting and sanctioning of grants in a timely manner will be helpful in gathering and managing the resources. The availability of alternate sources and back up technical support in terms of analytical instruments will further flatten the challenge. Research is a very poised phenomenon that requires guidance. The facilitation of outcomes in a favorable direction will be helpful as worldwide researchers work to sail the ship of science and technology towards a better and more comfortable horizon.