

Outer and Inner Challenges in context of COVID-19

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A matter of concern for school psychology is to empower meet the challenges of students in view of current and future challenges, such as the COVID-19 pandemic. Children are a great asset of a nation, two extreme groups need special attention, those who are gifted and those who are suffering major loss. The school psychologist must apprise the students about motivational avenues that are open for them to keep their interests alive, in addition to caring for their well-being. In this direction, the initiatives towards human resource development in cognitive science in India is a historic turn. There are also some other significant motivational programs for students in sciences and biotechnology. Besides this, these frontier areas have some unforeseen transformational potential in social and psychological realms.

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The 'rapid and ruthless' COVID-19 pandemic has left behind thousands of orphaned children in every nation (Hillis et al. 2021a, b). These children are likely to suffer from long-lasting pain of separation, an inner challenge, but along with this the outer challenges of mitigating the lethal pathogen involve multiple strategies. In this direction, the Indian School Psychology Association (InSPA) has also a special role being a national body focusing on the mental health and well-being of students in schools (Ramalingam, 2021). We believe that communities, especially in the villages, need to develop ways for maintaining cordial relations within and between the families. An assertion which is again and again underlined in a recent document on the future of orphaned children left after two waves of COVID-19 pandemic (Hillis et al. 2021b).

The COVID-19 pandemic is continuing though (Vaidyanathan, 2021), nations globally have adopted win-win strategy to meet its challenge. The cautionary phrase of Prime Minister Narendra Modi 'do gaz ki doori' or social distancing must become automatic mode in our minds. It is a prompt for self and others' safety. A new way of life with outer and inner empowerment is vital to mitigate the challenge of

lethal virus varying its forms (Editorial, 2022). As soon as scientists develop a vaccine to combat the lethal antigens, a new form of virus emerges.

Variations occurring in the virus (SARS-CoV-2) that has taken a toll on human lives all over the world are a matter of immediate concern (Van Kerkhove, 2021; Dolgin, 2022). We need to convey this information to students in school and apprise men and women in the countryside.

The pathogen SARS-CoV-2, which causes COVID-19, enters into our cells in disguise as there is a protective wall of immune system on the cell surface. The vaccine generates squadrons of soldiers, the antibodies, to kill the disguised enemies, the antigens of lethal pathogen seeking entry into the cell. In this way we are protected by the vaccine. When new form of virus emerges, it produces a new antigen for its entry into cells in disguised form. In this way a third, and then fourth form emerges. Scientists have showed this for SARS-CoV-2 causing COVID-19 pandemic. There are several variants though, the variants of concern are delta and omicron (Van Kerkhove, 2021; Dolgin, 2022).

The next section summarises the strides India has taken to combat COVID-19 pandemic,

and its vision to develop human resource in the area by attracting talented students. It is indeed the 'Make in India' vision to care for masses in meeting inner and outer challenges.

Outer challenge

As we have noted above the "rapid and ruthless" COVID-19 pandemic needed a goal-oriented win-win strategy. The challenge required a goal-oriented effort of unforeseen measures, and multiple dimensions, such as, the political will and determination to take a lead, the financial outlay, the gearing up of scientific machinery, and the immense coordination between public health, the public administration, and provision of essential commodities. There was an urgent need to develop a vaccine to neutralize the effect of the virus causing COVID-19 in a set time.

It is, here, that we saw the chasm between developed and the developing world abridging to a very large extent, the vaccine in India came in the public domain as early as in the developed countries. Even the target of vaccinating people in the vast country was achieved earlier than the expectation of the developed world. When there was a total lockdown in the country, some determined action was going on among and between the groups of scientists and administrators to develop vaccines in India, with her own know-how and meeting the international standards, in the shortest possible time. The negotiations with the pharmaceutical industries to produce the vaccine for marketing were also on the way. Above all, Rs.900 crore Covid Suraksha Fund to develop vaccines was allocated, which is crossing well over Rs.2000 crore now.

This coordinated effort was quietly going on under the supervision of Dr. Renu Swarup, a scientist and administrator heading the Department of Science and Technology (Mordani, 2020). In her interview Dr. Renu Swarup clarified that the Prime Minister Narendra Modi has made it very clear that the indigenous vaccines would not only be for India's self-sufficiency, but available for other countries too. The miracle has taken place is not a hidden fact. Half a year later, in another interview (ANI, 2021), Dr.

Renu Swarup said with far greater confidence that India has now a robust 100% ecosystem to take up the challenge of the variants of virus causing COVID-19. With this background, one can see the emergence of a small facility at the Department of Biotechnology as a saviour and playing a crucial role in mitigating the challenge of COVID-19 pandemic. This small facility is BIRAC, the Biotechnology Industry Research Assistance Council (www.birac.nic.in).

As far as school psychology is concerned, a new initiative of the BIRAC, the E-YUVA Fellowships, is an important way to empower students in the schools. It has immense potential to empower teachers also, as it is translational research. In other words, it is an application of knowledge for advancement of basic research to applied or clinical research. In a college or other institution, five undergraduate students can form a team under a mentor and pursue their ideas towards inventions. There can be five such teams at one place. In the first trial there is call for 250 E-YUVA proposals. This initiative of BIRAC can be seen as motivational intervention.

It is not the first attempt of the Department of Science and Technology (DST; www.dbtindia.gov.in), towards 'Make in India' vision to help the students in schools. A previous initiative was INSPIRE (Innovation in Science Pursuit for Inspired Research), which began in 2008. This initiative has fellowships to attract young students from intermediate level (12th pass) so that they can pursue their education up to Ph.D, and then support for career is also provided (there are INSPIRE awards from early school level also). The idea behind INSPIRE is to attract talented students and inculcate creative pursuit of science.

The Cognitive Science Research Initiative (CSRI) of the Department of Science and Technology is a platform for scientific community in India to take up the challenges of cognitive disorders and social issues. Researchers can take multi-centric mega-projects. The other programs in this initiative are to develop human resource in cognitive science. It was initiated in 2008 to study human mind and brain. How

mind represents and manipulates knowledge, and the processes through which it is realised in the brain. The programs can even begin in schools. As far as psychology is concerned, an inquisitive scholar may find basic ideas in the two state of art reports on cognitive science by Dr. Narayanan Srinivasan, a leading researcher in cognitive science in India (Srinivasan, 2011; 2019).

We conclude with a comment from the great visionary and pioneer of cognitive science Jerome S. Bruner, that the task of growing human mind belongs to “the whole intellectual community: the behavioural scientists and the artists, scientists, and scholars who are the custodians of skill, taste, and knowledge in our culture” (Bruner, 1965). His advice to psychologists is even more important, they have the special task of transforming every skill and knowledge so that it fits to growing minds. Growth mindset is a new paradigm in present times in school psychology. Dr. Barbara Hanfstingl from Austria delivered a Keynote Address, in the 11th InSPA international conference (6-8 January 2022).

The incubation paradigm of the Ministry of Science and Technology, Government of India, through the facility such as BIRAC, nicely fits into action research. The first provides a space to a researcher already engaged in exploring application of an idea into real life problem solving, the latter is however a part of real-life situation, to transform it for better output or improved functioning. Every researcher after incubation phase can engage in action research so that the prospects of the new product can be assessed. For example, once the vaccine is ready in the laboratory, it can be tested for various aspects on human subjects suffering from the disease.

There are many situations where the personnel working in organisations develop intuitions to change the functioning of the organisation for better output. If there is flexibility in the organisation, for example the schools, the teachers can introduce changes, and assess its outcome. The Indian School Psychology

Association (InSPA) has been engaged in such programs in the schools. One such international collaboration with the Austrian psychologists has been fruitful in term of apprising the teachers in India about the idea of action research, its methods and philosophy behind it (Ramalingam & Hanfstingl, 2018).

The outer challenge is similar for all children, for example, due to various kinds of restrictions. This makes the help of school psychologist more imperative in the schools and colleges. This challenge before the school administration due to COVID-19 pandemic restrictions became more serious due to lack of preparation for such disastrous changes in the school ecosystem. Students and teachers, including the families, have somehow learned to cope up with the changed scenario, the achievement of students cannot be called satisfactory.

Inner challenge

School Psychology is a system of psychological services for schools and a distinct discipline within psychology. The range of psychological services provided by school psychologist is very broad (Ramalingam, 2021). Therefore, increasing the competencies of the school psychologist, to ease out the problems of children, and to nurture character strengths in children, are matters of concern. The school administration desperately seeks out psychological services during these times of COVID-19 pandemic for various unforeseen problems impairing the performance of students shut inside homes. We look at these critical challenges as opportunities to make a difference by playing creative role for better future. The professional development programmes are vital to meet the challenges that educational institutions are facing. Some of these challenges can be met by means of effective coping strategies which are within the scope of school psychology services.

In this scenario Indian School Psychology Association (InSPA) appears to break the ice in multiple ways. One of the basic issues has been to apprise masses about the aims and objectives of InSPA. It has been achieved with

the translation of the volume entitled “School Psychology in the Indian Context” by InSPA President Panch. Ramalingam (2021) in Indian languages. The Vice-President of India Shri M. Venkaiah Naidu appreciated the focus of this volume, the ‘mental health and well-being’ of school students. Above all, the task was achieved in difficult times when the COVID-19 pandemic has disrupted life. Besides this, the InSPA with its meagre resources took initiative to hold its 11th international conference with a focus on the global challenges, including COVID-19 pandemic, for school children and their families.

Keeping in view the above scenario, and especially the threat of COVID-19, the schools and colleges need empowerment. Among several other things, the presence of school psychologists is almost a necessity today. It is in this context that the theme of the 2022 international conference of InSPA is “Meeting the Challenge of COVID-19 in Schools: Current and Future Well-being”. The Conference will not only be a platform to share the latest psychological practices and innovations among the participants, but the greater aim is also to document them to apprise the policy makers for necessary modifications in the existing frameworks to build open, integrative, and vibrant school psychology services.

Inner realms of loss. We have referred in the beginning about the inner challenge for orphaned students of various ages suffering loss of their parents, grandparents, and other care takers during COVID-19 pandemic. The talented students also suffered during the pandemic but their problems are largely due to lack of opportunities for fulfilling their inner urge for knowledge.

The tragic experiences early in life such as loss of loved one are not rare (Keyes et al. 2014) though, the ‘rapid and ruthless’ COVID-19 pandemic has left behind thousands of orphaned children in every nation (Hillis et al. 2021a, b). It requires mammoth global effort to support these children. Our focus however here is on some psychological aspects related to such tragedy.

We know that the World War II left behind broken families and orphaned children. The attachment theory (Bowlby, 1969, 1973, 1980) evolved mainly from research on, and rehabilitation of, these children. In this context, it is useful to explore self-other relationships involving loss of loved one where transformations in emotional states ensue in a grieving person. No doubt these are mainly negative, but positive changes do occur due to human cognitive endurance, and support from community. Our proposition is that the separation from the loved object can be source of immense psychic energy for creative work (Pirta, 2020; Pirta & Ramalingam, 2021).

The immediate need however is to apprise the State level authorities through school administration about such orphaned children (Anonymous, 2022). There is an ambitious PM Cares for Children scheme in place for those orphaned by COVID-19. The children who have lost their parents, is entitled to monthly stipend, free education, health insurance and some other benefits. This basic support would go a long way in healing the pain of separation and anguish.

We believe that the memories of loss keep on igniting a fire of separation inside the person who has lost the loved one. If one can avoid a tilt toward gloom, the fire of separation can be a source of psychic energy for creative purposes. In words of Csikszentmihalyi (1990) this is an ability to turn misery into fortune. Many children face harsh struggles in day-to-day life. The self-other relations are distorted through discriminations perpetuated culturally. A child has no means to defeat the perpetrators of the miseries, the family instils hope. In this regard we should not forget building character strength (Seligman, 2011) of schoolchildren as a primary step. An insight in this direction comes from the remedial steps for dropout problem in schools in the developed world. One of the pioneer research papers on this issue suggests that a child must sacrifice short-time pleasure for long-term gain by self-discipline (Duckworth & Seligman, 2005). Passion and perseverance, the grit, is a common denominator of high achievers was the finding of Angela Duckworth. She has a GRIT Lab for cultivating it.

To summarise, we believe that family is in fact a primary social institution for building character strengths, and InSPA may start this initiative in schools. In addition to meet the COVID-19 challenge in schools it may be easy to initiate some programs that are directed at building character strength and grit among children and youth including the families. On this basis our suggestion is as follows. The Flourish by Seligman (2011) is a wonderful companion on it. Additionally, the children may have some initial training in breathing through Yoga. Mindfulness is now a popular way to deal with feelings of gloom (for more all-inclusive training one may consider Segal, Williams, and Teasdale, 2013), and to harmonizing it by the maternal feeling of compassion (the Bodhichitta: Ribur, 2010; Epstein, 2014). These are ways of hope. As the SARS-CoV-2 is here to stay (Editorial, 2022), we must evolve ways to adapt to it.

The molecule of unity

There are however a few notes, coming out of biotechnology arena, which make us ponder upon as they have transformative potential for social and psychological sciences. Therefore, a cursory look on this issue is not out of order as they are often a matter of concern for teachers inside classrooms. The issue pertains to recent information coming from ancient DNA (aDNA) studies on ancestry of populations in different parts of the world including India.

A well-known historian writes, "Nations need identities. These are created from perceptions of how societies have evolved. In this, history plays a central role." (Thapar, 2014. p. 305) On the other hand, it is a common observation that self of the individual develops its identity in intricate ways that has individual and social dimensions. Groups also develop their identities. Both, the individual and the group, not only involve cultural and historical aspects, but strong psychological underpinnings also (Pirta, 2019). We feel hurt on derision of our individual or group identity.

How important questions about our origins and identities are can be judged from three publications: biology (Reich, 2018), journalism (Joseph, 2018), and history (Thapar, Witzel,

Menon, Friese & Khan, 2019). The common issue being the origins and identities of different populations as belonging to Aryan descent, the ancient DNA analysis has put question mark on these notions.

Essentially it is analyses of DNA samples taken from human specimens unearthed by archaeologists from different parts of world. This new technique is considered more accurate in estimating time on one hand and suggesting genetic relationships with living populations on the other. Thus, we get an 'accurate' idea of age and movements of populations. The problem was stated by David Reich, a biologist specialist in this technique, as follows. "Since the original excavations at Harappa, the "Aryan invasion theory" has been seized on by nationalists in both Europe and India, which makes the idea difficult to discuss in objective way." (Reich, 2018, p. 125) These analyses of aDNA trace a common origin of Ancestral North Indians to Urals in Central Asia in genetic allele 'R1a'.

The temptation to read much from genotype in the phenotype (replacing 'R1a' (genetic allele) by 'the Aryans') using a historical landscape (e.g., Joseph, 2018) is likely to be risky, as has been the case earlier. The 'labels', once assigned to objects and concepts, acquire physiological attributes at individual level, and involve the group in strange ways. The psychological aspects undermined by historians (see Thapar et al., 2019). These symbols begin to control centres of emotion and cognition. The words start playing a significant role in mobilizing the minds of people. These are important transformations in the social and psychological domain having origins in biotechnology domain.

The social and spiritual self of a scientist also feels that today "One can get heart cells to beat in culture or create an organ in the test tube or change one bacterium to another by incorporating even synthetic DNA with information from the latter. All these would not qualify as 'infusing life' into the target as we understand it and it is a mystery." (Padmanaban, 2018; p. 122). To conclude, the note that we all have the same DNA in India, the caste and

racial hatred must end (Anonymous, 2021), is enormously reassuring.

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