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EDITORIAL

Friends,

With a very heavy load of several decades of teaching experience I am writing all this on the basis of my personal experience. I may state that even today I do teaching work –teaching very small children of the deprived society coming from the families of maids, chowkidars street vendors, rickshaw pullers etc. What pains me is the standard of their attainment. I know that their parents bring them to us knowing fully well that we run our classes in abject pitiable conditions - under the canopy of heavens, totally at the mercy of the natural elements. If there is a shower, then we cannot meet, if the ground has been given the water by the gardener (Mali) then we are again unable to meet. The street dogs also saunter near our classes. The situation becomes dangerous when the bitches have littered because they always fear that the small children are going to harm their cubs and the vice versa is equally true because our small children fearing the dogs and bitches do all sorts of mischief (so natural with them) and we suspend classes. Still our institution attracts the parents of these children.

Now let me refer to the real and stark plight of our primary education. It is heart rending and shameful. Let me give one concrete example. A mother of a child about 12/13/14 years of age comes to seek admission of her child – a girl. Naturally my question is-“Where is she studying presently?”. She gives the name of a Govt. Higher Secondary School. Then I ask her “Which class?”. With an air of superiority and arrogance she says, in 7th or 8th standard. Then without discouraging her I just ask the girl to write 19718 and then write below it for the purpose of addition 437. The unit digit of 7 would go beyond 8, 3 in tens place would figure somewhere between 1 and 8. In simple words I can say that they have hardly any concept of unit or tens or hundreds so on and so forth. Same holds good with regard to their knowledge of English or Hindi. It is not to degrade these children but to bring home to all of us the way we are treating our education and thereby our children. There is a Chinese saying that if we plan for one year then we should plant grain, if for ten years then plant trees, if for 100 years then educate man. So it appears that we are putting in jeopardy our future for 100 years. I have heard that in their annual school result card even if they fail they are promoted to next senior class. It means that there is no sanctity of examinations and that when everyone is to be promoted to the next class then why should the child study seriously and why should the teacher take his/her work seriously. This reminds me of the great step taken by Lord Curzon in the first decade of 20th Century when he

propagated quantitative expansion at primary level as the literacy rate in the country was very low. However, it would result in such mass promotion to next class even when one failed, was unheard of. I have found nowhere a mention of such a dismal condition of education.

I tried to talk to some teachers about it. They say that by and large they have around 40 or more children in a class and when some teachers are absent, 2 or 3 classes sit together and the class is turned into a crowd. Under the circumstances, using constructivist approach talk about the teaching- learning process is a great joke.

Anyway, we, as educators, cannot leave things as such, in the interest of the future of the entire nation. We must do something about it and raise our voice against this great *tamasha* being enacted in our country at the cost of the future of millions of our budding children.

S.P. Pathak
Sushil Dhiman

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Social Character of Examination

Ritu Bala

Abstract

In last hundred years of this criticism of examination system, its various dimensions like validity, reliability, utility, educational contribution, technical and dimensional limitation, aims of education along with its content, the capability to determine ways of reading and writing, emotional repercussions of this on both the learner and guardians etc. have been considered and discussed time and again. However, discussions about the social character of examination results have been missing. The central interest of the following research paper is to theoretically explore this very social character of examinations. In other words, this research paper perceives, sketches, explores and analyzes the inherent disparity in current examination system. It also seeks to comment on the 'just-ness' of the existing examination system in the light of the unequal educational opportunities available to those who are deprived on grounds of caste and class.

Introduction

In the history of last hundred years of school education, examinations have been a phenomenon that has been criticized time and again at policy level. Yet both this phenomenon and the criticism have been incoherent at a foundational level. But in last one decade this phenomenon has once again gained prominence and become part of educational discussions. The reasons for this have been recent policy decision related to examinations; for example the making of Tenth Board Examinations optional since 2011 and the subsequent revoking of the same, thereby restoring the inevitability of Board Examination from the year 2018 onwards.

From the perspective of examinations, the last decade has been one of dilemma and paradox. Under a historical judgment given in 2011, Board Examination for class Tenth was made optional. But within few years this judgment has been revoked and 2018 onwards Board Examination has again been made compulsory for class Tenth students. Both the judgments were backed by their own sets of arguments. Key arguments, behind making Tenth Board Examinations optional were, that this step would reduce examination induced stress, depression etc. On the other hand, the argument backing the second judgment was that the restitution of board examinations would make both students and the teachers more serious towards the teaching-learning process by making them realize their responsibilities. This will, in turn, lead to an arresting of the declining quality of education.

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Educational debates, related to examinations surveyed so far by the researcher, have been lacking the cognition of this social character. There is no effort to explore, highlight or analyze this aspect of examination system. A question that demands consideration is whether this examination system provides the deprived sections of the society the same opportunities to succeed as it does to the so called forward sections of the society? Evidence of this disparity can be repeatedly seen in the reports on the results of Tenth and Twelfth Board Examinations submitted to MHRD by CBSE. Though one can separately analyze the examination results of Scheduled Castes and Scheduled Tribes, one is unable to find anything that might highlight the social character of a broad category namely, rural v/s urban.

Conventionally, examination system has projected itself as being absolute, objective, equal, just, egalitarian, one that fights the feudal symptoms of nepotism, and one that provides upward mobility to the 'talented' people belonging to the lower strata of society. The effect of this projection has been such that it has been internalized not just by the common population but also by the academicians. Given this backdrop, the identification of the social character of the examination becomes even more relevant.

The current education system stresses upon conducting objective and impersonal examinations. Most of the provisions for evaluation are outlined without raising any questions about the framework or the way the examinations are to be conducted. To achieve the desired results, stringent measures are taken to maintain the confidentiality of the examinations. This trust-deficient form of colonial-objective culture cannot be seen anywhere except the evaluation system. The system has been devised in such a way so as to annihilate, defeat and eliminate people and to have only a selected few for privileged careers. When people are chosen for particular kind of employment through merit-based selection, then the above mentioned evaluation system becomes the standardized medium of evaluation which itself violates the very basic principles of education.

The ideology that examinations are a competition-based method of social selection, has been inherited by the Indian education system as a colonial legacy. Its form continues to be remarkably similar to what it was during the colonial period. This ideology came into being in India by the end of the 19th century and has continued unaltered. This situation merits the question that how can the colonial system of public examinations be capable of meeting post-independence aspirations and needs of India; that of re-engineering the

nation around the idea of social justice? The synonymization of education with examinations further accentuates the need for asking this question.

There is a widespread agreement over the fact that examinations, which were to be a 'part' of the teaching-learning process, now have become the 'pivot' around which the whole education system revolves. Indian Universities Commission observed that teaching, within Indian Education was subordinate to examinations. Senior Secondary Education Commission (1952) found that examinations, instead of following the syllabus were rather directing it and thus obstructing the aims of education. University Grants Commission, in its document; 'Examination Reform Action Plan', has expressed that examination dominates the process of education. Probably for the same reason 'University Education Commission' 1948-49 stated that, 'we are assured that if any recommendation for correction has to be made for University Education, then that has to be in regard to examinations.' Thus it can be concluded that the primacy of examinations has and is affecting the entire character of education.

The discussion around examinations can be broadly divided into two groups. The first group believes that examinations provide mobility to the society. On the basis of various characteristics of examination like, objectivity, secrecy, being merit-based, similar treatment with every examinee during the exam hours and unfamiliarity of the examiner, question paper-setter, evaluator, and scorer with the learner, etc., the supporters of this group believe that such kind of an examination treats learners from varied backgrounds in same manner. The ideology of this group is referred to as 'Liberal reformist'. Reports of various education commissions and committees in India fall under this group. This ideology holds that various institutions of assessment have struggled against nepotism, inabilities, and inadequacies and have provided unprecedented and varied opportunities for social mobility to all alike. According to this ideology, examinations contribute to the establishment of an egalitarian society. Within such a system learner through his/her inherent talent and efforts carves a niche for himself/herself, within the social hierarchy (Broadfoot 1979, page 89). At the same time, reports of various Indian commissions and committees related to education do not talk about the social character and role of examinations. At the most, they talk about some flaws and drawbacks of the present system.

The supporters of the second view believe that the very nature of examinations is one that strengthens disparity. They take examinations as a tool of social control, social reproduction, legitimization of knowledge of the dominant social group, a mechanism of selection, social filtration, maintenance of status quo, a mechanism that favours the so called elite group in various domains like

social, economic, political, etc., and an instrument that maintains social and commercial hierarchy (Broadfoot 1979, Eckstein and Noah 1989, Kumar 1985, 1998, 2000). Scholars of this ideology believe that examinations have played a role in limiting social mobility and not the other way around. Along with this, it has also validated an education system inflicted with biases favouring the traditionally privileged group of the society. Bourdieu and Pearson believe that on the basis of one's 'cultural capital', a learner coming from an elite background performs better than one coming from a different background (Broadfoot 1979: page 40). They hint towards the knowledge that is associated with the elites and is validated by both education and examination. Jung believes that evaluation is a definite product of relations that balance social power, which in Gramsci's vocabulary can be called 'hegemony' (cited in Broadfoot: page 100).

According to Durkheim, in order to maintain the existing social order, evaluation as a divisive mechanism should have the capacity of performing two types of social functions. Firstly, to find a way to divide people into various categories of labour and also assure them that the roles they are to perform within these categories would enable them to use their skills and qualifications to their highest level. Secondly, in order to keep a check on 'the army of dissatisfied' and to maintain social order, it will have to assure the people belonging to the category of less desired roles, of the impartial nature of this divisive mechanism (ibid: page 91). Inspired by Durkheim, the dominant groups take this mode of 'functionalist assessment' as a tool to fulfil their wish to dominate, reproduce and control the social order (ibid: page 85). Both 'Structural Functionalists' and 'Conflict Theorists' accept the above mentioned dual character of assessment in education. Conflict theory defines this dual character of educational assessment as a product of power imbalance between various social groups. They take it to be unjust, wayward and abusive. They believe that assessment in its form and subject matter, in the name of objectivity, validates the social and cultural biases of the dominant group (ibid: page 91-101). The central significance of examination in Indian education system and its wide departure from education's responsibility to create an egalitarian society leads to an anxiety as to how this system behaves with victims of severe discrimination on the basis of region, gender, community, etc. i.e. what is its social character? In other words, which groups' interests are maintained by this system? Whose interests are neglected? Does it treat everyone as equals?

It has been more than half a century since independence, yet any kind of research to study the social character of such a comprehensive examination

system which exerts long-lasting impacts has been missing. Various educational discussions, whether governmental or non-governmental limit themselves around the technical aspects of examinations only. Educational committees and commissions while addressing scope of improvement in education do talk about issues like what new additions can be made, who should be in charge of this, what should be its regularity, etc. but they maintain a steadfast silence when it comes to questions related to the social character and role of examinations, i.e. to see whose interests are supported and whose are opposed? If education, in reality, wants to play a role in creating an egalitarian society while keeping in mind various disparities within Indian society then it would be relevant to explore the education system that we have been following since the colonial time and thus establish an exact understanding to bring necessary changes. While looking at the tradition of taking marks scored in an examination as the sole criteria of success, the context to eliminate 'equal opportunities to everyone to succeed' and 'biases and frustration spiralling out of one's birth and background', can be seen only in examinations. In this context, the National Policy on Education's (1986 and 1992) expectation from education and Ramamurti Committee's (1990) comment on the present examination system are worth noting. These documents state that working like a 'conveyer belt' the current examination system eliminates majority of people and makes education discriminatory and elitist. Given its favouring of the accomplished, there is much to be desired from the current examination system as far as equality and social justice go. It is proposed that this line of inquiry is given its due consideration by the academia in the times to come.

References

- Broadfoot, P. (1979). *Assessment, Schools and Society: Contemporary Sociology of School*. USA: Methuen
- Bourdieu, P., and Pearson, J.C. (1976) *Reproduction in Education, Society and Culture*. London: Sage Publications.
- Dore, R. (1976) *the Diploma Disease: Education, Qualification and Development*. London: Unwin Education Book.
- Eckstein, M. and Noah, H. J. (1989a). Tradeoffs in Examination Policies in International Comparative perspective. *Oxford Review of Education*, 15(9), pg 17-27.

- Eckstein, M. and Noah, H. J. (1989b). Forms and Functions of Secondary School Leaving Examinations. *Comparative Education Review*, 33(3), pg. 295-356.
- GOI (1990) *Towards an Enlightened and Humane Society*. New Delhi: MHRD.
- Malviya, M. (1997) *Powerjhandha, 57 Salon Mein, Shaishkshik Sandarbh*, 19, pg. 22-28.
- Matthews, J. (1985) *Examinations: A Commentary*. London: George Allen and Unwin.

Addressing Misconceptions in Science at Primary Stage

Vandana Gupta

Abstract

Humans routinely construct mental models in order to make sense of the world around them (constructivism). If these constructions conflict with accepted scientific ideas they are misconceptions, and act as a barrier, preventing successful learning in science. A good deal of educational research has been geared towards the identification and correction of science misconceptions by means of conceptual change, aligned with the learning theories of Piaget, Vygotsky, and others. Attempts to replace learners' misconceptions with scientific ideas have met with mixed success.

Science misconceptions are addressed using a constructivist approach by means of elicitation, teacher recognition, and then correction. Whenever possible, learners should construct science concepts using hands-on activities that allow some freedom in planning, execution and interpretation. The input of peers is of vital importance during these processes. Activities need to clearly refute misconceptions thus triggering cognitive conflict in order that the student successfully assimilates acceptable science.

What is a science misconception?

Children will know some areas of science before ever having been taught them at school, and an individual's constructions are not drawn on a blank slate, but instead built on previously created structures. Since the prior ideas of students gained from both previous educational experiences and informal events are of vital consideration, in order to facilitate meaningful learning it is preferable that at the start of a topic or lesson, teachers try to discover their students' current ideas that are relevant to the science concepts that are about to be introduced. Existing constructions that are at odds with accepted science can provide a shaky foundation for new concepts, and there are vast quantities of constructivist research within the science education literature, much of which deals with such incorrectly constructed scientific concepts, or misconceptions. Two different science misconceptions pertaining to the nature of Earth's association with the Sun are that the Sun is a sentient god, and that during summer the Earth is nearest to the Sun.

In many cases, once learners construct models that make perfect sense to them and have successfully explained a variety of phenomena, they are difficult to change or shed, particularly if constructed in early childhood, which is clearly a problem if these models reflect misconceptions.

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Many mental models are the result of everyday trial and error experimentation; for instance, deep-seated knowledge of how forces behave in the real world is thought to be constructed during informal play in the early years, and can be a source of misconceptions that reveals later on when the child studies physics at school. Alternatively, students may not have met certain concepts in their everyday lives before exposure to them during a science lesson, for instance the rules governing the depiction of food chains, and so may construct misconceptions during the lesson itself. Constructions can be quite sophisticated where several misconceptions link together in the mind of students in a sensible way which has the tendency to strengthen them because each supports the other, becoming a meaningful erroneous conceptual network. An example would be the interrelated ideas that the lungs' job is to pump air to the heart, and during exercise the heart beats faster to supply the muscles with more pumped air

It is well established that science misconceptions represent a barrier to learning at all levels of education. Some misconceptions contained within this article have been reported in published research articles over the last 25 years; some are commonly seen 'classic' misconceptions, others are less well known. One main aim of this article is to provide teachers with the awareness that their students are capable of creating their own ideas that are different from those that were intended, exactly what form those ideas might take, and suggested ways to change these ideas into acceptable scientific variants.

It is worth noting that literature also refers to misconceptions as children's science, naive conceptions, private concepts, alternative conceptions, alternative frameworks, intuitive theories, preconceptions, and limited or inappropriate propositional hierarchies.

Can a misconception be corrected?

Identification of a student's misconception is often the easy part for teachers, while correction being more complex and less attainable. The literature carries a multitude of constructivist-inspired attempts to transform misconceptions into scientifically acceptable ideas (conceptual change), which can be traced to Piaget's idea of accommodation, where new ideas conflict with existing models resulting in a change in the latter, or equilibration. More recent explanations have focused less on Piagetian stage theory and more on the nature of learners' ideas with respect to scientific phenomena. Over the last three decades research has centered largely on how

students construct ideas from observations of natural phenomena, though some studies have focused on social constructivism and constructing knowledge in a social setting.

The origins of the modern conceptual change model stem from the frequently cited 2002 paper of Cornell University's Posner, Strike, Hewson and Gertzog, who claim that learners tend only to accept new concepts if dissatisfaction with the current constructs exists (it does not solve a current problem). The replacement theory needs to be intelligible (it can be understood), plausible (it actually works, and is able to solve present discrepancies) and fruitful (it can solve future problems presented in a different context that are not resolvable using current conceptions). An important quality of conceptual change interventions is the building of new concepts giving due regard to students' prior ideas, and learning should be embedded in classroom conditions that support the process. However, many studies have found misconceptions to be resistant to modification, which may be due in part to them serving a useful function in explaining everyday life phenomena.

A conceptual change approach signifies that if dissatisfaction is encountered with respect to an idea that is already held, learners will restructure the idea until it fits the latest evidence. Constructivist pedagogies have provided such opportunities for cognitive conflict in pupils' thinking by introducing a problem situation such as experimental evidence that disagrees with pupils' conceptions to create cognitive disequilibrium. Exposure to alternative concepts helps students think more deeply about their own ideas, and they either reject, modify or hold on to those views. Also, awareness of one's own existing concept is necessary for any conceptual change.

Research shows that even if students successfully construct scientific ideas during exposure to a classroom event, they may revert back to their initial misconceptions either at a later time, or when a problem is presented to them differently from the way they learned it, with the misconception frequently persisting into adulthood. It appears that a student's misconception might never be truly extinguished, instead existing side-by-side with the correct scientific concept, with either of the two being recalled depending on the circumstances. In this situation, ideas compete with each other for dominance within a learner's mind, and this has been termed '**conceptual competition**'.

How can we elicit, recognize and correct science misconceptions?

Science misconceptions have been and remain a significant problem at all levels of education, along with a recognition of the importance of 'catching

them young' by starting to address misconceptions at the primary stage. The article aims to make teachers aware of the myriad of alternative ideas that their pupils may construct either before the formal introduction of science concepts in the classroom, or as a consequence of teaching. Once teachers have an awareness of the misconceptions that they might encounter during the delivery of a particular topic, they will be more equipped to recognize them when pupils say or write something that suggests they may hold a misconception. That said, instead of passively waiting for misconceptions to arise during the course of normal teaching it is preferable that teachers actively search by introducing specialized activities that are designed to highlight them; this is **elicitation**.

Elicitation

This section gives ways in which teachers can elicit the ideas of their pupils, so exposing misconceivers and correct conceivers alike. As well as informing teachers, elicitation will make each learner explicitly aware of what they really believe about scientific phenomena, which is fundamental to any future reconstruction.

Ask students directly about their ideas

The most straightforward way in which to find out what someone is thinking is to ask them in a direct manner face-to-face. This can sometimes reap benefits; often, however, asking students directly tends to end up in them giving you the answer they think you want to hear, and not what they really believe. More indirect methods, detailed below, may be necessary in order to provide a more valid form of assessment. Direct questions can be asked to the whole class and used in conjunction with pupils' dry pen mini-whiteboards in order to survey understanding, e.g. by means of a true/ false plenary session. Some misconception entries in this book offer specific teacher questions that have been found to be useful when eliciting learners' ideas.

Self-Completion Exercises

These can take the form of worksheets that ask probing questions related to a science concept, written tests, computer-based quizzes etc. There is also an element with these exercises of not revealing children's true beliefs, although perhaps less so than with face-to-face encounters. If you want to elicit the ideas of all students it is best that the class complete these activities as individuals instead of as a group effort, which usually ends up eliciting just the concepts held by the dominant member(s) of each group.

Card Sorts

An example of a common card sorts activity in primary class science is to have a collection of cards with pictures of materials, with the aim being to place them into sets of solids, liquids and gases. These non-verbal approaches have the advantage of being more accessible to learners with lower literacy skills. A traditional method is to have pupils first sort their cards into the groups that they think are correct, then swap seats with other pupils so that different arrangements can be examined. The teacher can walk around the room and readily see any misconceptions held by individuals or the class as a whole.

Students' Drawings

Asking children to draw a picture, for instance, of 'different animals' can give the teacher an indication of any restrictive sets or incorrect categorization. In this particular case if a child has drawn only furry four-legged animals you could ask them why they have not drawn animals such as a fish or an earthworm. Reading a story can be used as an orientation towards a science concept that the teacher would like to elicit, with learners being asked to draw pictures afterwards that offer personal visualizations of certain events in the story. Researchers have used students' own diagrams as a basis for asking questions in order to explore their ideas in intricate detail.

Concept Maps

These are usually a helpful way in which to elicit misconceptions as well as acting as a revision exercise to assess understanding after the delivery of a topic. There are several concept mapping techniques, with perhaps the most basic being the variant where the teacher provides all the words that will be used on a printed sheet. Working in pairs, students are given a list of key words that relate to a topic to cut out. Students then arrange the words onto a sheet of sugar paper and associated words are glued down and linked with a drawn pencil line. Each line must be accompanied by a written comment explaining why the words are connected.

Concept Cartoons

Scientific ideas are presented in pictorial scenes where cartoon characters express different views about an illustrated situation. Students then decide which character is correct, or offer their own explanation, so eliciting any misconceptions.

Using Toys

It is often the case that a more valid indicator of what a person is thinking/feeling is reflected in how they behave and not what they tell you, this

premise forming the basis of the study of body language. When children play with toys they become relaxed and absorbed in the moment, entering into a different world and dropping their guard, allowing an informed observer the chance to glean valuable information about their scientific beliefs.

Using Scientific Apparatus

Observing the behavior of pupils can be extended from playing with toys to more formal exercises involving scientific apparatus that require them to perform a systematic experiment. An example would be a boy who believes all metals are magnetic trying to attract an aluminium drinks can (which is non-magnetic). When the can fails to stick to his magnet, he frantically searches for other magnets to try because he believes his must be broken

Role Play

It is sometimes easier for children to express their true thoughts and feelings when they are pretending to be someone/something else. Research into self-expression by students through hand puppets has suggested that this could be a useful way forward, with the teacher asking the puppet (and not the student) direct questions relating to scientific concepts, within an appropriate imaginary setting.

Word Association Games

Researchers have found learners' misconceptions by describing a context and then asking the child to say out loud the first situation which immediately comes to mind. An example would be 'the Earth in space at summertime', followed by a child's response 'the Earth is very near to the Sun'. Spontaneous responses are thought to be linked with what a person strongly believes, as with Freudian slips of the tongue, being governed by unconscious processes the person is unaware of and so has no control over.

Listening to Pupils Talking

Eavesdropping on what children say to one another during group work or when engaged with their talking partners on the carpet can be used as a valuable gauge of their ideas.

Recognition

It is intended that knowledge of misconceptions act as prompts for teachers during elicitation exercises so that they are able to recognize any misconceptions displayed by students if they arise. The rationale is that reading about them beforehand primes the teacher to be ready for them should they appear in class. If teachers are unaware of the variety of misconceptions that

are associated with a particular topic or concept, they might overlook them, especially if the misconception is closely aligned with the scientific concept, i.e. is nearly right, but not quite.

Correction

Once misconceptions have been elicited and recognized, the next step is correction. A vital starting point for misconception correction is the linking of any intervention with the prior knowledge of the learners.

Another fundamental assumption is that people often learn best when they are performing a hands-on task; in the case of science learning this would be taking part in an experiment. Students in primary (and secondary) schools are taught to act like ‘little scientists’, planning experiments, observing phenomena, recording and interpreting results, drawing conclusions and finally evaluating the whole process by reflecting on what they did. Students are allowed a certain amount of freedom to plan and perform practical activities. Students may predict that a heavy object will fall faster than a light object, though when two different sized glass marbles are dropped they are both seen to land at the same time. Thus, their prediction has been shown to be false, which triggers cognitive conflict and ideally ends up with the pupil rejecting their original view and assimilating the scientific concept (mass has no effect on the speed of freefall) in its place; we say that the misconception has been refuted. A more involved approach is to give pupils a number of different outcomes or hypotheses and ask them to carry out tests in order to ascertain which one is correct.

In a constructivist classroom, predictions and results are openly expressed and interpretations debated; this is closer to how scientists actually work, since theories are suppositions that have been collectively agreed upon by a community of experts as being a ‘best guess’. School science in general should be viewed as a shared activity where the assistance and input of peers is of vital importance. Some effective pedagogies regarding correction are as follows:

Effective pedagogies

- Facilitating students’ personal construction of knowledge, and integration of this knowledge with prior ideas (assimilation).
- Learning involves not only acquisition and extension of new concepts but also reorganization or rejection of old ones (accommodation).
- Providing laboratory practical work to help construction of knowledge through personal experience of the physical world.

- Providing experiences such as discrepant events that challenge existing hypotheses using empirical data (cognitive conflict).
- Using a social setting for learning.
- Allowing student autonomy, engagement, motivation and initiative.
- Presenting open-ended questions.
- Promoting higher-level thinking.
- Encouraging peer dialogue.
- Resting the final responsibility for learning with the pupil.

Some common misconceptions in science

1. What is a material?

Common misconception

A material is something used for building, clothing or stationery.

Scientific conception

The pupil is using the word material in its everyday sense, e.g. bricks are building material, fabrics are clothing material, and stationery is writing material. Other familiar non scientific meanings include information (research material), and something solid, worldly and corporeal. This pupil might classify anything outside these categories as being a non material.

In science a material is something that is made from matter, i.e. from atoms, molecules or ions. Gases are included within this category, though pupils often do not consider them to be materials due to overlap with the everyday ‘solid’ meaning considered above. Non-material entities are those not consisting of matter, e.g. energy.

The term raw materials, meaning the starting substances for an industrial process, may also act as a source of confusion, even though all raw materials are materials in the scientific sense.

Correction

This misconception may crop up when the term ‘material’ is first introduced to pupils in primary science. During this and other primary science topics that pupils experience, the word ‘material’ would be used extensively by the teacher in many classroom contexts, including activities that involve liquids and gases. It would be hoped therefore that pupils implicitly construct a scientifically all-encompassing understanding of the word and understand that

this is different from any everyday meaning that they know. This process can be facilitated during classification exercises, such as the placing of objects into exclusive solid, liquid and gas sets, by repeatedly referring to all of the objects as materials.

2. When something burns why does it disappear?

Common misconception

When an object burns, parts of it disappear and no longer exist.

Scientific conception

When a piece of wood burns, flames appear to eat away at the wood which turns into something different that is much smaller, i.e. ash. Some pupils are unable to explain why this size reduction takes place, and are at a loss when asked what has happened to the original wood. They may think that through the action of burning the flames convert some of the wood into ash, with the rest of the wood being completely destroyed, no longer existing in any form. Others might conclude that the missing wood becomes smoke, which is nearer to the truth, although when pressed they insist the smoke then ‘disappears into the air’, likewise ceasing to exist.

As with any chemical change, during combustion the mass of materials is always conserved. That is to say, if you weigh what you start with and what you end up with, these values will be identical because matter can be neither lost nor created. The particles that make up wood and oxygen have been rearranged during combustion to make new materials, carbon dioxide and water.

Wood + oxygen \longrightarrow carbon dioxide + water

Simple word equation for the complete combustion of wood

If a piece of wood is observed whilst burning it might appear that there is a quite obvious disappearance of mass as the wood shrinks and turns to ash. But since combustion produces carbon dioxide gas and water (as steam), these gaseous products invisibly rise up in heat currents and spread out into the surrounding air – they have not ceased to exist, they are merely difficult to detect. To complicate matters slightly, often not all of the wood burns completely and so other products are usually made such as gaseous carbon monoxide and solid carbon. Some of this carbon is lost as smoke (soot) and the rest becomes part of ash, which also includes minerals in the wood that are incombustible. If burning takes place within a sealed container then all of these

products of combustion cannot escape; if the container and its contents are weighed before and after combustion, there will be no reduction in mass.

A related misconception is that during combustion the wood disappears because it turns into heat energy.

What happens when a candle burns?

Correction

While burning a candle on a tabletop, ask students why does the candle become smaller? What has happened to all of the wax? This will help elicit some of the misconceptions discussed above. Then, place a candle into a sealable transparent container such as a large gas jar. Weigh the candle plus container. Light the candle, being sure to quickly seal the top and leave it to burn until it extinguishes itself – this will take less than half a minute with a large jar. Keeping the jar sealed, reweigh the contents, explaining that although it might be surprising that the weight has not changed, this conservation of mass occurs because the gases produced by burning have been trapped within the jar. These products normally drift away from the flame and escape into the surrounding air. Conclude by saying that burning does not destroy the wax which then ceases to exist, it merely changes it into something else, mostly carbon dioxide and water.

Although some students may predict a loss of mass within the closed container, others might believe the burning will result in an increase in mass, possibly because the smoke being produced is thought to add its mass to the final value. Like the main misconception, this type of thinking belies the error of failing to conserve mass during a chemical change.

3. Are some acids ‘safe’?

Common misconception

All acids are corrosive.

Scientific conception

The word acid frequently conjures up associations with danger, burning, and science laboratories. Although lab acids such as hydrochloric, sulphuric or nitric are rarely utilized during science teaching at the primary level, and so the term acid may never be formally referred to by teachers, older pupils would still be familiar with the word and its associated descriptors. Acids are not only

found in the science lab, many have a use around the home; in fact quite a few acids are common foodstuffs so are not corrosive or otherwise harmful.

Correction

Pupils need to be aware that many familiar, everyday substances are acids. Some are capable of causing harm (e.g. car battery acid, drain cleaner) while others are safe (citric acid in lemon juice, tannic acid in tea). These examples serve to show that acids are not restricted to the science laboratory and are not all dangerous. Having physical examples on show in the classroom would help during these discussions.

A familiar pedagogical demonstration tool in the primary classroom is the mixing of vinegar with bicarbonate of soda, which produces profuse fizzing. This chemical reaction is used to illustrate different phenomena, from the behavior of gases to making a model volcano as part of a geography project. In contexts such as these, teachers can take the opportunity to introduce the fact that scientists call vinegar ethanoic acid, and that this is an example of an everyday, safe acid.

The most powerful acid

Through curiosity pupils may ask you what is the world's strongest acid? Sources vary as to the most corrosive acid (technically corrosion is different from strength), although one contender is hydrofluoric acid which is able to dissolve glass easily and when in contact with human skin readily liquefies flesh. In lower concentrations skin remains undamaged but the acid permeates through and begins to dissolve the bones. At the other end of the spectrum are non-corrosive acids such as carbonic acid, found in acid rain. Pupils sometimes mistakenly consider acid rain as being able to cause immediate corrosion to exposed areas of their skin.

4. What is rust made of?

Common misconception

Rust is a type of decay caused by a fungus.

Scientific conception

Students may be aware that iron or steel objects left outdoors during periods of wet weather can develop rust. A familiar example would be the rusty chain on a little-used bicycle that has been left uncovered. This association of rusting with wet conditions is sometimes merged with the understanding that organic materials can decay when left in damp areas; examples include the underside of a log, the mouldy contents of a bin, and a rotten wooden fence that has not

been sufficiently damp-proofed. In these instances the materials decay due to the action of living organisms such as fungi (mould), bacteria and insects, and pupils sometimes incorrectly attribute these same living causes to the seemingly similar case of rusting metal.

When iron or steel is exposed to prolonged moist conditions it takes part in a chemical change. The iron combines with oxygen from the air and/or in the water to become brown/orange iron oxide, what we commonly call 'rust'. This is wholly a chemical change and does not require the action of any living organisms such as fungi or bacteria.

A related misconception is that rust is simply an impurity from within the metal that works its way to the surface over time. Another common misunderstanding is the idea that when iron becomes rusty it also becomes lower in mass because it is flakier, weaker and more insubstantial. In fact, rusted iron has a greater mass than the non-rusted iron because rusting involves capture of the oxygen atoms from the air, which add their own mass to the system

Correction

The physical appearances of rusty iron and decayed organic matter can be very similar, acting as source of the misconception. Also, young children realize that both rusting and decay are 'bad' or unwanted outcomes, for instance through exposure to curricula focusing on healthy lifestyles that deal with ways to avoid food becoming rotten. This association may further enhance the possibility that children attribute both rusting and organic decay to the same living causative agents, e.g. fungi.

It is difficult at the primary level to adequately explain the difference between decay and rusting without using concepts rooted in secondary science, such as the nature of oxidation reactions. It would be necessary to correct the misconception on a simple level by stating that rusting is a purely chemical change unlike organic decay, which requires the presence of living organisms such as bacteria or fungi. One way to underline this difference is to demonstrate that rusting will still take place at low temperatures inside a fridge, while the decay of many foodstuffs is slowed to a large extent because the growth of microbes is inhibited. This can be done by placing an iron nail in a jar of tap water with the lid screwed on, in the fridge for a couple of weeks. The discussion of rusting alongside other chemical changes such as combustion will also facilitate its correct categorization.

References

- Allen, M. (2009) Learner error, effectual stimulation and conceptual change. *Journal of Research in Science Teaching* (in press).
- Avraamidou, L. and Zembal-Saul, C. (2005) Giving priority to evidence in science teaching: A first-year elementary teacher's specialized practices and knowledge. *Journal of Research in Science Teaching*, 42, 965–986.
- Carle, E. (1969) *The Very Hungry Caterpillar*. London: Puffn.
- Carter, L. (2008) Sociocultural influences on science education: Innovation for contemporary times. *Science Education*, 92, 165–181.
- Ehrlén, K. (2009) Drawings as representations of children's conceptions. *International Journal of Science Education*, 31, 41–57.
- Harlen, W. (2009) Enquiry and good science teaching. *Primary Science Review*, 106, 5–8. Joung, Y. J. (2009) Children's typically-perceived-situations of floating and sinking. *International Journal of Science Education*, 31, 101–127.
- Naylor, S., Keogh, B. and Mitchell, G. (2000) *Concept Cartoons in Science Education*. Sandbach: Millgate House.
- Oliveira, A. W. and Sadler, T. D. (2008) Interactive patterns and conceptual convergence during student collaborations in science. *Journal of Research in Science Teaching*, 45, 634–658.
- Otero, V. K. and Nathan, M. J. (2008) Preservice elementary teachers' views of their students' prior knowledge of science. *Journal of Research in Science Teaching*, 45, 497–523.
- Phethean, K. (2009) When are you too old to play in science? *Primary Science Review*, 105, 12–15.
- Piaget, J. (1929) *The Child's Conception of the World*. London: Routledge & Kegan Paul.
- Posner, G. J., Strike, K. A., Hewson, P. W. and Gertzog, W. A. (1982) Accommodation of a scientific conception: Towards a theory of conceptual change. *Science Education*, 66, 211–227.
- Vygotsky, L. S. (1962) *Thought and Language*. Cambridge, MA: MIT Press.
- Zembal-Saul, C., Krajcik, J. and Blumenfeld, P. (2002) Elementary student teachers' science content representations. *Journal of Research in Science Teaching*, 39, 443–463.

Relevance of Total Quality Management in Teacher Education

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Abstract

Total Quantity Management (TQM) is in its usage. TQM in education is adopted as a tool that must be clearly understood, adopted and implemented as soon as possible and aimed at improving the standard of quality of educational institutes. Total Quality Management (TQM) was originally used in the business organizations to achieve excellence and to maintain quality standards. Overtime, it has been adopted by other fields. The field of education is one of the topmost fields wherein, it directly and indirectly necessitates its need in the field of Teacher Education. TQM also requires coping with change in a positive and constructive manner. TQM in Teacher Education needs a stronger commitment from all its members who are attached with it. To achieve TQM in Teacher- Education it needs to be ensured that the educational needs of the Students-Teachers are met.

Quality is the pre-requisite for the growth and development of every nation. Modern Indian Economy is known for Globalization and Internationalization of each and every sector of the civilization of human beings. Each and every person of the world expects quality in all kinds of goods and services to be used. To achieve this, organizations providing us with goods and services take into their ambit various kinds of quality assurance techniques. One of these techniques – Total Quality Management (TQM) was originally used to achieve excellence in business organizations. The concept of TQM was first introduced in 1920's when the statistical approach was first used in quality control in factories of America. It is the management style based upon producing quality service as defined by the customer. It is the quality centered, customer focused, fact based and team driven management process to achieve an organization's strategic imperative through continuous process of improvement. Total Quality Management is both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization.

TQM stands for Total Quality Management which was developed by an American, Edwards Deming, to improve the quality of production and services. TQM is a management approach of an organization based on quality and the participation of all its members, aiming at long term success. It is way of thinking about goals, organization, processes and people to ensure that right things are done at right time.

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Such a thought process may change attitudes, behavior and results for the betterment. It is not a system, a tool or even a process. All these are employed to achieve TQM, as Quality is never an accident. It is always the result of an intelligent effort. It is the will to produce a superior thing.

Basic Principles

Quality comes from people who care and who are committed. Quality improvement is a way of thinking. Quality management is not a program only. It is a systematic, integrated and organized way of life directed at continuous improvement of organization. It is not a management trend: it is a proven management style. Following are the fundamental principles which highlight these aspects :-

- Total quality is a continuous work process starting with customer requirement and ending with customer satisfaction.
- Documentation allows visualization and communication and work assignment.
- The quality system provides scope for greater flexibility because of greater use of attention provided.
- Systematic re-engineering of major quality activities leads to greater level of continuous improvements.

When the principles of Total Quality Management (TQM) are adopted to suit the educational organization, the following important steps could be followed:

- i. Creating quality consciousness among all connected with the educational institutions, i.e. management, faculty, students, parents and the society at large.
- ii. Total commitment of the management, be it government, university or private aided or unaided body, providing quality education.
- iii. Treating the students as the sovereign authority and creating a feeling amongst the faculty that the institutions exist for the students and not for the staff. Although students are not the only customers of an educational organization: the parents, employers and the society in general are also the consumers. Since students are the primary and direct customers of an educational institution students should get the best from them.
- iv. Setting up of short term and long term goals for improving the quality of education and preparing plan of action for achieving the goals.
- v. Monitoring the quality improvement programs at frequent intervals and making suitable alterations wherever necessary, in the programs
- vi. Motivating the staff to work with enthusiasm and dedication to achieve the goals set.

- vii. Provide effective and dynamic leadership to the institutions for successfully implementing the Total Quality Management (TQM)
- viii. To pay attention to improving the entire process of teaching-learning and the environment in the institutions, to bring out the best from the students.

Good buildings with well-furnished and well maintained classrooms, well equipped laboratories, a good library with ample facilities for students, well qualified and committed faculty and the environment which facilitates the task of an effective teaching learning process, are all the important sources of quality. Among all the above mentioned quality measures, the most important is the dedicated faculty. A school, college or university may not have a good building, furniture, playgrounds or even well equipped labs and libraries, but if the teachers are enthusiastic, highly motivated and committed to their task, the students are likely to have the best education.

TQM in Education

Over time, it has been adopted into various other fields, education being one of them. TQM in education aims at improving the quality of educational institutions. Quality in education is the right of every student, parents, the society and the stakeholders as a whole. However, the use of TQM in schools would directly necessitate the need for TQM in teacher education. Teachers play a paramount role in any educational system. It is the teacher education institutes that have been allocated with the important role of improving the standards of educational system by preparing effective teachers. Hence, TQM in schools cannot be really effective unless teachers are adequately trained to meet the needs of the schools. To train teachers, as per the pre-requisites set by the Ministry of Human Resource and Development, requires Teacher Training Institutes to make teachers effective in relevant pedagogy. They also need to develop the teachers' professionalism and sincerity towards the teaching profession. TQM, when practiced in the field of teacher education, can bring teacher training institutes close to this objective. The process of TQM in teacher education needs to be quite different from the TQM being implemented by other organizations.

Need of TQM for education

Total Quality Management for education is needed

- ❖ To set objectives of institution for all round development of students.
- ❖ To improve the institutional work continuously.
- ❖ To lay focus on learning process.
- ❖ To bring about improvement in teaching process.
- ❖ To provide for creative experiences.

- ❖ To identify the needs of students.
- ❖ To create awareness among parents
- ❖ To make stress free environment for better learning of students.
- ❖ To make strong bond between teachers and pupils.
- ❖ To remove barriers between teachers and principal.
- ❖ To give training to teachers for up-gradation of their work.
- ❖ To give chance for self-improvement of teachers.
- ❖ To develop capacity for enhancing social, moral and cultural values in students.
- ❖ To cultivate humanistic approach in teachers.
- ❖ To make commitment for giving quality education to students.

In a nutshell, it may be stated that the quality has an important role in the field of education. Total Quality Management has a direct influence on the human improvement. It can also lead to high commitment and spirit in work environment. It is better for all the teachers of the institutions to be exposed to more quality in education which in turn, would influence the perception of teaching. Hence, teachers should be encouraged towards positive aspect of TQM and to take active participation to render quality education.

Total Quality Management (TQM) in Teacher Education

Teacher education institutions have a vital role in improving the standards of the system of education by preparing competent and effective teachers. It is the general opinion that the quality of nation is judged by the quality of its citizens. The latter is mostly determined by the educational system of the nation, which in turn is decided by the quality of teachers it has. Thus, the real dynamic force of education is the teacher.

After independence, various efforts have been seriously and continuously made for expansion and qualitative improvement of teacher education. For the qualitative improvement of education in general and teacher education in particular, various committees and commissions were formed. Among the commissions, the **Kothari Commission (1964-66)**, which dealt broadly with all aspects of education, is worthy of mention. It said, “A sound program of professional education of teachers is essential for the quality improvement of education”. Unfortunately, the professional education of teachers has been neglected in the post-Independence period.” Preparation of qualified and able teaching personnel is one of the most significant functions of all Teachers Education Institutes. Realizing the fact, The National Policy on Education (1986) places complete trust in the teaching community and suggested a variety of steps to improve the status of teachers with effective accountability.

The quality of teacher education would largely depend upon the effectiveness of Teacher Education Institutions. Quality of teacher education is an integral part of quality of education system. Teacher Education Institutions have a greater responsibility in producing quality teachers, lest the future of the nation is at stake.

The Education Commission (1964-66), popularly known as the Kothari Commission, devoted one complete chapter to teacher education and detailed various recommendations for the improvements of its quality. It emphasized that the core of teacher education is “Quality” and in its absence, teacher education becomes not only a financial waste but also a source of overall deterioration in educational standards. For enhancing the quality in teacher education institutes, the key areas may be adopted as: -

- **Curriculum Design and Planning**
- **Curriculum Transaction and Evaluation**
- **Research Development and Extension**
- **Infrastructure and Learning Resources.**
- **Student Support and Progression**
- **Organization and Management**

Teacher Education Institutes make continuous efforts for maintaining the quality standards set by the higher authorities i.e. NAAC (National Assessment and Accreditation Council). The father of Modern Quality, Dr. W. Edwards Deming gave his opinion about Quality maintenance in the field of education of teachers-to-be. His views are as: -

a. Adopt New Philosophy

In the present scenario, the demand and opportunities for teachers are persistently varying. The existing model of teacher education is as



Teaching Practice under B.Ed. course is a very important part under which the trainees are given the training. Trainees, during the course, are told of various theories related to teaching and learning. There is need of practice for the development of various skills, they have to undergo such practice under the supervision of their teachers. The practice is under controlled conditions. As per the rule, the trainees have to take two classes for teaching purposes. Here, the case takes a different shape when the trainees after getting training become

actual teachers. In such a situation, they face many problems, being unable to tackle problems in the real professional work.

To manage this problem, the model proposed by **A.K. Paliwal & B.K. Passi** produced a concept named as “**Holistic Teacher Education**”

In this proposed model, the trainees are sent to the field to face the actual situation. This will supplement their experience and the real picture of teaching. In such a situation, they are able to construct their own theory based on their actual experience.



b. Become Competitive

For the purpose of overall development of the students, the teacher has to motivate them for the competitive spirit. Teachers have to create competitive spirit by creating such type of atmosphere which provides them experiences free from subjectivity and bias. Good teacher can inspire the students which will ultimately change the life of students resulting in good human beings in future.

c. Quality of Raw Material

Here, Raw Material means the students who are going to be Teachers in future as finished product. If the institution plants good seeds, they will become big trees in future. It means that students who are chosen for teacher training course should have teaching aptitude and ready to learn skills of such noble profession.

d. Commitment and Constant Efforts

Teacher Training Course should follow constant efforts of improvement. Teachers should commit to **CAN** which means **Constant and Never Ending Improvement**. The organizations which follow TQM work for continuous improvement. Although there is domination of service, but the quality should be placed on the higher rank. To achieve “The Best”, teachers have to search the talent and experience from the students. Teachers venture for the collaborative efforts of the students as well as teachers by following the good personal relations between teacher and teacher, students and teachers and students and students. Teachers should make efforts for the students about covering all aspects of becoming good teacher.

e. Put up the shutters of Numerical Standards for Rating

If the institutions desire to achieve the standards of high quality in teacher education, it is desirable to abolish the system of rating students as would be teachers. If such system is followed, it will encourage creativity and experimentation in the students, as the students will focus on learning and enriching the experience. While rating the students subjectivity comes as a hindrance for the purpose of rating. So, individual differences should be kept in mind while rating the students.

f. Reduced burden

When the teachers and students do not have the burden of rating, they will work freely and cover all risks. They will work with pleasure. This will inculcate confidence and endurance to manage all the obstacles.

g. Spirit of Belongingness

Last but not least, the teachers and students should have the spirit of belongingness to achieve the quality. In this sense, the efforts will be united and equal opportunity will be provided to each and every member to excel his potential.

Conclusion

Total Quality Management is very much useful in the field of education to maintain good quality. TQM in Teacher Education needs a stronger commitment from all its stakeholders. If Teacher Education Institutes are to maintain the standards of Quality, there is need to redefine the roles, create staff developments, involve all, eradicate mass inspection, remain open for the adoption of new philosophies and create conducive environment and work culture based on trust and shed judgmental attitude. Therefore, to achieve TQM in teacher education, it needs to be ensured that the educational needs of the student-teachers are met. This can be done by making continuous improvement efforts toward the curriculum and delivery services.

References

- Khan, A.H., Minis Tommas. (2004). Management of Higher Education – 21st Century Challenges. Ananya Publishers, New Delhi.
- Kothari Education Commission (1966). Government of India Document, New Delhi: Ministry of Education
- Kumar, Ravindra. (2004). Improving Quality of Higher Education—Autonomy to College, what Next? University News, AIU, New Delhi. Vol. 42, No. 18

- Naik, Ramesh H. (2007). Total Quality Management in Teacher Education Institutes. *Edutracks*. Vol 6.No. 6
- Rao, Usha.(2016). Total Quality Management (TQM) in education. *Edutracks*. Vol 15.No. 12.
- Sawhney, Sonia. (2014). Total Quality Management in Teacher Education. Who Does the Onus Lie On? *Edutracks*. Vol 14.No.4
- Sidhu, Beant Kaur (2009). Total Quality Management (TQM) in Teacher Education *Edutracks*.Vol 8.No.8
- Singh, Harishankar (2008). Professional Ethics: A Perquisite in Teaching Profession; *Edutracks*. Vol. 7, No. 10.
- Website of NAAC www.naac.nic.in

Awareness of Teachers About the Academic Provisions of RUSA to Enhance the Quality of Higher Education

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Abstract

Education is the most powerful instrument in the progressive transformation of a society. Especially, the higher education plays a major significant role in this respect. So in the 12th Five Year Plan, MHRD launched its one of the ambitious programs to revamp the higher education sector in the country called as, Rashtriya Uchchatar Shiksha Abhiyan (RUSA) – National Higher Education Mission. It is one of the creative evolutions which is being developed to boost higher education sector in India. The present study has made an attempt to assess the awareness of teachers about the academic provisions of RUSA in relation to its various aspects like access, equity, faculty, reform in admission process, curriculum development and examination process, research and development etc., which are concerned to improve the quality of higher education. For this purpose, a mixed method approach with proper combination of both qualitative and quantitative processes, as described by Johnson and Onwuegbuzie (2004), was adopted as the primary design for the study. The two data base were compared to determine if there is convergence and/or difference. Thus, keeping in view the requirements of the study, the Convergent Design of mixed method strategy was adopted. Further, the study is based on the rural degree college teachers of Odisha. A multi-stage sampling procedure has been adopted by the investigator to select sample and to make the sampling process more practical. The investigator selected 54 rural degree college teachers from six rural degree colleges two from each zones of Odisha. The self-developed awareness test, semi-structure interview schedule and checklist appropriate for relevant data collection and the collected data were analyzed by percentage analysis and thread wire discussion. The findings of the study revealed that majority of the teachers working in rural degree colleges were yet not aware about the academic provisions of RUSA in relation to its all dimensions- access, equity, faculty and research and development. Further, the stream wise (Arts, Science and Commerce) information obtained by researcher confirmed that only to some extent the Arts teachers were aware about the academic provisions of RUSA in comparison to Science and Commerce teachers.

Key Words: Awareness, Academic Provisions, RUSA – Rashtriya Uchchatar Shiksha Abhiyan

Background of the Study

“The journey of a thousand miles begins with one step.”

- Lao Tzy

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As far as planning in India is concerned, this is the most favourite quote. The Higher Education system of a country is the gateway of its recognition in the global platform. It is the most critical component of bringing change in a society and a nation. Through Higher Education, a nation can address the issues relating to equity, accessibility, quality, values and development. Therefore, the government is looking at bringing various reforms to improve the quality of higher education. The 12th Five Year Plan of India proposed a holistic plan for the development of higher education in the country by ensuring access, equity and quality through strategic shift in central funding. Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a new Centrally Sponsored Scheme (CSS) which is to play a great role in this regard to address issues of equity, access and excellence in higher education. The scheme aims at providing strategic funding to eligible state higher educational Institution.

The central funding is in the ratio of 65:35 for general category States and in the ratio of 90:10 for special category states. First the Central Advisory Board of Education (CABE) had approved the draft of RUSA in its 60th Meeting held on 8th November, 2012 but, the Cabinet Committee for Economic Affairs (CCEA) approved RUSA on 3rd October, 2013 and RUSA became the final tier of the CSS of the Ministry of Human Resource Development (MHRD) which began with Sarva Shiksha Abhiyan (SSA), graduated subsequently to Rashtriya Madhyamik Shiksha Abhiyan (RMSA).

According to MHRD, higher education sector has witnessed a tremendous increase in the number of universities and colleges since independence. The number of universities has increased 37 times from 20 in 1950 to 750 in 2016. There are 47 Central Universities, 345 State Universities, 235 State Private Universities, 123 Deemed to be Universities and 41,435 Colleges in India as listed by University Grant Commission (UGC), the apex regulatory body for higher education. But still the problems that confront education today are : low rate of enrolment, unequal access, poor quality of infrastructure and lack of relevance. As per the annual report of MHRD 2014-15, the rate of enrollment is only 20 percent. Similarly, although there was an increase in the number of new institutions and in the intake capacity of existing institutions but inspite of this, our institutional capacity is still low. We have only 750 Universities, as against the National Knowledge Commission (NKC) recommendation of 1,500.

As per “All India Survey on Higher Education, MHRD, 2015-16” the higher education system in India today suffers from many shortcomings. There is only a small fraction of population between the age group of 18-23 which is

enrolled in higher education institutions as the Gross Enrollment Ratio (GER) is only 18.8%. There are wide disparities between various social groups like SCs, STs, and OBCs, falling below average GER. There is also gender inequality; GER for males is 20.9% while that for females is only 16.5%. There is difference in quality of institutions and enrollment between rural and urban areas and between developed states and not so developed ones. Many issues like, issues in universities arising from affiliation resulting in administrative burden on universities; Governance issues also found in universities such as lack of appropriate structures and limited autonomy, financial constraints in higher education, particularly for state level institutions, lack of clear regulatory framework for private sector participation in higher education. Further, there are also significant levels of faculty vacancies in institutes and inadequate research opportunities.

The review of related literature also revealed that some of the persisting problems and challenges – like unequal access, poor quality of infrastructure and lack of relevance. The Gross Enrollment Ratio is 19.4% which may not permit to achieve 30% by 2020. There is only limited research output in Indian higher educational institutions and insufficient funding as well as sparse focus on research (Hatekar 2009; Singh and Devi, 2015; Gaikwad and Solunke 2013; Prodan, et al., 2013; Sindhi, 2015; Patra and Mete, 2016). Regarding governance, it is found that weak quality assurance mechanisms, lack of autonomy for universities from state and central governments, administrative burden for universities due to affiliation system (Sanyal and Martan, 2006; Balu and Rajkumar, 2015; Pandiya, 2015; Rambails, 2015; Dahal and Behera, 2016) etc.

So far as Quality dimension is concerned, it is found that ineffective monitoring and evaluation mechanisms, few recognized accreditation agencies, limited number of accredited colleges and lack of clear framework for private sector participation in higher education (Morley, 2011; Lindsay, 2012; Paul and Shingh, 2014; Giri and Priyanka, 2015; Sahu and Jain, 2015; Saha, 2015; Bhattacharya and Pal, 2016). RUSA can play a pivotal role in revamping existing Indian higher education. The document paper of RUSA has envisaged many provisions to overcome the problems from multiple dimensions such as:

- **Academics-** It makes provisions of usage of ICT and distance learning, establishment of model college in each district, proactive steps for Faculty Recruitment and Development, CBCS system, provision of research and innovation grants etc.

- **Governance** – It makes provisions for greater academic, financial and administrative autonomy, creation of college Cluster University, infrastructure upgradation of existing institutions with focus on quality and equity etc.
- **Enhancing Quality** – It makes provisions like three-tier institutional structure to monitor progress, all institutions to be linked to a web-based Management Information System (MIS), creation of state level accreditation agencies, establishment of appropriate regulatory framework to set quality standards etc.

Thus a teacher must be aware about all these provisions of RUSA. as a result of which the quality of higher education will no doubt be enhanced. Thus the present study has made a humble attempt to have an insight about the awareness of teachers about the academic provisions of RUSA in relation to all its dimensions like access, equity, faculty, reforms in admission process, curriculum development and examination process, research and development etc. and how does it improve the quality of higher education.

Objectives of the Study

Keeping in view the requirement, the study focused on the specific objectives as mentioned below:

1. To study the awareness of teachers about the academic provisions made in RUSA to enhance the quality of higher education with specific reference to:
 - **Access:** Consolidating and developing through capacity addition, usage of ICT and distance learning
 - **Equity:** Model Colleges in each district and integration of various equity schemes currently in place
 - **Faculty Recruitment and Development**
 - **Reform** in admission process, curriculum development and examination process
 - **Research and Development**

Methodology of the Study

Design

Keeping in view the objectives of the study the investigator selected a mixed method approach with proper combination of both qualitative and quantitative

processes as described by Johnson and Christensen (2003) and Johnson and Onwuegbuzie (2004) as the primary design for the study. The two data base had compared to determine if there is convergence and difference. Thus, keeping in view the requirements of the study, the investigator used **Convergent Design of mixed method strategy.**

Population and Sample

The target population for the present study was all the rural degree college teachers of Odisha. A multi-stage sampling procedure was adopted by the investigator to select sample and to make the sampling process more practical. The investigator first made clusters and divided the 30 districts of Odisha in three zones: North, South and Central and then purposively selected 3 (1 from each zone) district. Further, after selection of district the investigator again purposively selected two rural degree colleges from each district as the research site of the study. Then the investigator, by adopting incidental sampling method, selected nine teachers from each college (3 from each Science, Arts, and Commerce), as sample of the study. In this way total sample size was about 54 teachers (18 from each - Science, Arts and Commerce).

Tools Used

In the present study the following tools have been used to obtain information from the respondents. All the tools have been developed by the investigator.

Awareness test for the teachers - An awareness test was prepared by the investigator for teachers. The investigator selected multiple-choice type questionnaire as a tool for collecting data in the present study. The tool included thirty items related to all dimensions of academic provisions (access, equity, faculty, academic and research and development) of RUSA. This was made with the intention to assess as to what extent rural degree college teachers are aware of the academic provisions of RUSA. The validity and reliability of the tool was checked and corrected by the experts.

Interview schedule for the teachers: A semi-structured interview schedule was also prepared by the investigator. The schedule mainly consisted of five questionnaire items related to all five academic dimensions of RUSA and few / several questionnaire items under these main themes. This was also made with the intention to know about to what extent teachers have comprehensive understanding of it.

Checklist for the researcher: A checklist was also prepared by the investigator. The checklist consisted of twenty-five items related to both

human and material resources. The investigator developed this tool with the intention to check the availability and usability of resources in rural degree colleges provided by RUSA for ensuring quality of higher education.

Analysis and Interpretation

1. Availability and Utilization of Resources

The information obtained from the checklist revealed that rural degree colleges are faced by many shortcomings, like all degree sampled colleges were not adequately and evenly equipped with peripheral hardware. Overall picture on availability of computers and peripheral hardware in all degree colleges were not sufficient enough for unlimited as well as multiple uses by the teachers. The closer view of hardware facilities indicates a sizeable portion of the rural degree colleges do not have projector, digital library, department library, research cell, audio-video conferencing system, interactive white board and ICT labs. A very low percentage of colleges have playground and hostel facilities for students. Almost all colleges were suffering from inadequate staff members, pupil-teacher ratio, insufficient classrooms etc. Further, in almost all colleges anti-ragging cell and IQAC were not working properly. The scopes for scholarship facilities found were very negligible. The overall findings clearly indicated that majority of the resources and facilities are not available adequately in rural degree colleges, and even if those facilities are available in the colleges, they are not used frequently.

I. Awareness of Teachers about General Knowledge of RUSA

Table-1

Awareness of Teachers about General Knowledge of RUSA

Q. No.	Description of Items	Correct Response (%)			Correct Response (Over all%)
		Arts	Sc	Com	
1	What is the full form of RUSA?	100% (18)	100% (18)	100% (18)	100% (54)
2	RUSA was launched in which year?	66% (12)	55% (10)	38% (07)	53% (29)
3	What is the central funding ratio for general state under RUSA?	55% (10)	44% (08)	38% (07)	46% (25)
4	What is the GER target of RUSA by the end of 12 th five year plan?	72% (13)	50% (09)	22% (04)	48% (26)

7	Which colleges are not covered under RUSA?	77% (14)	55% (10)	33% (06)	55% (30)
9	What is the GER target of RUSA by the end of the year 2020?	50% (09)	44% (08)	33% (06)	42% (23)
11	Which one does not come under RUSA?	44% (08)	27% (05)	22% (04)	31% (17)
30	Which one of the following issues is not addressed by RUSA?	55% (10)	44% (08)	33% (06)	44% (24)

(The figures outside the parenthesis indicate the percentage)

Table-1 summarizes the awareness of teachers about general knowledge of RUSA. It was found from the awareness test and interview that just more than half of the teachers stated correctly about the launching year of RUSA (53%). Less than half of the teachers had knowledge about the funding ratio of the RUSA to general state (46%). Very less number of teachers had knowledge about the scope of RUSA (44%). Further, in relation to stream wise analysis the interrogation by the researcher revealed that the overall findings related to basic knowledge on RUSA indicate that to some extent Arts teachers have knowledge about the basics of RUSA scheme whereas majority of the teachers of Science and Commerce were yet not aware about the basics of RUSA scheme.

II. Awareness of Teachers about Access Provisions of RUSA

Table-2

Awareness of Teachers about Access Provisions of RUSA

Q. No.	Description of Items	Correct Response (%)			Correct Response (Over all%)
		Arts	Sc	Com	
8	For better access to higher education RUSA suggested which of the following	50% (09)	44% (08)	38% (07)	44% (24)
22	Which one of the following provision of RUSA is related to access?	66% (12)	50% (09)	33% (06)	50% (27)

(The figures outside the parenthesis indicate the percentage)

Table-2 shows that just less than half of the teachers (44%) stated correctly regarding the provision made by RUSA for better access to higher education. Subsequent query found that half of the teachers (50 %) were aware about the usage of ICT and distance learning provisions of RUSA to accelerate higher education. In relation to stream wise analysis the overall findings related to access provisions of RUSA indicate that to some extent teachers belonging to Arts stream were only aware about the access related provisions of RUSA scheme whereas Science and Commerce teachers are still not aware of it.

III. Awareness of Teachers about Equity Provisions of RUSA

Table-3
Awareness of Teachers about Equity Provisions of RUSA

Q. No.	Description of Items	Correct Response (%)			Correct Response (Overall%)
		Arts	Sc	Com	
8	If a college wants to be upgraded into a Model college it is eligible for a fund of _____?	50% (09)	44% (08)	33% (06)	42% (23)
22	Which one is the provision of RUSA to facilitate equity?	94% (17)	83% (15)	55% (10)	77% (42)
23	According to RUSA which of the following is mandatory for quality assurance?	77% (14)	55% (10)	44% (08)	59% (32)
26	Which of the following up gradation is made by RUSA?	77% (14)	72% (13)	38% (07)	62% (34)
28	Which of the following steps taken by RUSA for correcting regional imbalance?	44% (08)	55% (10)	22% (04)	40% (22)

(The figures outside the parenthesis indicate the percentage)

Table-3 indicates that just less than half of the teachers (42%) had knowledge about the funding pattern of an upgraded model college. Similarly, very less number of teachers were aware about the steps taken by RUSA for correcting the regional imbalance (40%). Further probing revealed that just more than half of the teachers (59%) had knowledge about the provisions mandatory for quality assurance. The interrogation by the investigator, in relation to stream wise analysis, the overall findings indicate that the Arts and Science teachers

working in rural degree colleges were more aware about the equity related provisions of RUSA scheme in comparison to Commerce teachers.

IV. Awareness of Teachers about Faculty Provisions of RUSA

Table-4

Awareness of Teachers about Faculty Provisions of RUSA

Q. No.	Description of Items	Correct Response (%)			Correct Response (Overall%)
		Arts	Sc	Com	
5	What criteria should be followed under RUSA with regards to the student- teacher ratio?	50% (09)	33% (06)	22% (04)	35% (19)
12	Which one is not related to administration and faculty component of RUSA?	66% (12)	55% (10)	33% (06)	51% (28)
19	Which one does not come under the faculty related provision of RUSA?	55% (10)	55% (10)	22% (04)	44% (24)
24	According to RUSA the faculty recruitment process will adhere to which norms and regulations?	66% (12)	44% (08)	38% (07)	50% (27)
25	What provisions are made by RUSA for faculty recruitment?	72% (13)	55% (10)	50% (09)	59% (32)

(The figures outside the parenthesis indicate the percentage)

Table-4 summarizes that very less number of teachers working in rural degree colleges responded correctly about the criteria that should be followed under RUSA with regards to the student- teacher ratio (35%). Further interrogation by the researchers revealed that just more than half of the teachers stated correctly about the administration and faculty component of RUSA (51%), provision made by RUSA for faculty recruitment (59%) and the norms and regulations adhere for faculty recruitment process (50%). In relation to stream wise analysis the overall findings indicate that the Arts and Science teachers working in rural degree colleges are more aware about the faculty related provisions of RUSA scheme in comparison to Commerce teachers.

V. Awareness of Teachers about Academic Provisions of RUSA

Table-5

Awareness of Teachers about Academic Provisions of RUSA

Q. No.	Description of Items	Correct Response (%)			Correct Response (Overall%)
		Arts	Sc	Com	
13	Which one is not related to monitoring of institution under RUSA at state level?	33% (06)	22% (04)	22% (04)	25% (14)
16	Which agency works for accreditation of institutions under RUSA?	100% (18)	100% (18)	100% (18)	100% (54)
17	Which one is suggested by RUSA to capture the required data of an institution in a timely fashion?	50% (09)	38% (07)	27% (05)	38% (21)
20	Which one does not come under the academic related provision of RUSA?	55% (10)	44% (08)	44% (08)	48% (26)
27	Institutional structures are made at how many levels, which would facilitate monitoring of RUSA?	44% (08)	33% (06)	22% (04)	33% (18)
29	Which of the following academic dimensions of RUSA include Choice Based Credit System?	66% (12)	44% (08)	44% (08)	51% (28)

(The figures outside the parenthesis indicate the percentage)

Table-5 shows all teachers working in rural degree colleges responded correctly the name of the agency which works for the accreditation of institutions under RUSA. Further interrogation by the researchers revealed that just more than half of the teachers stated correctly about the Choice Based Credit System (51%). It has also found that only one quarter number of teachers had knowledge about the monitoring of institution under state level (25%). Further in relation to stream wise analysis, the overall findings related to academic provisions of RUSA indicate that Science and Commerce stream teachers working in rural degree colleges were yet not aware about the academic provisions of RUSA scheme in comparison to Arts teachers.

VI. Awareness of Teachers about Research and Development Provisions of RUSA

Table-6
Awareness of Teachers about Research and Development Provisions of RUSA

Q. No	Description of Items	Correct Response (%)			Correct Response (Over all%)
		Arts	Sc	Com	
14	Which financing strategy would be adopted by RUSA?	55% (10)	44% (08)	27% (05)	42% (23)
15	Under RUSA, funds would flow from where to universities and colleges, through the state government?	88% (16)	55% (10)	38% (07)	61% (33)
18	Which one of the allocation of grant is not listed in RUSA document?	50% (09)	27% (05)	27% (05)	35% (19)
21	Which one of the following provision of RUSA is to facilitate research and development?	44% (08)	38% (07)	16% (03)	33% (18)

(The figures outside the parenthesis indicate the percentage)

Table-6 indicates that just more than half of the teachers know about the flow of funds for higher education (61%). But very less number of teachers had knowledge about the financing strategy adopted by RUSA (42%) and allocations of grants (35%). Further interrogation by the researchers revealed that in relation to stream wise analysis the majority of the Arts teachers working in rural degree colleges are aware about the research and development related provisions of RUSA. However, the Science and Commerce teachers are not fully aware about it.

Major Findings of the Study

1. The major findings of the study revealed that majority of the resources and facilities are not available adequately in rural degree colleges, and those facilities which are available in the colleges, are not used frequently.

2. The overall findings related to basic knowledge on RUSA scheme indicated that to some extent rural degree college teachers were aware of it whereas it was again found that Arts teachers have more knowledge about it in comparison to Science and Commerce teachers.
3. Findings related to access provisions of RUSA revealed that just less than half of the teachers were aware regarding the provisions made by RUSA for better access to higher education where it was found, to some extent, teachers belonging to Arts stream have only better knowledge than Science and Commerce teachers.
4. Awareness about Equity related provisions of RUSA revealed that to some extent teachers working in rural degree colleges were aware of it whereas it was again found that the Arts and Science teachers were more aware of it in comparison to Science teachers.
5. Awareness about faculty related provisions of RUSA revealed that just less than half of the teachers working in rural degree colleges were aware of it. Further, it was again found that the Arts and Commerce teachers had more knowledge of it in comparison to Science teachers.
6. Findings related to academic provisions of RUSA indicate that near about half of the teachers working in rural degree colleges were aware of it where Science and Commerce stream teachers had not much knowledge about it in comparison to Arts teachers.
7. Overall findings related to research and development provisions of RUSA indicate that majority of the teachers working in rural degree colleges were yet not aware of it whereas Arts teachers have only to some extent knowledge about it in comparison to Science and Commerce teachers.

Recommendations

The recommendations based on the results of the study are as follows:

1. The study revealed that majority of the resources and facilities are not available adequately in rural degree colleges, even those facilities that are available in the colleges are not used frequently. Hence it may be the recommendation of the study that the policy makers and principals of the colleges should consider this and make necessary arrangements for its improvement.
2. The study revealed that the awareness of teachers about the academic provisions of RUSA is below the average. Hence it is the recommendation of the study that the policy makers should consider this and take necessary actions to enhance the awareness among teachers.
3. The study revealed that the Arts teachers had better awareness than Science and Commerce teachers. Hence it may be the recommendation of the study that there should be necessary arrangements for proper

motivation and orientation to Science and Commerce teachers to enhance their knowledge and awareness in this respect.

4. The study revealed that all of rural degree colleges are facing the problem of maintaining the proper pupil-teacher ratio. Hence it may be the recommendation of the study that the government and policy makers should look at this point and try to remove this problem.
5. The study revealed that in respect to equity, the rural degree colleges are lacking behind in many respect like upgradation, regional imbalance, mandatory quality assurance etc. and teachers also lack awareness about it. Thus it may be the recommendation of the study that the policy maker should keep this aspect in mind and may provide all types of equity facilities to enhance the quality of higher education.
6. The study revealed that majority of the teachers working in rural degree colleges were not aware about the research and development related provisions of RUSA. Thus it may be the recommendation of the study that there must be orientation programs held in rural degree colleges to make them aware about it and enhance their knowledge updating and improving their current affairs knowledge.

Conclusion and further Research Directions

The importance of RUSA in higher education sector is being highlighted in many educational policies and exponents' speeches but studies on this area are very few. Therefore, the present investigation has opened up a new direction in this respect. The problems which have been identified by the investigator will give a proper direction to the authorities concerned in developing and modifying the programs regarding the awareness of teachers about the academic provisions of RUSA to enhance the quality higher education. Through this study it can be understood that by implementing the RUSA scheme, the Government tries to equip all types of facilities with respect to all academic dimensions' access, equity, faculty, academic and research and development to higher education institutions for quality output.

For further research, using the same methodology, it can be carried out in examining the awareness of teachers with respect to gender, locality, type of institutions etc. Further out of academic provisions other aspects of RUSA provisions related to quality and governance can also be taken into consideration. The study can also be done with respect to the effectiveness and attitudes of stakeholders towards RUSA scheme. Comparative study will be useful in this domain. A comprehensive study would help to review the overall quality of higher education in relation to its curriculum, administration and facilities to improve service quality of the higher education institutions.

References

- Balu, A., and Rajkumar, P. (2015). RUSA-Present higher education trends in India, *International journal of scientific research*, XI (4), 240-241.
- Gaikwad, B.R. and Solunke R.S. (2013). Growth of higher education in India, *International Research Journal of Social Sciences*, 2 (08), 58-60.
- Giri, D.K., and Priyanka. (2015). A comparative study on the awareness of students, teachers, principals and policy makers on RUSA (Rashtriya Uchcharat Shiksha Abhiyan) project and their attitude towards its implementation in Indian higher education, *International Scholarly Research Journal*, XIII (7), 1-9.
- Lindsay, C.N. (2012). Quality and equity in higher education, *An Irish quarterly review*, 83 (330), 161-169.
- Pandiya, S. (2015). A study of the various provisions and challenges for RUSA, *International Journal of Human Potential Development*, IV (2), 31-37.
- Patra, J.N. and Mete, J. (2016).RUSA: The roadmap and future of higher education in India, *International Journal of Human Potential Development*, V (2), 21-26.
- Rambilas, (2015). The National Higher Education Mission (RUSA): Challenges and prospects, *International Journal of Innovative Social Science and Humanities Research*, II (3), 51-60.
- Sahu, A. and Jain, P. (2015). Impact of higher education system in India through RUSA, *Voice of research*, IV(2), 30-34.
- Shah, V. (2015). Rashtriya Uchcharat Shiksha Abhiyan (RUSA): A study, *International scholarly research journal*, XIV(3), 23-29.
- Singh, N.R., and Devi, M. (2014). Rashtriya Uchcharat Shiksha Abhiyan (RUSA) Current higher education trends in Manipur, *International Journal of Social Science and Humanities Research*, II (3), 57-71.
- “MHRD Rashtriya Uchcharat Shiksha Abhiyan (RUSA): Draft Guidelines for Consultation”, Ministry of Human Resource Development, Govt of India, 2013: Retrieved 20.09.2015 from www.mhrd.gov.in/RUSA_guidelines_30102013.pdf.
- “Rashtriya Uchcharat Shiksha Abhiyan (RUSA): National Higher Education Mission”, *University News*, Vol. II, 51(39), 2013.

Webliography:

- <http://www.asercentre.org/Annual/Status/of/Education/>
- <http://eduvisors.com/dwnldassets/PDF/EduvisorsMonographRashtriyaUchchatarShikshaAbhiyan.pdf>
- <http://www.aicteindia.org/downloads/RUSA%20Version%2018%20Narrative%207th%20Jan.pdf>
- <http://mhrd.gov.in/sites/uploadfiles/mhrd/files/uploaddocument/RUSAfinal1090913.pdf>
- <https://www.scribd.com/doc/186661374/Rashtriya-Uchchatar-Shiksha-Abhiyan-National-Higher-Education-Mission>

(Note : Complete list of reference is available on the website www.meri.edu.in)

Multicultural Counselling

Manisha Minocha

Abstract

Multicultural Counselling occurs when the professional counsellor works with a client from a different cultural group. Culture plays a very relevant role in counselling. The outcome of treatment is very much affected by cultural considerations. Multicultural Counselling considers the effects of culture in the counselling relationship. With the gathering of various cultures which is frequent in school, work and social situations, there will be cultural differences. Hence, multicultural awareness is very important in counselling.

For Multicultural Counselling, both the client and the counsellor play a dynamic role. It is important for the counsellor to be aware of the client's cultural background. For this purpose, training on Multicultural Counselling is very important. Becoming a Multicultural Counsellor means gathering more knowledge of other cultures and understanding the complex processes through which people become members of communities and societies. How they construct their world views, basic attitudes, values and norms is quite relevant.

Counselling is a continuous state of learning. One can never master the ability to understand every unique cultural difference. The knowledge base grows as one works with a greater number of diverse clients. This will provide opportunities to gain new insights and skills with each new client. Self-reflection is vital to becoming a culturally competent counsellor. It is important to realize and understand and uncover one's own prejudices, feelings and stereotypical ideas about clients from other cultures.

Counsellors must be willing to acknowledge the limitations of their own cultural competency and expertise when dealing with culturally diverse clients. In some cases, they may even be required to seek culture specific guidance while working with a client or refer to a more culturally competent professional. The great significance of this counselling is that it can provide many marginalized individuals with the necessary emotional and conceptual tools to make a success of their lives, without sacrificing who they are. It empowers individuals and groups to maintain their specific identity within a cultural matrix that may not match their own, to remove the personally applied stigma of reduced income or other socio economic factors, enabling clients to pursue the life paths right for them in their own way.

Introduction

Special Counselling is the counselling of any group of people identified who have certain features that distinguish them from normal persons. The features do not involve only negative qualities but also positive ones. In Multicultural Counselling, the cultural dimensions of a client's life are identified and there takes place an integration of culture into counselling work. Multicultural Counselling theory seeks to take into consideration the highly varied context in which individuals act. It takes into account the variations and differing viewpoints of other cultural and socio-economic backgrounds.

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Multicultural Counselling occurs when the professional counsellor works with a client from a different cultural group. It is the counselling practice that offers effective interventions to culturally diverse clients. A person's culture, ethnicity and race determines his identity and life circumstances. There is a great effect of cultural differences in the interactions that take place within the counselling relationship. Differences in individual clients may be in the form of religion, gender, age and maturity, socio-economic class, family history, and even geographic location.

Major Elements of Multiculturalism

The main features of Multiculturalism can be summarized as all human beings are products of their own culture and that each culture has its own uniquely acquired ways of construing its own world, which give meaning to their lives. Each culture has its own values and traditions and each culture has something of value to offer to another culture. Also equally important each culture has something of value to learn from other cultures. It values cultural pluralism, values diversity and it is about social justice, cultural democracy and equity. It helps us to acquire the attitudes, knowledge and skills needed to function effectively in a pluralistic society. It is an essential component of analytical thinking and challenges us to study multiple cultures and to develop multiple perspectives. It is about a commitment to change social conditions that deny equal access and opportunities.

Refraining from negative stereotyping and discrimination may be difficult but necessary in an ever changing society. Hence, Multicultural awareness is very important in counselling. Multicultural awareness is an understanding, sensitivity, and appreciation of history, values, traditions and lifestyle of minority groups. The counsellor must be aware of the ways in which culture affects us and how we affect culture.

Training of Counsellors

Counsellors and other professionals need multicultural competencies in order to take into account cultural diversity of their clients. There are certain issues which need to be included in the training of counsellors as

1. The different approaches to counselling within different cultures.
2. Beliefs in different cultures regarding mental illness.
3. Sensitivity to racism and ethnocentrism
4. The various ways in which culture shapes family relationships, ethics, core beliefs and communication styles.
5. Culturally sensitive communication, including the necessity of avoidance of potentially triggering terms and figures of speech.

6. Variations in communication styles. For example, some cultures prefer close contact while others need more space during a therapy session.

A culturally competent counsellor needs to have **three characteristics** viz

1. an awareness of his or her own assumptions, values and biases;
2. understanding of the worldview of a culturally different client
3. an ability to develop appropriate intervention strategies and techniques.

Each of these characteristics includes beliefs and attitudes, knowledge and skills. The first step in effective Multicultural Counselling is to identify and acknowledge these differences between the counsellor and client. A fundamental step is also to build a rapport with the client by showing a willingness to learn about their values and beliefs. Another step to be given some importance is to discuss and identify the problem. This technique includes use of body language, eye contact and using open-ended questions. Recognizing and being sensitive to cultural differences is essential for establishing the trust necessary to conduct effective counselling sessions.

Self-reflection is vital to becoming a culturally competent counsellor. It is important to uncover one's own prejudices, feelings and stereotypical ideas about clients from other cultures. Being open minded and willing to educate oneself about culturally different groups is a productive way of moving forward toward the goal of working effectively with them in counselling.

Challenges in Multicultural Counselling

The challenges involved in Multicultural Counselling can be summarized as:

Counsellor Competence and Values: It is important for the counsellor to be thoroughly educated in providing services to a multicultural client. Ignoring the impact of social class and culture-related values can be significant barriers to Multicultural Counselling and may affect treatment. The counsellor may also find it difficult to focus on characteristics associated with the client's values or culture instead of his or her own.

Understanding Language Barriers: Language may be a barrier in the cross-cultural counselling process. Language differences in counselling can lead to miscommunications, misdiagnoses, and misinterpretations. If the counsellor fails to understand a break of eye contact or automatically attributes other body language to assumptions based on culture, the client may feel uncomfortable or be misunderstood.

Belief Systems and Ideologies: Counselling is a practice that originated primarily in western cultures. Therefore, it is largely based on concepts such as individualism, logic and competition, which are in opposition to the ideas associated with other cultures. Minimizing the impact of differences in beliefs and ideologies can be detrimental and can convey disrespect, even resulting in an inaccurate diagnosis or ineffective treatment.

Cultural Bias: Bias can also be a major issue in multicultural counselling. To be effective, counsellors must understand bias in general and be able to refrain from engaging in stereotyping and prejudice in their practice. Considering each client as an individual is essential, because even if two clients are from the same cultural background, they will have unique factors that will inform the session.

Lack of Cultural Awareness: A major obstacle to effective Multicultural Counselling is the counsellor's lack of cultural awareness. Cultural knowledge includes the counsellor's understanding and knowledge of other cultural groups' behaviours, norms, beliefs, and attitudes. Counsellors who are knowledgeable of their clients' cultural preferences and norms are better equipped to make appropriate clinical decisions. For example, in some cultures, passivity rather than assertiveness is revered. A counsellor adhering to the Western culture may have great difficulty understanding a Chinese client's unwillingness to "demand" more from others. However, after learning more about the client's culture, the counsellor introduces counselling interventions that take into account Chinese cultural norms.

Lack of Culturally Appropriate Counselling Skills: Counsellors who lack Multicultural Counselling skills are at risk of providing ineffective counselling.

Examples of skill requirements specific to cultural competency are:

- a) determining effective ways to communicate with a client that may use a different style of thinking, information processing, and communication,
- b) discussing race and racial differences early in the counselling process,
- c) engaging in multiple verbal and nonverbal helping responses, recognizing responses that may be appropriate or inappropriate within a cultural context,
- d) using resources outside of the field of psychology, such as traditional cultural healers, and
- e) modifying conventional forms of treatment to be responsive to the cultural needs of the client.

The challenges involved in Multicultural Counselling can be summarized as:

Counsellor Competence and Values: It is important for the counsellor to be thoroughly educated in providing services to a multicultural client. Ignoring the impact of social class and culture-related values can be significant barriers to Multicultural Counselling and may affect treatment. The counsellor may also find it difficult to focus on characteristics associated with the client's values or culture instead of his or her own.

Understanding Language Barriers: Language may be a barrier in the cross-cultural counselling process. Language differences in counselling can lead to miscommunications, misdiagnoses, and misinterpretations. If the counsellor fails to understand a break of eye contact or automatically attributes other body language to assumptions based on culture, the client may feel uncomfortable or misunderstood.

Belief Systems and Ideologies: Counselling is a practice that originated primarily in western cultures. Therefore, it is largely based on concepts such as individualism, logic and competition, which are in opposition to the ideas associated with other cultures. Minimizing the impact of differences in beliefs and ideologies can be detrimental and can convey disrespect, even resulting in an inaccurate diagnosis or ineffective treatment.

Cultural Bias: Bias can also be a major issue in multicultural counselling. To be effective, counsellors must both understand bias in general and be able to refrain from engaging in stereotyping and prejudice in their practice. Considering each client as an individual is essential, because even if two clients are from the same cultural background, they will have unique factors that will inform the session.

Lack of Cultural Awareness: A major obstacle to effective Multicultural Counselling is the counsellor's lack of cultural awareness. Cultural knowledge includes the counsellor's understanding and knowledge of other cultural groups' behaviours, norms, beliefs, and attitudes. Counsellors who are knowledgeable of their clients' cultural preferences and norms are better equipped to make appropriate clinical decisions. For example, in some cultures, passivity rather than assertiveness is revered. A counsellor adhering to the Western culture may have great difficulty understanding a Chinese client's unwillingness to "demand" more from others. However, after learning more about the client's culture, the counsellor introduces counselling interventions that take into account Chinese cultural norms.

Lack of Culturally Appropriate Counseling Skills: Counselors who lack Multicultural Counseling skills are at risk of providing ineffective counseling.

Examples of skill requirements specific to cultural competency are:

- a) determining effective ways to communicate with a client that may use a different style of thinking, information processing, and communication,
- b) discussing race and racial differences early in the counseling process,
- c) engaging in multiple verbal and nonverbal helping responses, recognizing responses that may be appropriate or inappropriate within a cultural context,
- d) using resources outside of the field of psychology, such as traditional cultural healers, and
- e) modifying conventional forms of treatment to be responsive to the cultural needs of the client.

References

- Bhatnagar, A. and Gupta, N. (Eds) 1999. *Guidance and Counselling: A Practical Approach*. Vikas Publication House. New Delhi.
- Carol, M. R. 1980. Standards for guidance and counselling programs. *The School Counsellor*. November.
- Cruickshank, W. M. 1975. *Education of Exceptional Children*. Prentice-Hall, Englewood Cliffs, NJ.
- Gazda, G.M. 1989. *Group Counselling: A Developmental Approach*. Allyn and Bacon, London.
- Gibson, R.L. and Mitchell, M.H. 2003. *Introduction to Counselling and Guidance*. Prentice-Hall, New Delhi.
- Gysbers, N. and Moore, E.J. 1981. *Improving guidance programmes*, Prentice-Hall, Englewood Cliffs, NJ.
- Jacobs, E.E., Harvill, R. L. and Masson, R. L. 1994. *Group Counselling Strategies and Skills*. Brooks Cole Publishing Company, California.
- Ligon, M.G. and McDaniel Sarah, W. 1970. *The Teacher's role in counselling*. Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- Saraswat, R.K. and Gaur, J. S. 1994. *Manual for Guidance Counsellors*, New Delhi: NCERT.s

- Sharma T.C. 2002. Modern Methods of Guidance and Counselling. Sarup and Sons. New Delhi.
- Srivastava, A.K. 2003. Principles of guidance and counselling. Kanishka Publishers and Distributors, New Delhi.
- Thompson, C.L. and William, A.P. 1979. Guidance activities for counsellors and teachers. Brooks/Cole Pub. Co., Monterey, California.
- Yalom, I.D. 1985. The Theory and Practice of Group Psychotherapy. Basic Books, New York.

School Violence - Causes and Prevention

Rajnish Sharma
Sapna Khurana

Abstract

Many times you or your children have been victims of violence or intimidation and you have been left feeling abandoned, demoralized and full of despair because no one will lift a finger to help. The truth of the matter is that we are all alone when it comes to dealing with any form of aggressive behavior among children, especially in school. Did you ever wonder why schools have so much violence and what really causes children to fight and argue? This study is an endeavor to find out causes of violence and preventive measures taken to reduce school violence. Qualitative research method has been used. To collect qualitative data, 20 higher secondary school teachers were selected. Data were collected by conducting face to face interviews. In order to develop effective preventive strategies and interventions for school violence, risk factors and causes of school violence are discussed in the study.

Keywords: School violence, causes, preventive measures, interventions.

A school is supposed to be safe haven where children can go to learn basics of mathematics, literature, science without fearing for their safety. But now a days despite continuous efforts of administrators and teachers toward making the school environment safe and secure, crime and violence do find their way into the school. Not only in India but all over the world, the schools are facing troubling incidents of shooting, murder, sexual harassment etc. It's usually the innocent children who are involved in the violence. Instead of solving the problems, students fight and choose the way of crime. Schools are not safe anymore because of the growth of violence in schools.

Meaning of School Violence

Hoang (2001) considered school violence as “unacceptable social behavior ranging from aggression to brutality that threatens or harms others, goes beyond highly publicized incidents of mass bloodshed to include acts, such as bullying, threats, and extortion.” Boxer , Edwards-Leeper , Goldstein, Musher-Eizenman and Dubow (2003) espoused that most of the people consider violence as a physical confrontation, but, in the school context (especially), verbal abuse can be just as damaging to the victims as physical violence is.

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School violence is defined as “acts of physical or verbal altercation on the way to school, on the way home from school, or at a school sponsored event that can cause physical or psychological harm to another individual, school, or community”. (Espelage & Swearer, 2004).

Violence can be classified into two types: physical and verbal. Students encounter it not only from their classmates and schoolmates, but also from teachers and administrators. It includes violence between school students as well as physical attacks by students on school staff. In many studies conducted across globe, it has been found that teachers were being emotionally, physically, psychologically and in a few cases even sexually victimized by their students (Burton, 2008; Chen & Astor, 2009; Espelage et al., 2013; Mehmet, 2012). The problem we are facing today with violence in the schools is a major concern with communities everywhere. It isn't the brain that the kids are born with that has changed in half a generation; what has changed though is the easy access to guns and the glorification of revenge in real life and in entertainment.

Crime in and around schools is threatening the well-being of students as well as the staff and surrounding communities. It also affects the learning and academic achievement of students. Besides, violence in school not only affects the victims but perpetrators also and on the whole decreases the effectiveness and relevance of education (Sugai & Horner, 2006) which goes against the aim of the school. School counsellors are a good idea, but they seem to be preoccupied with students who have learning disabilities. Many schools are now adopting a zero tolerance policy. They are pulling out every student who does anything suspicious.

Causes of School Violence

- 1) Violent video games and aggression among kids.** The Internet, blogging, e-mail, and cell-phone text messaging have grown to play significant roles in the erosion of school safety. Homan (2014) found that high school students, who had more exposure to violent video games showed increased arousal in the aggressive thoughts, angry feelings and aggressive behavior of the participants. Cell-phone text messaging and e-mail provide additional platforms that support a new form of violence--cyber bullying.

2) **Environmental Impact**

- i. **School Environments:** School environment, regardless of their settings-- rural, suburban, or urban-- are becoming more violent.
- ii. **Gangs at schools:** Gang formation is very common in schools. It has been reported that two percent of juvenile crime is gang-related. Gang members from different schools often come together at one school to partake in gang-related attacks.
- iii. **Community Environments:** If the community is not responsive to the needs of children, this neglect can develop into school violence. When a child spends unstructured and unsupervised time, he starts acting violently.
- iv. **Family Environments:** Contemporary Indian society makes it difficult for parents to meet all their children's needs. The current economy demands both parents to work; more children are raised by single parent. Subsequently children are subjected to physical, sexual, and substance abuse in the absence of parental suppression. Abusive family environments can inhibit the development of communication skills.
- v. **Lack of realistic, effective disciplinary systems:** Often, too much focus is placed on stopping violence in schools and strict disciplinary rules are enforced on students. This is not realistic approach. Students find the rules suffocating and break them.

3) **Lack of communication between parents, guidance counselors, and teachers:** Young people need a strong support system of their authority figures. For students, this means their parents, teachers, and guidance counselors. School administration must focus on creating easy, mandatory, and continuous communication between these groups, so that it is not just “parent/teacher conferences”, after a student is displaying violence and aggressive behavior.

4) **Disconnect between students:** As students are typically the ones causing violence in schools, they are the true key in minimizing events of aggression and violence. Faculty and staff can go through trainings such as crisis prevention and Active Shooter Response Training. Anti-bullying and anti-violence trainings should be encouraged and made available to all students.

5) **Disconnect between students and teachers:** Student-teacher interaction is paramount for preventing violence in schools. It is easy for teachers, after dealing with constant aggression from particular students, to feel that the student body is only the problem and not realize that students are

also the solution. Teachers and administration must utilize the support and help from those students who stand out as role models and leaders in their classes and school clubs.

The truth is, school violence is on a rise, and it can be attributed to factors such as disinterest in learning, the total preservation of the civil rights of the students at all costs, and the lack of power the teachers and administrators have to punish misbehavior. Finding a permanent, better resulting answer demands a closer look at where the problem starts.

Purpose of the Study

Preventing school violence has been an issue in our society for so long it has almost become commonplace. The violence goes from elementary schools all the way up to college universities. So what are we to do? Should we institute better security? For all of these tragedies, it is time reasonable measures are finally taken to implement new methods of prevention and to address the school violence issues as a severely significant problem. For some schools, violence may be a minor issue; for others, it may be a daily concern. The threat of violence can keep students away from school, prevent them from going to after-school events, and leave them in fear every day. To make our schools safer, everyone can and must help: teachers, parents, students, policy makers, law enforcement officers, and other concerned community leaders. Each of us can do something to help solve the problem. And it's a problem we all must solve and resolve.

Research Method

Design of the Study

To have deeper understanding of the experiences, values and beliefs of school professionals, qualitative research method was used. In order to develop effective preventive strategies and interventions for school violence, it is necessary to understand the risk factors and causes of school violence. Teachers should understand their role in identifying, preventing and combating school violence.

Sample

To collect qualitative data 20 higher secondary school teachers were selected. In sample selection, academic qualifications and gender representations were taken into account Teachers' experience ranged from 8-14 years.

Data Collection

Data were collected by conducting face to face interviews. Interview questions were developed by the researchers through literature review and questionnaires related with the study. Interview schedule included following questions:

What do you mean by school violence?

What are the causes of school violence?

What is the reaction of teachers and school administrators toward school violence?

What are the preventive measures taken to deal with school violence?

The interview time varied for different participants but it took 60-90 minutes. The interviews were recorded and transcribed verbatim and the data were analyzed using descriptive and content analysis.

Analysis and Interpretation

Meaning of school violence

Teachers reported different kind of violence in school which includes student to student violence, teacher to student violence and teacher to teacher violence. Student to student violence is in the form of hitting, fighting, beating, punching, teasing with harsh language, threatening etc. It may be also verbal and/or physical. Students also reported cyber bullying to threat the peers on social media. Both genders employ violence but physical or verbal violence is more common in boys. Teacher to student violence is reported in verbal form of violence only. Teachers' verbal violence is employed only when the students misbehave and react aggressively or become violent. School violence can take place anywhere - in the classroom, playground, on the school bus and/or outside school gate or parking area.

Causes of school violence

Students reported that inconsistent disciplinary rules of school cause aggression among students that provoke violence. Sometimes sarcasm, labelling, dull environment of classroom, overcrowded classes and ineffective classroom management promote violent acts in schools. Teachers explained that the most obvious reason for violence is the role of mass-media, lack of tolerance, lack of democracy in education, child rearing practices and overly involved parents. Location of the school, physical conditions, use of harsh language is also associated with violence. Inability to transfer energy to suitable activities and lack of self-confidence is also contributory factor.

Reaction of teachers and school administrators toward school violence

Students and teachers reported that the administrators take serious actions against perpetrators. Teachers warn, threaten and give corporal punishment. Some students are sent to school principal's office for some serious action to be taken. Parents are consulted immediately for serious violent act. Schools follow zero tolerance policy. Children also get help from school counsellors. They share their problem and interventions are suggested to the child as well as parents by the counsellor.

Preventive measures taken to deal with school violence

Teachers revealed that psychological and counselling services are provided to students to take safety measures and to change behavioural problems like bullying, aggression etc. Students are encouraged to take responsibility for maintaining school environment safe. Complaint box or suggestion box is installed in the school premises where students can drop grievance letters and necessary action is taken by school authorities. Common areas like playgrounds, cafeterias, parking areas are under CCTV monitoring. Security guards are always alert at entrance gate of school. They keep check on visitors. School safety rules by CBSE are strictly followed by school authorities. But still there is lack of cooperation from parents. There is lack of communication between parents and children.

Students reported that to maintain discipline in the school, students have been assigned the duties to keep check on students. Students who break the rules are given 2-3 warnings and after that strict action is taken against them.

Conclusion

Teachers reported different kinds of violence in school which includes student to student violence, teacher to student violence and teacher to teacher violence. Students reported that inconsistent disciplinary rules of school, sarcasm, and labelling, dull environment of classroom, overcrowded classes and ineffective classroom management promote violent acts in schools. Teachers explained that impact of mass-media, lack of tolerance, lack of democracy in education, child rearing practices and overly involved parents, location of the school, physical conditions, and use of harsh language is also associated with violence. School violence prevention programme should be developed with the help of teachers, school administrators, parents and students. The contributing factors to school violence should be identified and preventive measures should be taken. Counselling is the best method to deal with perpetrators. Students should be offered effective violence prevention curriculum. Teachers should resolve conflict between students.

To prevent teacher-student violence, police verification of non – teaching staff to some extent ensures safety of students. Proper enquiry of drivers and conductors should be done along with police verification and all the safety standards of the vehicles should be complied with. Psychometric test of all the staff members is also one of the guidelines issued by government. Children deserve a safe setting to learn in. Teachers and staff deserve a safe place to work in. Communities deserve safe schools that educate kids and help keep neighbourhoods safer.

References

- Boxer, P., Edwards-Leeper, L., Goldstein, S. E., Musher-Eizenman, D. R., & Dubow, E. F. (2003). Exposure to “low level” aggression in school: Effects on aggressive behavior, future expectations, and perceived safety. *Violence and Victims*, 18, 691–704.
- Burton, P. (2008). Merchants, Skollies and Stone- Experience of school violence in South Africa. Centre for Justice and Crime Prevention, Monograph Series, No 4.
- Chen, J.K., & Astor, R.A. (2009). The perpetration of school violence in Taiwan: An analysis of gender, grade level, school type. *School Psychology International*, 30, 568–84.
- Espelage, D. L., & Swearer, S.M. (Eds.). (2004). *Bullying in American schools: A social-ecological perspective on prevention and intervention*. Mahwah, NJ: Erlbaum.
- Espelage, D., Anderman, E., Brown, V., Jones, A., Lane, K. L., McMahon, S. D., Reddy, L., & Reynolds, C. (2013). Understanding and preventing violence Directed against teachers. *American Psychologist*, 12, 253-60
- Hoang, F.Q. (2001). Addressing school violence: Prevention, planning and practice. Retrieved from <https://www2.fbi.gov/publications/leb/2001/august2001/aug01p18.htm>
- Homan, M. (2014). Violent video games can make players more aggressive. *The Lantern*. <https://www.thelantern.com/2014/02/>
- Mehmet, O. S. (2012). An investigation of violence against teachers in Turkey. *Journal of Instructional Psychology*, 39(1), 51-62.
- Sugai, G., & Horner, R. H. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School Psychology Review*, 35, 245–259.

Meta-Analysis of Development of the Social Skills among Autism Spectrum Disorder(ASD) Children

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Abstract

Social skills are the essence of quality of life but Autism Spectrum Disorder children mainly deficit in social skills being reflected in their language, communication and executive function. It is assumed that their social skills can be improved by exposing them towards a number of interventions. In this context, through meta-analysis, attempt has been made by the investigator to look into certain research questions like which intervention, setting and how much duration of intervention is more effective in developing the social skills of the ASD children; and which intervention is more effective in developing the social skills of low functioning ASD children. This paper presents the meta-analysis of 15 papers which focus on the interventions i.e. behavioural intervention, video modelling, peer mediated, parent mediated and superhero's intervention for children with Autism Spectrum Disorder. The result shows that all the interventions are helpful in improving social skills but superheroes intervention is more effective as compared to others and shows significant effect size(1.81). So far as setting is concerned it is found that both clinical and school setting is found to provide better opportunity for development of social skills of ASD children and an intervention of eight to nine weeks is reported to put better impact on the development of social skills as compared to intervention of less than one month. But when intervention exposed to children with Autism Spectrum Disorder for more than one year then effectiveness of the interventions seems to be decreased. Due to less number of researches and lack of sufficient information in research papers, the investigator could not draw any conclusive result on the type of intervention effective for low functioning ASD children.

Key Words: Autism Spectrum Disorder, Effect Size, Social Skills

Introduction

The Autism Spectrum Disorder children possess certain peculiar characteristics that makes them different from the typically developed children. In all the spheres of development including cognitive as well as non cognitive, the Autism Spectrum Disorder children differ from the normal children. Generally the ASD children fail to express their own feelings and understand the feelings of other persons (May, Kiss & Carter, 2017) which indicate their poor social skills. In this context the major responsibility of all is to extend their supportive hand which will help them to be in the mainstream of the society.

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But this will be possible only when the personnels closely associated with them will be able to identify their symptoms early and will be able to provide measures necessary for the development of their cognitive and non cognitive abilities (Hume,2009). Besides their cognitive development, since they are the part and parcel of the society, and their social interaction is quite essential for their social mainstreaming, the development of their social skills can not be undermined. But any attempt for their developemt, either intellectual or social skills, needs a comprehensive understanding of their behavioral manifestations by the personnels closely associated with them.

In this context the parents, teachers and personnels associated with them need to ask themselves some fundamental questions like –

- Does your child react verbally or non-verbally when you call his/her name?
- Does your child make eye contact when you communicate with him/her?
- When you play with your child, does she/he smile at you often?
- During communication, does your child use gestures like showing objects, pointing?
- Does your child sit properly on the chair and is your child developing at the same pace as other children?

If the answer to all these questions is ‘no’ then it can be concluded that your child is definitely suffering from developmental challenges and may be identified with neuro developmental disorders like ASD, ADHD. Autism Spectrum Disorder children mainly reflect deficit in social skills, language, communication, executive function skills (DSM V, 2013), as a result of which they find difficulty in interacting with other people, to express their needs and wants which is important component for adjustment in the society (Rogers & William,2006).

Therefore the teachers, parents and peers are expected to have a minimum common knowledge about the behavioral symptoms of such category of children and they need be minutely observed with a view not to show sympathy rather as a part of our responsibility. It is to be kept in mind that simply identification of symptoms is not enough rather their mentor, teachers and parents need be aware and skilled about different strategies essential for their social development besides their cognitive development.

Social Skills and ASD Children

Autism is a developmental disorder, firstly identified by Leo Kanner (Kanner, 1943). This early study shows that individuals with autism face problems in social and communication skills. These children are mainly characterized by the presence of three impairments: poor communication skills, poor social skills and a lack of imagination (Wing and Gould, 1979). In case of one of the major impairments i.e. social impairment, an individual finds it difficult, to form and maintain social relationships (Strain & Schwartz, 2001). They mainly fail to understand and follow the social norms (Lord, Storoschuk, Rutter & Pickles, 1993; VanMeter, Fein, Morris, Waterhouse & Alien; 1997). Most individuals with autism are profoundly delayed in their acquisition of language, and many never achieve how to speak (Camaioni, Perucchini, Muratori & Milone, 1997; Leekam, Lopez & Moore; 2000). Prior, M., et al. 1998 noted a lack of imagination in autistic children, which can be clearly seen in the development of play skills.

In many cases the ASD children struggle in communication, social skills and behaviour, which arises due to the neuro developmental disorder (American Psychiatric Association, 2013; National Research Council, 2001). ASD children should be integrated with the typically developed children. Therefore, in India inclusive education approach is being used so that maximum development of students could be possible. However, it has been found that ASD children in inclusive schools do not find any benefits, mainly due to a lack of social skills (Uthairattanakit, 2002). According to Gresham and Elliott (2008) the social skills required for successful schooling are: listen to others, follow instructions, co-operation, communication, patience and empathy. The problems found in ASD children are that they are not able to understand the feelings of others and incapable in building relationship with other people (Carter, 2014). Hence, it is quite essential to think of some specific well-designed intervention, which will be used in class, so that social skills of Autism Spectrum Disorder children can be improved.

Social skills intervention strategies generally provide productive results (Goin-Kochel et al., 2007). Hwang and Hughes (2000) examined 16 studies on social skill intervention on children with ASD. This study concluded that social skill interventions help in improving the social and communicative skills. Similar to this study, Rogers (2006) and Brain (2010) also agreed that social skill interventions are effective in improving the social skills. In contrast to this, the meta-analysis of Bellini (2007) through the study of 55 papers based on school based interventions for children and adolescents with ASD revealed that social

skill interventions has minimal impact on the social skills of the children with ASD.

These previous meta-analyses have not reported the comparative effectiveness of these treatments under different conditions. This article focuses on quantitative analysis by determining effect size to find the effectiveness of the interventions those would add knowledge to the existing literature. As the number of ASD students increase, there is need of evidence based treatment related research. In this context, meta-analysis is one of the methods for gathering evidences with regard to the treatments for ASD children. Effect size, used in meta-analysis, is one of the ways for calculating magnitude of the intervention or effectiveness of the interventions.

Purpose and Research questions

This paper presents the meta- analysis of 15 papers, which focus on the interventions for children with Autism Spectrum Disorder and find out the effectiveness of these interventions. In this case, meta-analysis is a powerful tool to study the impact of interventions on social skills. To solve the purpose of this study, following research questions will be addressed;

1. Which intervention is more effective in improving social skills of children with Autism Spectrum Disorder?
2. Which setting exerts more impact on social skills of Autism Spectrum Disorder children?
3. Which intervention is more effective for low functioning Autism Spectrum Disorder?
4. How the intensity (number of hours) of interventions put their impact on the social skills of the Autism Spectrum Disorder?

This paper has certain limitations. **Firstly**, different papers used different methodology which add error in value of effect size. **Secondly**, among 15 papers one paper has low rate of reporting in terms of interventions outcome, as a result of which, could not be included in this review paper. **Thirdly**, number of research papers i.e. sample size is very less. **Fourthly**, different papers measure outcome in different manners, which adds errors in output. **Fifthly**, descriptors such as “sessions” or “trials” provide minimal treatment parameters. **Sixthly**, lack of homogeneity in research papers.

Methodology

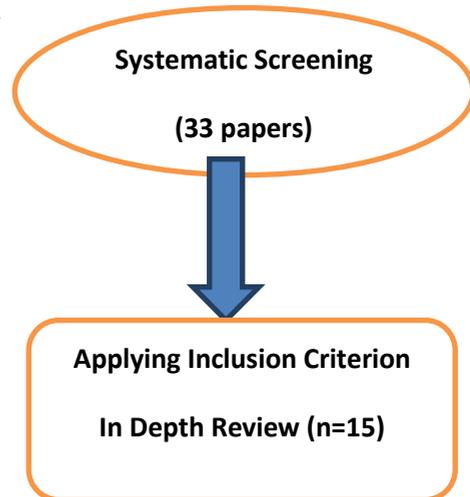
The articles related to interventions on ASD children published in the Journals namely “Journal of Autism Development Disorder”, “Journal of Behavioural Education”, “Journal of Learning Disability”, “Canadian Journal of Psychiatry

and mind, brain and education” in 2018 were consulted for literature review. The selection of papers for review was made on the basis of some criteria like;

1. Those papers were selected in which participants were between the age group of five to eighteen and diagnosed with Autism Spectrum Disorder.
2. Peer reviewed articles were only included.
3. Interventions focusing only on the improvement of the social skills of Autism Spectrum Disorder children were considered
4. Articles published in English language.

As such initially 33 papers were selected from the mentioned Journals but only 15 papers could meet the inclusion criteria.

Fig 1. Process Used
In Meta-analysis



Determination of Effect Size

Effect size tells statistically about magnitude of the effectiveness of the interventions in the Meta analysis process. During the process of review it was found that different articles, use different methods, like single method design, multiple treatment design or quasi-experimental design. Some papers use comparison group and others use only one treatment groups. Therefore, different methods have been used to calculate effect size, which are as follows;

1. **Cohen’s d method:** This method is used when we have mean and standard deviation. Mathematically, we calculate Cohen d as:

$d = \frac{\text{Mean of treatment group} - \text{Mean of control group}}{\text{Pooled standard deviation}}$

This method is not applicable for single case design

2. **Hedges and Olkin small sample correction method:** This method is used when we have only treatment group and no control group available. This method compares pre-treatment and post - treatment scores of one group.
3. **Non-Overlapping Method:** Mostly those papers deal with autism interventions, use single subject designs in which the data are interpreted

from baseline and treatment graphs. In this case, the effect size is calculated by non-overlapping method which is mathematically expressed as follows:

$$NAP = (NA \times NB) - (O + .5[T]) / NA \times NB$$

Where NAP = non-overlap pairs, NA = the number of data points in baseline, NB=the number of data points in the intervention = the number of overlapping pairs of data points from the baseline and the intervention phase, and T= the number of comparisons in which both data points have the same points. This method is suitable in case of single case design.

Interpretation of Effect Size:

Different authors interpret the effect size in different ways, which is as follows:

Table - 1
Interpretation of effect size

Author	Very effective treatment	Moderate effective	Debatably effective	Not Effective
Scruggs(1998)	>0.90	0.70-0.89	0.50-0.69	<0.50
Cohen's	>0.60	0.40	0.20	<0.20
Hedge'g	>0.8-1.30	0.50	0.20	<0.20
NAP	0.93-1.0	0.66-0.92	0-0.65	-

Literature Review on Recent Interventions for Improving Social Skills among Autism

Spectrum Disorder

The review of related literature on interventions for improving the social skills of ASD children is categorized under four parts like behavioural interventions, video modelling, peer mediated interventions, parent mediated interventions and superheroes social skills. The following section deals with the detailed elaboration and analysis of reviews on different interventions promoting social skills of ASD children.

(A) Behavioural Interventions

Philosophy of intervention

Behavioural intervention is specially designed for the Autism Spectrum Disorder children, based on the principle of applied behaviour analysis. It is

based on the philosophy of applied behaviour analysis, which is a scientific approach of modifying the behaviour by applying the learning principle.

Studies Identified

Five studies were identified which used applied behaviour analysis technique to improve the social skills among Autism Spectrum Disorder children. Out of these studies three studies used meta-analysis approach, one study has used AB design and last study used pre –post design.

Finding of the Studies

N. Studer et al. (2017) examined the effects of an early intensive behavioural intervention for children with Autism Spectrum Disorder by use of assessment tools. The average duration of intervention was 45 months. A total of 22 children were exposed to the intervention. Before intervention pre-test and after one-year post test was conducted and this process further extended to another one year. After one year it was found that there was increase in mean value of social skills and effect size was found as **0.53**. After two years the effect size was found **1.37**. This paper finds that effect size was large after two years and significant positive changes were seen after two years of intervention.

Artoni S. et al., (2018) examined the effect of technology enhanced applied behaviour analysis intervention in the children with low functioning Autism Spectrum Disorder for the improvement of their social skills. This pilot study was tested on seven children for one year at school and home, which includes 25-30 hours of structured sessions per week. The effect size was found **0.13** but there was slight increase in the mean value from 93.5 to 99.7, between interval 1 and 2.

Reichow B.(2012) evaluates five meta-analysis studies of early intensive behavioural intervention for young children with the Autism Spectrum Disorders. This study found the weighted effect size for adaptive behaviour range from **0.30 to 1.09**. Among five studies four studies agree on the effectiveness of early intensive behavioural intervention.

Ho et al., (2014) conducted meta-analysis on the cognitive behavioural approach for the children with Autism Spectrum Disorders. Their ten studies involve 402 children and majority of them were high functioning. All interventions were administered in clinical setting. These students were exposed with this intervention maximum for 14 weeks. The resultant overall effect size was found **0.89** which was statistically significant.

Roth E. et al., (2014) evaluated the effectiveness of behavioural interventions through meta-analysis using single case design. Eight studies were included which yielded the non-overlap scores of **85.0** which suggests medium effect size of intervention.

(B) Video Modelling

Philosophy of Intervention

Video modelling interventions are based on the principle of social learning in which subject learns social behaviour through observation in its social setting. In video modelling intervention, the subject imitates the behaviour of peers as well as of their own through recorded videos till desired behaviour is mastered.

Studies Identified

Three studies examined the impact of video modelling on ASD students. These studies reflect that video modelling positively impacts on the social skills among the Autism Spectrum Disorder children.

Findings of the Studies

Nikopoulos and Keenan (2003) studied the impact of a video modelling intervention on the social initiations and playing behaviour, of seven children diagnosed with ASD by using multiple-treatment design. During baseline sessions, participants were free to play with toys with the support of the experimenter for five minutes. After baseline sessions, students were exposed to the video modelling sessions, in which children were taken to the rooms, where in Room Number 01 children watched video of peers, parents and of unfamiliar characters. After that, those children are taken to Room Number 02 where exact environment replicates as children shown in the video. In Room Number 03 students are exposed to different toys so that they can generalize their learning.

After the intervention, social initiation and time period of play with the experimenter was measured in each session. The data suggested that only four students out of seven benefitted through this intervention. Children were taken to one of three Rooms (Room 01) to view a 35mm video of one of the three models, either a familiar adult, a peer, or an unfamiliar adult, engaged in a simple activity using a particular toy with the experimenter. In the video, the experimenter was shown entering Room 02 with the model and going to a chair placed opposite a number of toys (the numbers of toys varied across conditions). The experimenter then sat on the chair. The model spent a few seconds wandering around the room and then approached the experimenter,

taking him by the hand, saying ‘Let’s play’, and leading him to a particular toy. This toy was closer to the experimenter’s seat than the other toys and is referred to here as the ‘pertinent toy’.

Across a number of conditions, the toy selected, to be the pertinent toy, varied. Together the experimenter and model played with the pertinent toy for about 15 seconds. After watching this video sequence only once, each child was taken into the experimental Room (Room 02), which was the same room as that shown in the video) by the experimenter. At no time were any instructions given to the child and no reference was made to the video just watched. While in the room, the experimenter engaged in the same behavior as shown in the video. The child’s behavior during the experimental session, which lasted up to 5 minutes, was videotaped. Behaviors measured included (i) latency to social initiation with the experimenter, and (ii) time spent in appropriate play with the experimenter, using any toy in experimental Room (Room 02, which was the same room as that shown in the video) by the experimenter.

Paterson et al., (2007) studied the effects of a video modelling intervention for generalizing toy play of three children with Autism Spectrum Disorder between age six to twelve by using multiple baseline design and withdrawal design. In this study, two types of toys were used: unrelated (construction site) and related site (crane, bulldozer). They demonstrated that using video models as an intervention was helpful to children with autism in improving verbal and motor play which is a part of the social skills.

Mohammed Alzyoudi and AbedAlziz Sartawri (2015) examined the effects of video modelling on social skills of five children with Autism Spectrum Disorder between ages five to seven by using A-B design. Teacher observed the students in dimensions like social initiation, conversational skills and answering informational questions during baseline assessment. After baseline session, two sessions of video modelling were conducted for six weeks. After that follow up was made on the pre-specified dimensions. The result shows that students’ scores on the post-test were increased, which clearly indicate that video modelling positively impacted on the social skills of children with ASD.

(C) Peer-Mediated Intervention

Philosophy of Intervention

In peer-mediated interventions, peers, of the target students (ASD) were taught strategies of how to interact with ASD children to improve their social,

emotional behaviour (Chan et al. 2010). This intervention fully used the potential of the peers as well as of the children.

Studies Identified

Two studies were focused on peer-mediated interventions to improve the social behaviours in adolescents or adults with Autism Spectrum Disorder.

Findings of the Studies

Shukla et al. (2010) reviewed twenty-six studies in which they studied the effect of the video instruction on social and communication skills by using single-subject design on Autism Spectrum Disorder children aged between 2.5 to 15 years. Out of twenty six studies, twenty studies used peers as video model; subject was model in four studies and in remaining studies point of view was used. This study concluded that it is very difficult to know whether video modelling intervention is effective to improve social skills, so more research is needed on this intervention.

Murphy et al. (2018) examined the effectiveness of complex peer-mediated interventions to improve play skills among ten children diagnosed with ASD aged between six to twelve with randomised control trials (RCT). Ten children diagnosed with ASD paired with typical developed children, which were chosen by the parents of the target group (ASD). Children of this study exposed with 10 intervention sessions (video modelling, peer-mediated and free play). After the follow up, it was found that when autism students are taught by their peers they show positive result.

(D) Parent-Mediated Intervention

Philosophy of Intervention

Parent- mediated intervention mainly focuses on training of parents to effectively modify the behaviour of their child and elicit the desired behaviour. The objective of the parent mediated intervention is that parents become co-facilitators and act as catalyst in the intervention process.

Findings of the Studies

Barry et al. (2003) examined the clinic-based social skills group intervention on four Autism Spectrum Disorder children. Firstly these children are trained in greeting, conversation and play skill. At the end of the session, autism children played with typical developed children. These typical developed children, trained prior to the study, in how to interact with these children. Result in this study indicates that play skills, greeting of the child improved in

the outside of clinic setting but not significant improvement in communication skills.

Beaumont & Sofronoff (2008) studied that parent-training programs mainly focus on the social problem-solving skills. When parents are trained to elicit the desired behaviour of the children and follow-up is done after five months, it is found that incorporation of parents in social training programme produce positive results.

(E) Superheroes Social Skills

Philosophy of intervention

Superheroes social skills are basically social skills training package which is helpful in improving social skills among the ASD category of children. Each animated superhero presents each skill through video in which subject has an opportunity to rehearse the skills through role plays and social games. This program follows the same format: **firstly** skills presented before the subject by giving rationale behind the skill, Superhero will explain the skill, video clipping of the skill presented to the subject and subject practicing this skill through role playing.

Studies Identified

Three studies focus on usability of superheroes' social skills intervention by involving parents and training them on the pre-decided skills. All the studies use the multiple baseline design.

Findings of the Studies

Keith C. (2014) study proposes a comprehensive model for parent-training through the superheroes social skills program and provides directions on how to use this model effectively. In this study, multiple baseline designs were used to evaluate the utility of the parent-training intervention. The sample was divided into two groups. The first group consisted of three children, second group consisted of two children, and participants age lie between five to seven years. Before the baseline phase, parents were trained for eight weeks in which parents were trained on evaluation of social skills and complete teaching strategies were also discussed. The result of the study indicated that parents act as catalyst in promoting the social skills among Autism Spectrum Disorder children.

Radley et al. (2015) examined the superhero social skill intervention in the training of two children with Autism Spectrum Disorder. Participants of the

study were trained for five weeks in non-verbal, requesting, responding, and conversation skills. Participants in this study get benefitted in social accuracy in the training as well as in generalized conditions. In addition to this, parent's report also depicted the similar results.

Ashley et al., (2018) examined the effect of superhero social skills intervention on four Autism Spectrum Disorder children aged between six to twelve, by using multiple baseline designs. The study followed three phases: baseline, intervention, and maintenance. Before the intervention, baseline of skill accuracy was conducted and after that intervention sessions on skill accuracy (Body Basics, Participate, Expressing Wants and Needs) was conducted which was of 20–30 minutes in duration, occurred twice per week for nine weeks. The study with regard to the use of the superheroes social skills program indicated that the program is useful in promoting skill accuracy and generalization in the children with ASD.

Results

Fifteen papers were selected for meta-analysis, which met inclusion criteria. This paper focused on the recent advancement in intervention i.e. behavioural intervention, video modelling, peer-mediated intervention, parent mediated interventions and superhero interventions. The following section deals with the effect size analysis of different interventions as used by the scholars.

Analysis of the Studies

(A) Behavioural Interventions

The effect size analyses of the behavioural interventions have been given in Table -2.

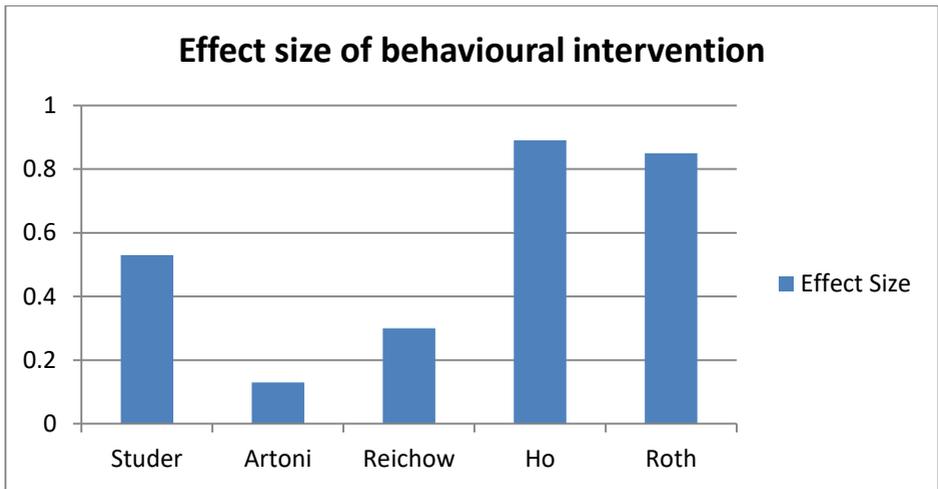
Table - 2
Effect Size of Behavioural Intervention

Author	Number of participants	Intervention on exposure hour/month	Setting	Effect size used	Effect size value	Interpretation
Studer N.et al.,(2017)	22	45 months	Clinical	SMD	0.53	Moderate effect size
Artoni S.et al.,(2018)	07	12 months	School and Home	SMD	0.13	Small effect size
Reichow et	60	18 months	Home	SMD	0.30	Large

al.,(2012)						effect size
Ho et al.,(2014)	402	14 weeks	Clinical	SMD	0.89	Large effect size
Roth et al., (2014)	12	8 months	School	NAP	0.85	Medium effect size
Total	503			Overall effect size	0.54	

*SMD=Standardized mean difference effect size; NAP=non overlapping method

The overall effect size of this intervention is 0.54, which shows moderate effect of this intervention. This can be clearly seen in this bar graph, which is shown as:



Bar Graph 1: Bar Graph on effect size of behavioural intervention

(B) Video Modelling

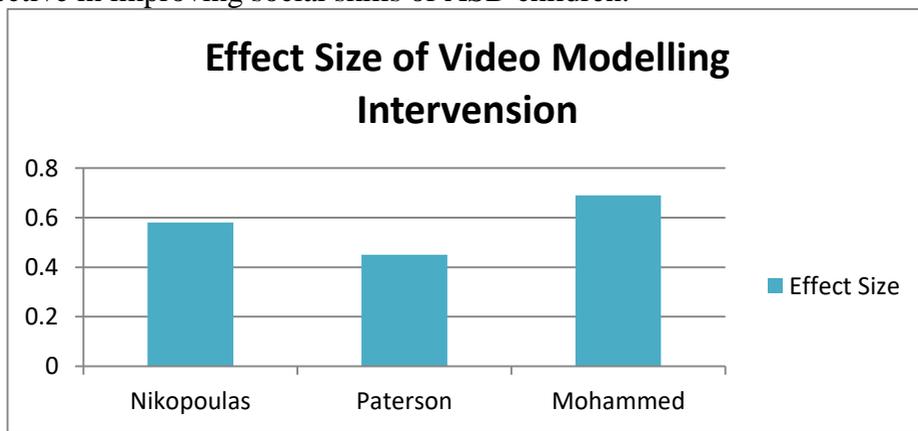
Analysis of Findings

Three studies conducted by Nikopoulos, Paterson and Mohammed examined the effects of video modelling for improving the social behaviour among ASD children by taking small number of sample and not examining its effectiveness of intervention in natural settings. Thus, this intervention (Video modelling) should be further investigated before considering an effective intervention for low as well as high ASD children. The detailed analysis is presented in Table - 3.

Table-3
Effect Size of Video Modelling Intervention

Author	Number of participants	Intervention exposure hour/month	Setting	Effect size used	Effect size value	Interpretation
Nikopoulos	07	6 weeks	School	NAP	0.58	Moderate effect size
Paterson	08	8 weeks	School	NAP	0.45	Small effect size
Mohammed	05	6 weeks	School	NAP	0.69	Large effect size
Total	20				0.57	Moderate effect size

Overall effect size of video modelling intervention is 0.57, which has moderate effect size (significant). This result is supported by the Bellini (2007) meta-analysis of 23 single subject research design which examined the effectiveness of video modelling and video self-modelling (VSM) interventions for children and adolescents with Autism Spectrum Disorders (ASD). This study concluded that video modelling technique is effective for addressing social and communication skills of ASD children. In the same manner, Mason (2013) evaluated video modelling intervention for ASD children and found that an overall improvement rate difference (IRD) effect size of 0.78. Buggey (2005) suggests positive behaviour change video modelling intervention worthy of consideration for persons with autism. Qi C. et al. (2017) evaluated 24 studies using single case studies to examine the effect of video modelling intervention for children with ASD and reported that video modelling interventions are effective in improving social skills of ASD children.



Bar Graph 2 .Bar graph shows effect size of video modelling intervention

(C) Peer-Mediated Intervention

Analysis of findings

Studies reported that peer mediated intervention shows positive result in improving the social skills of ASD children but when these students are not able to access more skilled peers, it might put these children at more risk. Peer-mediated intervention is effective intervention for improving social skills (Bauminger,2003) Table-4 clearly indicates that due to less information available for this intervention, it is very difficult to generalize the data. This result is supported by Carter (2010) who reviewed 83 articles and evaluated the strategy for improving peer interaction with ASD children. This study suggested that more research should be done on intervention, which will improve the peers' interaction with ASD children. Some studies found that peer-mediated intervention is effective intervention for the ASD children for improving their social skills (Zagona L. 2015).

Table - 4
Effect Size of peer-mediated intervention

Author	Number of participants	Intervention exposure hour/month	Setting	Effect size used	Effect size value	Interpretation
Shukla(2010)	104	-	School	NAP	-	Not adequate information
Murphy(2018)	04	9 weeks	School	NAP	0.89	Moderate effect size
Total					0.89	

(D) Parent –Mediated Intervention

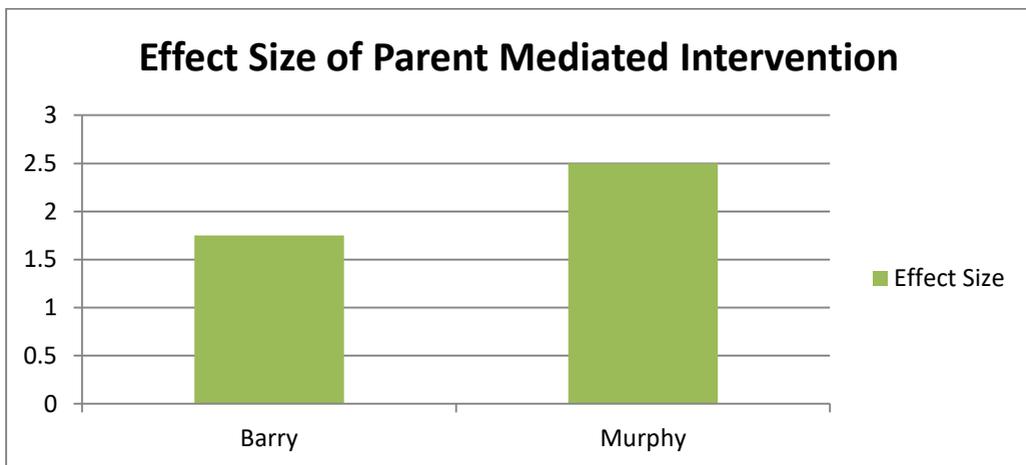
Analysis of findings

In parent mediated intervention studies, it is suggested that the parents can act as catalyst in producing desired behaviour among ASD children which is supposed to enhance social skills of the children (McConachie et al.,2007) but in India it becomes difficult due to lack of skilled teachers those can train the parents about this type of intervention. When parents involved are during the intervention then large effect size (1.0) was reported but due to less number of studies and less information about target domain it becomes difficult to conclude the result. This finding is supported by Rebecca G. Lieberman-Betz

(2015) and Goin-Kochel (2007) who systematically reviewed the fidelity of implementation of parent-mediated social and communication intervention. Nevil (2016) also supported this finding who reviewed 19 randomized clinical trials of parent-mediated interventions for children with Autism Spectrum Disorder. This study revealed that parent-mediated intervention shows weighted score between 0.18 to 0.27, which means debatably effect size. McConachie (2007) also found very few studies had adequate research design from which to draw conclusions about the effectiveness of parent implemented early interventions.

Table – 5
Effect size of parent mediated intervention

Author	Number of participants	Intervention exposure hour/month	Setting	Effect size used	Effect size value	Interpretation
Barry (2003)	04	8 weeks	Clinical	SMD	1.75	Large effect Size
Murphy (2018)	49	7 weeks	Clinical	SMD	0.25	Debatably effective
Total	53				1.0	Large effect size



Bar Graph 3. Bar graph of parent mediated intervention

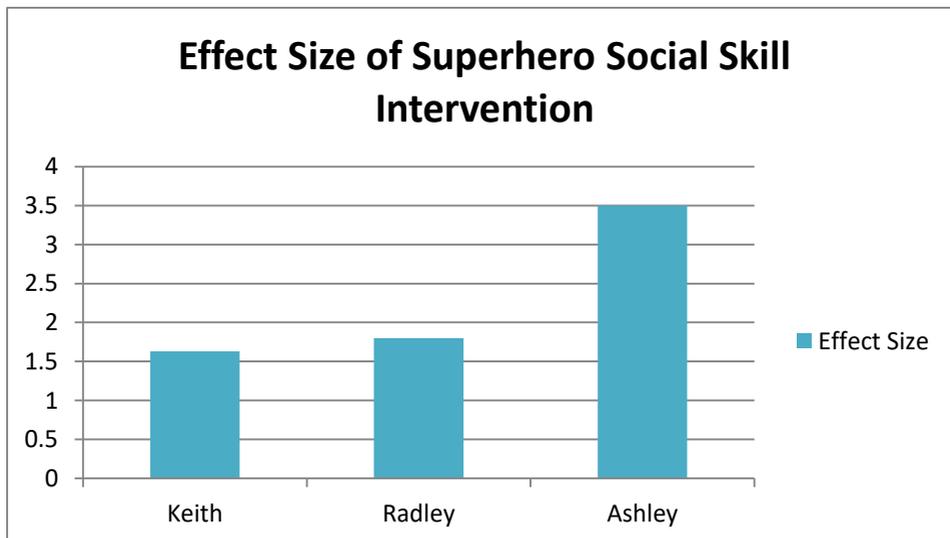
(E) Superheroes' social skills

Analysis of the findings

Superheroes' social skills intervention needs trained experimenter for its successful implementation. In the three studies cited in Table 6, data generalization in the natural setting needs be further evaluated. There is a scope of further research in to find out the effectiveness of this intervention. In this meta-analysis paper, superheroes' social skill intervention shows large effect size which is reported as 1.81. This result is supported by Radley et al., 2014, 2018; Hood, 2010, 2011.

Table - 6
Effect size of superheroes intervention

Author	Number of participant	Intervention exposure hour/month	Setting	Effect size used	Effect size value	Interpretation
Keith	05	8 weeks	School	SMD	1.63	Large effect Size
Radley	02	5 weeks	Clinical	SMD	1.8	Large effect size
Ashley	04	9 weeks	Clinical	Correlation	2.0	Large effect size
Total	11				1.81	Large effect size



Bar Graph 4. Effect Size of Superheroes intervention.

Summary of Interventions

The Table - 7 represents the summary of interventions along with their effect size;

Table - 7
Summary of Interventions

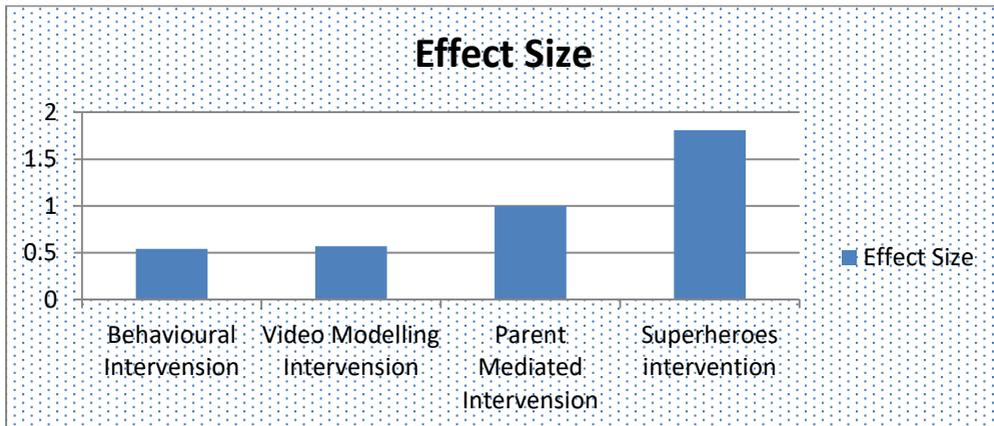
Interventions	Number of Studies	Effect Size
Behavioural intervention	05	Moderate effect size(0.54)
Video Modelling	03	Debatable effect size(0.57)
Peer- Mediated Intervention	02	-
Parent-Mediated Intervention	02	Large effect size(1.0)
Superheroes Social Skills Intervention	03	Large effect size(1.81)
Total	15	

Discussion

On the basis of the meta-analysis of 15 studies, the following research questions can be addressed as follows;

Research Question 1. Which intervention is more effective in improving social skills of children with Autism Spectrum Disorder?

Result



Bar Graph 5. Comparison of effect size of different interventions

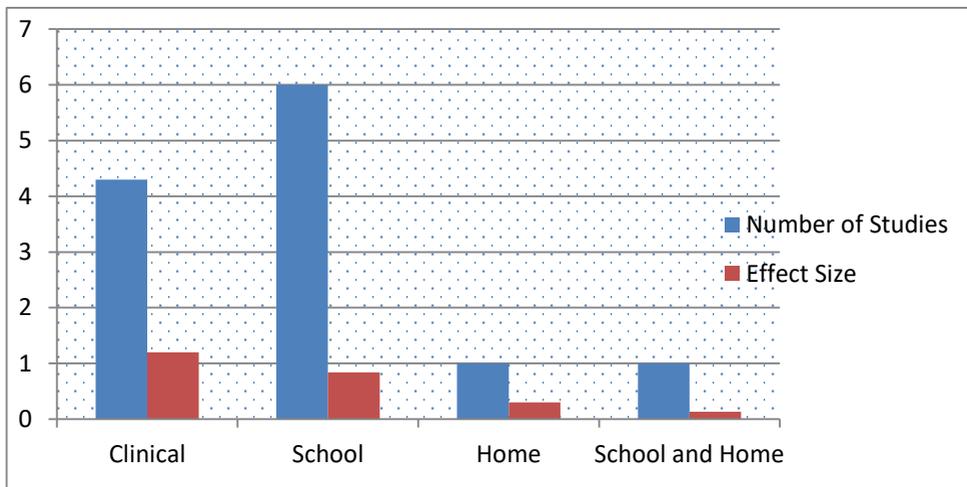
This Bar Graph 5 shows superhero intervention has more effect size (1.8) as compared to other interventions. This result shows significantly positive

improvement in social skills when children with autism are exposed with these interventions. It is unfortunate, however, that due to less number of research papers, and each paper using different methodology and small sample, makes it difficult to give conclusive remarks.

Research Question 2. Which setting impacts more on social skills of the Autism Spectrum Disorder children?

Table – 8
Effect size of different settings

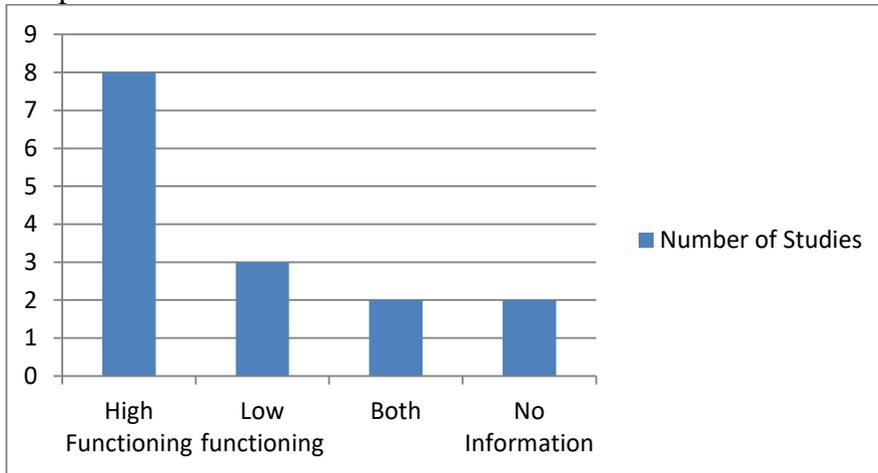
Setting	Number of Studies	Effect Size
Clinical	06	1.2
School	06	0.84
Home	02	0.30
School and Home	01	0.13



Bar Graph 6. Effect size of different interventions

Table – 8 and Bar Graph 6 clearly show that in clinical setting effect size (1.2) is more as compared to the other settings. This data is not sufficient for fine analysis because number of studies in school and home setting is less. These findings contradict with Sutton M. (2018) study who evaluated the effectiveness of school based interventions for improving social skills among ASD children in school settings. This study suggested that school based intervention increase the duration of initiation and responding behaviour among ASD children. So more researches are expected for deep analysis in different settings.

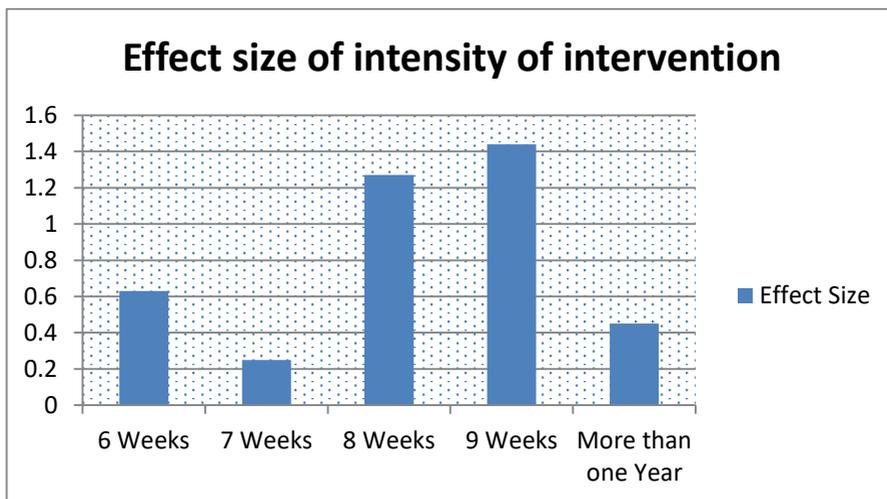
Research Question 3. Which intervention is more effective for low functioning Autism Spectrum Disorder?



Bar Graph 7. Number of studies related to different levels of autism.

The Bar Graph 7 shows that only three studies focus on low functioning children as compared to eight studies on high functioning. So, due to inconsistency in reporting and less number of research papers restrict for drawing any conclusion on it.

Research Question 4. How the intensity (number of hours) of interventions impact on the social skills of the Autism Spectrum Disorder?



Bar Graph 8. Intensity of intervention

The Bar graph 8 shows when children with Autism Spectrum Disorder are exposed with intervention for eight or nine weeks then they get maximum benefit but when exposed more than one year then impact of interventions decreases. This can be happening because when intervention exposed with more than one year then these studies will focus more on generalized settings output.

Conclusions

This paper presents the meta- analysis of 15 papers, which focus on the interventions for children with Autism Spectrum Disorder. The result shows that all interventions are helpful in improving social skills but superhero's intervention is more effective as compared to others and shows large effect size (1.81). Effectiveness of interventions can be increased when they are combined with the other interventions as shown by Wang et al., (2011). This study found the effect size as 1.27 when peer-mediated and video-modelling intervention collectively exposed with the Autism Spectrum Disorder children. The conclusion of the study that superheroes' intervention is more effective is also supported by the multiple reviews (Radley et al., 2014, 2015, 2018; Hood, 2010, 2011). It also noted that autism children show more improvement in clinical settings. Due to less number of researches and lack of sufficient information in research papers, it has been difficult to draw conclusion significantly. Based on this research, no evidence is found that which intensity of intervention is more effective in which setting for low functioning autism children. In this context, more research is expected for low functioning autism children in different settings especially in schools and home.

References

- Alzyoudi, M., Sartawi, A., & Almuhihi, O. (2015). The impact of video modelling on improving social skills in children with autism. *British Journal of Special Education*, 42(1), 53-68.
- Artoni, S., Bastiani, L., Buzzi, M. C., Buzzi, M., Curzio, O., Pelagatti, S., & Senette, C. (2018). Technology-enhanced ABA intervention in children with autism: a pilot study. *Universal Access in the Information Society*, 17(1), 191-210.
- Barry, T. D., Klinger, L. G., Lee, J. M., Palardy, N., Gilmore, T., & Bodin, S. D. (2003). Examining the effectiveness of an outpatient clinic-based social skills group for high-functioning children with autism. *Journal of autism and developmental disorders*, 33(6), 685-701.

- Bauminger, N., Shulman, C., & Agam, G. (2003). Peer interaction and loneliness in high-functioning children with autism. *Journal of autism and developmental disorders*, 33(5), 489-507.
- Bellini, S., Peters, J. K., Benner L., & Hopf, A. (2007). A meta-analysis of school-based social skill interventions for children with Autism Spectrum Disorders. *Remedial and Special Education*, 28(3), 153-16.
- Boyd, Brian A., Samuel L. Odom, Betsy P. Humphreys, and Ann M. Sam. "Infants and toddlers with Autism Spectrum Disorder: Early identification and early intervention." *Journal of Early Intervention* 32, number 2 (2010): 75-98.
- Bugghey, T. (2005). Video self-modeling applications with students with Autism Spectrum Disorder in a small private school setting. *Focus on autism and other developmental disabilities*, 20(1), 52-63.
- Camaioni, L., Perucchini, P., Muratori, F., & Milone, A. (1997). Brief report: A longitudinal examination of the communicative gestures deficit in young children with autism. *Journal of autism and developmental disorders*, 27(6), 715-725.
- Carter, A. S., Davis, N. O., Klin, A., & Volkmar, F. R. (2005). Social development in autism. *Handbook of autism and pervasive developmental disorders*, 1, 312-334.
- Carter, E. W., Common, E. A., Sreckovic, M. A., Huber, H. B., Bottema-Beutel, K., Gustafson, J. R., ... & Hume, K. (2014). Promoting social competence and peer relationships for adolescents with Autism Spectrum Disorders. *Remedial and Special Education*, 35(2), 91-101.
- Hood, J. A. K. (2010). Is “superheroes social skills” an evidence-based approach to teach social skills to children in a clinical setting? A Pilot study examining an evidence-based program for children with autism.
- Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in Autism Spectrum Disorders: A review of three focused interventions. *Journal of autism and developmental disorders*, 39(9), 1329-1338.
- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous child*, 2(3), 217-250.
- Lieberman-Betz, R. G. (2015). A systematic review of fidelity of implementation in parent-mediated early communication intervention. *Topics in Early Childhood Special Education*, 35(1), 15-27.
- Lord, C., Storoschuk, S., Rutter, M., & Pickles, A. (1993). Using the ADI-R to diagnose autism in preschool children. *Infant Mental Health Journal*, 14(3), 234-252.

- Maye, M. P., Kiss, I., & Carter, A. S. (2017). Definitions and classification of Autism Spectrum Disorders (pp. 1-23). New York, NY: Routledge.
- McConachie, H., & Diggle, T. (2007). Parent implemented early intervention for young children with Autism Spectrum Disorder: A systematic review. *Journal of evaluation in clinical practice*, 13(1), 120-129.
- Murphy, A. N., Radley, K. C., & Helbig, K. A. (2018). Use of superheroes social skills with middle school-age students with Autism Spectrum Disorder. *Psychology in the Schools*, 55(3), 323-335.
- Paterson, C. R., & Arco, L. (2007). Using video modelling for generalizing toy play in children with autism. *Behaviour modification*, 31(5), 660-681.
- Radley, K. C., Ford, W. B., McHugh, M. B., Dadakhodjaeva, K., O’Handley, R. D., Battaglia, A. A., & Lum, J. D. (2015). Brief report: Use of superheroes social skills to promote accurate social skill use in children with Autism Spectrum Disorder. *Journal of autism and developmental disorders*, 45(9), 3048-3054.
- Rogers, S. J., & Williams, J. H. (Eds.). (2006). *Imitation and the social mind: Autism and typical development*. Guilford Press.
- Shukla-Mehta, S., Miller, T., & Callahan, K. J. (2010). Evaluating the effectiveness of video instruction on social and communication skills training for children with Autism Spectrum Disorders: A review of the literature. *Focus on Autism and Other Developmental Disabilities*, 25(1), 23-36.
- Studer, N., Gundelfinger, R., Schenker, T., & Steinhausen, H. C. (2017). Implementation of early intensive behavioural intervention for children with autism in Switzerland. *BMC psychiatry*, 17(1), 34.
- Uthairattanakit, D. (2002). “How do we know if a child has Autism” Proceedings of the workshop on Teachers, Physicians, and Father and Mother:13 July 2002, Potential Development Dimension of Autistic Persons. Bangkok: Kasetsart University.
- Vivanti, G., & Hamilton, A. (2014). Imitation in Autism Spectrum Disorders. *Handbook of Autism and Pervasive Developmental Disorders*, Fourth Edition.
- Zagona, A. L., & Mastergeorge, A. M. (2016). An empirical review of peer-mediated interventions: Implications for young children with Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 1088357616671295.

(Note : Complete list of References is available on the website www.meri.edu.in)

A Study of Mental Health and Defence Mechanisms of Higher Secondary School Students

Mandeep Kaur
Pushpinder Kaur

Abstract

The present study was conducted to examine the relationship between level of Mental Health and defence mechanisms used by secondary school students. The study aimed at to trace out the relationship between Mental Health and five categories of defence mechanisms i. e. Turning Against Object (TAO), Projection (PRO), Turning Against Self (TAS), Principalisation (PRN) and Reversal (REV). The differences between the levels of Mental Health and defence mechanisms of male and female students were also examined. Data analysis revealed that there is a significant correlation between Mental Health and defence mechanism of secondary school students; however no significant correlation was obtained between these two variables in case of total sample and male sample of secondary students in TAS and PRO category of defences respectively. No significant difference in the scores of Mental Health and defence mechanism of male and female students was found.

Keywords: Mental health, Defence Mechanism.

Introduction

A. Defence mechanisms

Defence mechanisms are mental operations carried out by one's ego to satisfy its urges and instincts. Ego which mediates the other two components of human mind as stated by Freud: id and super ego, helps in maintaining our self-esteem by reducing anxiety aroused from various fears and stresses. Defence mechanisms operate on unconscious level. We all use these defences in one way or another without even being aware of their usage by us. Firstly introduced by renowned psychologist Freud, the concept of defence mechanisms was later developed by his daughter Anna Freud and many other psychologists. Vaillant and Snarey (1993) described defence mechanisms as regulatory processes that allow individuals to reduce cognitive dissonance and to minimize sudden changes in internal and external environments by altering how these events are perceived. According to Cramer (2003) defence mechanisms promote psychological well-being, increase adaptability, allow normal psychological development and maintain self-coherence due to the fact that they reduce, alter and manipulate one's own awareness of disturbing thoughts, desires, perceptions and feelings.

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Many psychologists have worked on identification and classification of defence mechanisms. Bibring (1950) listed twenty four basic first order defences and fifteen complex or second order defences. Cameron (1963) reported fifteen defences and Coleman (1964) described seventeen. Till now hundreds of defence mechanisms have been identified, but the most commonly employed have been mentioned here.

“Repression” represents unconscious exclusion of painful thoughts, emotions and desires which arouse anxiety from our conscious mind and get accumulated in unconscious mind. It was the first defence mechanism which was identified by Freud.

“Rationalization” tries to justify otherwise unjustified behaviour by providing socially acceptable logics, as a failed candidate gives different excuses for his failure like the teacher was partial rather than admitting his own inadequacies.

“Projection” leads to blaming others for own shortcomings, inadequacies, mistakes etc. and try to accredit own unacceptable thoughts and feelings to other persons and the objects in the outside world e.g., a dishonest person may insist that we can’t trust anyone nowadays.

“Denial” occurs when one unconsciously eliminates the emotional conflict and reduces stress by declining to accept the unpleasant aspects of external reality. For instance, after death of child his parents say no, this has not happened.

“Turning against self” presents a stressful situation when a person instead of showing hostility against others, use it against oneself through self-criticism and self-accusation. Vaillant (1985) studied the ego defence mechanisms as a factor responsible for upward social mobility. it was seen that main factors responsible for social upper mobility are - IQ, Mother's education, Mother's occupation, boyhood ego strength and four ego defence mechanisms as **intellectualization, dissociation, sublimation** and **anticipation**. Out of these, **intellectualization** was the most important one. Sandstrom and Crammer (2003) revealed that higher level of self-related social anxiety and depression were reported in children who use immature defence mechanism and they encounter more parent reported internalizing and externalizing behavioural problems. On the contrary, children using mature defence of identification showed more competence on social, academic, athletic, conduct and global domains. No significant relationship was found between children's use of defence of denial and their level of competence or between their use of identification as defence and degree of maladjustment. Hong et al. (2014)

studied the association between optimism and defence mechanisms in Korean College students. Study analyzed that male and female students differ in case of show off, passive aggressive, denial and identification defence mechanisms. For both genders, level of optimism was same, this relationship between defence mechanism and optimism level was also found in case of controlling, distortion, humour, altruism, sublimation and rationalization. Gokdag (2015) examined defence mechanism used by university students to cope with stress with respect to gender. Five hundred and eighty seven psychology course students participated in the study. Ten most commonly used defence mechanisms were investigated in the study. It was seen that female students most frequently used the defence mechanism of 'repression', 'denial' and 'displacement' while the male students carried out the use of defence 'Projection' two times more than their female counterparts.

B. Mental health

The term 'Mental Health' emphasizes two words 'Mental' and 'Health'. It talks about an individual's mental condition or a state of psychological well-being or even freedom from mental diseases. Mental Health has been explained by various psychologists in different ways. According to Longman's Dictionary of Psychology and Psychiatry (Goldenson, 1984), **Mental Health is a state of mind characterized** by emotional well-being, relative freedom from anxiety and disabling **symptoms, a capacity** to establish constructive relationships and cope with the ordinary demands and **stresses of life**. W.H.O explains it as a state of wellbeing in which the individual realizes his or her own abilities to cope up with the normal stresses of life and can productively and fruitfully make a contribution to his or her community. It is related to mental hygiene which is described as an art to protect the mind against influences and incidents which demolish its energy and quality. Mental Health represents the full and free expression of our natural and acquired capabilities in harmony with each another by being directed towards a common end or aim. Mental Health leads towards living securely, enjoying a productive life and having a balanced ego, able to withstand anxiety and stress. Lakshminarayanan et al. (1993) related this concept with achievement of goals, as they said that Mental Health depends on the development and retention of goals that is neither too high nor too low to permit realistic successful maintenance of belief in one's self as a worthy and effective human being. Hence Mental Health is described as a state or condition of mind.

Mental Health shows the health of a person's mind. It is also related to human behavior and attitude which a mentally healthy person shows. It directly and largely depends on one's adjustment with environment and oneself.

Anand (1989) examined Mental Health of high school students in the age group 14-15 years. A sample of 262 high school students (169 boys and 93 girls) took part in the study. He found in his study that mental health, academic achievement and the educational and occupational status of parents were positively related. Sasanpour et al. (2012) explored the relationship between emotional intelligence, happiness and Mental Health of medical students. One hundred and twenty students participated in this study. Data was collected with the help of bar-on emotional intelligence questionnaire and Argye and Lous Oxford Happiness Questionnaire. Statistical analysis showed a positive and significant association among emotional intelligence, happiness and mental health. More emotional intelligence was found to lead towards more happiness and better mental health.

Prathima and Kulsum (2013) examined the relationship between secondary school teachers' social intelligence and their Mental Health and also found the effect of different level of social intelligence of teachers on their mental health. The participants were 150 secondary school teachers. The findings of the study showed that there is a significant relationship between secondary school teachers' social intelligence and their mental health. The significant difference exists between male and female secondary school teachers' mental health. The results indicated that higher the social intelligence teachers had, the better Mental Health they possessed.

Dakhili et al. (2013) explored the relation between defence mechanisms and quality of life of university students through mental health. A sample of 428 students was taken. By multistage random sampling method, results found a significant and positive relationship between Mental Health and immature defence styles mechanisms as projection, rationalization, acting out, omnipotence, somatization, passive aggression and autistic fantasy. With other mechanisms no relation of Mental Health was found. Out of these immature defence mechanisms, only projection, omnipotence and rationalization were able to predict mental health. Kaur and Niwas (2016) investigated the Mental Health of tenth class students in relation to emotional intelligence and personality factors-neuroticism and extroversion. Six hundred class 10th students from six districts of Punjab participated in this research study. With the help of Pearson Product Moment Correlation, a positive and high correlation was found between Mental Health and personality factor extroversion, whereas with neuroticism relationship was negative. A significant relation was found to exist between Mental Health and emotional intelligence

2. Rationale of the study

The future of our nation depends upon our young students. Secondary school students are even more important from this aspect as they are on the threshold of completing school education and are going to opt for specialized education at higher stage. It becomes important to examine their level of Mental Health and type of defence mechanisms they are using. Students with better Mental Health will be an asset to our nation. This study also tries to explore the statistical differences in level of defence mechanisms and Mental Health of male and female students at secondary level. Researchers make a humble attempt through this study to represent the explicit picture of sub conscious mind of boys and girls.

3. Operational Definitions of Key words

3.1 Mental Health: It is defined as the perceptions, emotions and behavior of a person depicting his adjustment with environment and himself leading towards efficient and effective functioning and hence success in different walks of life. Good Mental Health builds up desirable value system with positive attitude and high self-esteem. In the present study, Mental Health means the scores attained by pupil teachers on Mental Health battery prepared by Dr. Arun Kumar Singh and Dr. Alpna Sengupta (2000) with reference to six dimensions of the Mental Health viz., emotional stability, overall adjustment, autonomy, security-insecurity, self-concept and intelligence.

3.2 Defence mechanisms: Defence mechanisms are defined as mental mechanisms which help in reducing stress and anxiety in one's mind by distorting the reality in one way or another. In the present study defence mechanisms means the scores attained by pupil teachers through Defence Mechanism Inventory (DMI) prepared by Dr. N. R. Mrinal and Dr. Uma Mrinal (2005). In this inventory five clusters of defence mechanisms have been used namely; Turning Against Object (TAO), Projection (PRO), Principalization (PRN), Turning Against Self (TAS) and Reversal (REV).

3.3 Secondary school students: The students who are studying at higher secondary level i.e. class 10+2 are called secondary school students.

4. Delimitation of the Study

- This study has been delimited to the students of secondary level only (10+2 class).
- This study is confined to the area of Amritsar district.

- Only 170 students have been selected from whom to collect the data.
- Only Gender (Male/Female) was selected as demographic variable.

5. Research Methodology

The descriptive method has been used for carrying out the present research. Following objectives were formulated for this study.

5.1 Objectives of the study

5.1.1 To study the relationship between Mental Health and defence mechanism (TAO, PRO, PRN, TAS and REV) of secondary school students. This objective includes following sub objectives.

- To study the correlation between Mental Health and Turning Against Object (TAO) for the total sample, male and female students at secondary level.
- To examine the correlation between Mental Health and Projection (PRO) for the total sample, male and female students at secondary level.
- To examine the correlation between Mental Health and Principialisation (PRN) for the total sample, male and female students at secondary level.
- To study the correlation between Mental Health and Turning Against Self (TAS) for the total sample, male and female students at secondary level.
- To study the correlation between Mental Health and Reversal (REV) for the total sample, male and female students at secondary level.

5.1.2. To compare scores of Mental Health between male and female students at secondary level.

5.1.3. To compare scores of defence mechanisms (TAO, PRO, PRN, TAS and REV) between male and female students at secondary level.

5.2 Hypotheses

Following hypotheses have been formulated by researcher to accomplish above stated objectives :-

5.2.1 There is no significant correlation between Mental Health and Defence Mechanisms (i.e. TAO, PRO, PRN, TAS, and REV) of secondary school students.

5.2.2 There is no significant difference between scores of Mental Health of male and female students at secondary level.

5.2.3 There is no significant difference between scores of Defence Mechanism of male and female students at secondary level.

5.3 Sampling and Sample

For the present research, sample of 170 (85 boys and 85 girls) secondary school students, from four schools of Amritsar district, Punjab state (India) were selected. The selection of schools was done by simple random sampling technique, while the cluster sampling technique was utilized for selection of students.

5.4 Data Collection Tools

5.4.1 Mental Health Inventory (MHB) developed by Dr. Arun Kumar Singh and Dr. Alpana Sen Gupta (2000) was used to collect data for assessing level of Mental Health of students. This battery covers six indices of mental health; Emotional stability, over-all adjustment, autonomy, security-insecurity, self-concept and intelligence, containing a total of 130 items.

5.4.2 Defence Mechanism Inventory

Defence mechanism inventory developed by Dr. N.R. Mrinal and Dr. Uma Mrinal was employed to obtain the scores of defence mechanisms. It is in the form of a self-rating questionnaire. The inventory is made up of ten stories. After going through each story, the subject has to respond to four questions related to four types of behavior evoked by the situation created in the story i.e., proposed actual behavior, impulsive behavior, thoughts and feelings etc. The tool concerns with various defence mechanisms which are classified into five clusters i.e. Turning Against Object (TAO), Projection (PRO), Principialization (PRN), Turning Against Self (TAS) and Reversal (REV). Each question is followed by five responses. Each response represents one of the five defence mechanisms mentioned above. Reliability of various defence categories is as given: TAO = 0.86; PRO = 0.80; PRN = 0.82; TAS = 0.87 and REV = 0.92

5.5. Statistical Techniques

The relationship between Mental Health and defence mechanism has been found by using Pearson Coefficient 'r' while, the 't' test was used to find out differences between the scores of Mental Health and defence mechanism of male and female students at secondary level.

Table - 1.1
Correlation between Mental Health and defence mechanisms.

Sample size	Variab les	Defence mechanisms	TAO	PRO	PRN	TAS	REV
170	Mental health	Whole sample	-0.270 Significant	-0.221 Significant	0.210 Significant	0.030 N.S	0.298 Significant
85	Mental health	Male	-0.230 Significant	-0.134 N.S	0.176 Significant	-0.251 Significant	0.324 Significant
85	Mental health	Female	-0.304 Significant	-0.305 Significant	0.265 Significant	0.241 Significant	0.285 Significant

Level of significance 0.05

6. Results and discussions

6.1 Relationship between Mental Health and Defence Mechanisms.

6.1.1 Mental Health and Turning Against Object (TAO) defence mechanism.

The calculated values of 'r' for the whole sample and for separate samples of boys and girls are found to be -0.270, -0.230, and -0.304 respectively (Table - 1.1). The tabulated critical value of 'r' is lower than the calculated value of 'r' for overall sample, male and female students. Therefore, the Null Hypothesis is rejected in all these cases. It shows that there is a significant correlation between scores of Mental Health and defence mechanisms TAO for total sample size, male and female sample. A negative value of 'r' implies that an increase in Mental Health scores will lead to corresponding decrease in the score of TAO i.e. an increase in Mental Health declines the chances of using Turning Against Object (TAO) defence mechanism. Immature defence mechanisms like identification with the aggressor and displacement are grouped under defences 'Turning Against Object' in which a real or presumed external frustrating thing is attacked as a substitute of aggression. Results obtained clearly show that high Mental Health causes lesser use of TAO defence mechanisms.

6.1.2 Mental Health and Projection (PRO) Defence Mechanism

In this case, the obtained value of 'r' for the complete sample is found to be -0.221, for male students -0.134 and for female students -0.305 (Table - 1.1). In case of total sample and girls' sample, these values are greater than the tabulated value of 'r'. Therefore the null hypothesis is rejected in both these cases. It indicates that there is a significant correlation between Mental Health and Projection defence mechanism in whole sample and female students. In case of boys no significant correlation has been found between two variables as tabulated value is more than the calculated one. Negative value in whole sample, girls and boys indicates as the Mental Health score increases, corresponding PRO score decreases. Projection (PRO) category exhibits immature and pathological defence mechanisms leading to blaming others for own faults and Projection of own weaknesses on them. People with high Mental Health take responsibility and are accountable of their own actions. They don't find faults with others. Results in this study also support this fact. Particularly in case of female students significant negative relationship has been found in Mental Health and PRO defences. It can be said that students with higher mental health, deal with anxiety in a better way and use PRO defence mechanism to a lesser extent.

6.1.3. Mental Health and Principialisation (PRN) Defence Mechanism.

As far as self-esteem and Principialisation (PRN) defence mechanism are concerned, calculated values of Pearson correlation coefficient "r" for overall sample, male students and female students are found to be 0.210, 0.176 and 0.265 respectively (Table - 1.1), which are greater than critical value. Null hypothesis is rejected here, showing a significant relationship between the Mental Health and PRN defence mechanism of secondary school students. Positive value of correlation coefficient shows a positive relation between the above stated variables. Hence it can be said that high Mental Health supports use of PRN defences. This category of defences includes defences such as intellectualization, isolation, and rationalization, which operate through usage of logical and intellectual aspects of mental mechanisms, distancing oneself from stress and anxiety provoking situations. People with high Mental Health also use logics and rationale while making decisions.

6.1.4 Mental Health and Turning Against Self (TAS) Defence Mechanism.

The calculated value of 'r' in this case is found to be -0.030 for the overall sample, -0.251 for male students and 0.241 for female students (Table - 1.1). The tabulated 'r' is less than the calculated 'r' for overall sample but greater than calculated one for boys and girls sample. Thus null hypothesis is accepted for total sample but rejected in both boys and girls separate sample. Therefore,

it can be said that there is a significant relationship between the Mental Health scores and the TAS score of male and female secondary school students but as far as total sample is concerned, this relationship is not found to be significant. In Turning Against Self category, defences such as masochism and auto sadism are included where an individual handles stress and anxiety by directing aggressive behavior towards himself or herself. In this case, a reciprocal relationship between Mental Health and Turning Against Self (TAS) defence mechanism is found in total and male sample, showing decrease in usage of TAS defences with corresponding increase in mental health, while opposite is found true in case of female students.

6.1.5 Mental Health and Reversal (REV) Defence Mechanism.

In order to find out the relationship between self-esteem and Reversal (REV) defence mechanism, coefficient of correlation was found out. The calculated value of 'r' is 0.298 for complete sample, 0.324 for male students and 0.285 for female students (Table - 1.1). Since the calculated 'r' is greater than the tabulated 'r' for overall sample, girls and boys samples, hence the null hypothesis is rejected in all these cases. Therefore it can be said that there is a significant relationship between the Mental Health and the REV defence mechanisms. This relationship is positive here. High Mental Health leads to more usage of these defence mechanisms. This category of defences deals with anxiety producing frustrating object by responding in a positive or neutral fashion. Defences such as negation, denial, reaction formation and repression are categorized here. Here the person thinks, and acts in a manner directly opposite to the unconscious impulse.

6.2 Comparison of Mental Health scores of male and female students

In order to compare Mental Health scores of male and female students, t test has been employed. In the present research, the mean of Mental Health scores is found to be 72.76 for boys and 71.89 for girls, with standard deviation of 9.19 and 10.57 respectively (Table - 1.2). The calculated value of t is lesser than critical value of t, therefore the null hypothesis is accepted. It can be concluded that no significant difference exists between the boys and girls as far as level of Mental Health is concerned.

6.3 Comparison of Defence Mechanism scores of male and female students.

The t test has been utilized to test this objective. It can be seen through Table 1.2 that in each category of defence mechanisms i.e., TAO, PRO, PRN, TAS, REV, calculated t value is statistically insignificant. Therefore the null hypothesis is accepted. Hence it can be said that there is no significant

difference between the scores of defence mechanisms of boys and girls students at secondary level.

Table - 1.2
Comparison of male and female students in the scores of Mental Health and defence mechanism

Variables	Male =85		Female=85		't'	Level of significance.
	Mean	SD	Mean	SD	't' value	At 0.05=1.97
Mental health	72.76	9.19	71.89	10.57	0.62	N.S.
TAO	34.73	6.94	34.30	7.01	0.67	N.S
PRO	38.95	4.66	38.47	4.89	0.52	N.S
PRN	42.72	5.55	43.62	5.11	0.31	N.S
TAS	39.19	5.42	38.02	5.94	0.11	N.S
REV	44.26	6.55	46.04	5.67	0.73	N.S

7. Conclusion

No gender difference among secondary students in their levels of Mental Health and usage of Defence Mechanisms has been found in the present research. Females having good Mental Health give a bright indication of our future. Findings also revealed a significant correlation between Mental Health and Defence Mechanisms in total sample, boys and girls samples with few exceptions. In case of TAO, this relationship is found to be insignificant in case of total sample. Similarly in PRO, above stated variables do not correlate significantly in male sample. Hence it can be generalized that Mental Health is related to defence mechanisms. Our education policy makers should take this fact into account. Education system should involve various curricular and curricular activities to enhance student's Mental Health level, so that their usage of immature Defence Mechanisms could be reduced. They should be guided to deal with stress and anxiety in better and healthier way.

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References

- Anand (1989). Mental Health of high school students. Indian Educational Review, 24(2), 14-24.
- Bibring (1950) Psychoanalysis and the dynamic psychotherapies. J am psychoanal assoc 2,745-770.
- Cameron(1963).Personality development and Psychology, Hough Miffin Co., Boston.
- Coleman (1964). Abnormal Psychology and Modern life, Bombay, D. B. Taraporewalla Sons andCo.
- Crammer (2003). Defence use and defence understanding in children, journal of personality. 69 (2). 297- 322.
- Dakhili et al (2013) .The prediction of Mental Health by the mechanisms of immature defence styles. Journal of behavior sciences in Asia.1. 32-40.
- Freud, S.(1923). A General Introduction to Psychoanalysis; Trans. by G. Stanley Hall. NewYork: Boni and Liveright
- Freud, A. (1937). The Ego and the Mechanisms of defence. London: Hogarth Press.
- Gokdag (2015.) 1 Defence mechanisms used by university students to cope with stress .International Journal on New Trends in Education and Their Implications, 6 (2) .www.ijonte.org.
- Goldenson.(1984). Longman dictionary of psychology and psychiatry. New York: Longman.
- Hong et al (2014). Defence mechanism and optimism in Korian college students, Open journal of social sciences 2.84-89.
- Kaur and Niwas (2016) A study of Mental Health in relation to Emotional Intelligence and Personality factors of 10th class students. Indian Journal of Applied Research.6(1).605-607.
- Lakshminarayan et al (1993). Comparison of Mental Health among the different age groups of industrial employees. Journal of Psychological Researches, 30 (3), 30-34.
- Prathima and Kulsum (2013). Relationship between Social Intelligence and Mental Health of Secondary School Teachers. Indian Journal of Research. Volume: 2 | Issue: 11 | Nov 2013
- Sasanpour et al (2012) The relationship between Emotional Intelligence, Happiness and Mental Health in students of Medical Sciences of Isfahan University. International Journal of Collaborative Research on Internal Medicine and Public health. 4(9). 1614-1620.

- Sandstrom and Crammer (2003) Defence Mechanism and psychological adjustment in childhood. *Journal of Nervous mental disorders* 191(8).487-95. Doi 10.1097/01 nmd.0000082274-19699.6f.
- Vaillant(1985) .Maturity of ego defence in relation to DSM-III axis personality disorder *Archives of general Psychiatry*, 42(6), 597-601.
- Vaillant and Snarey (1993) . The association between ego defence mechanisms and upward social mobility. *Child development*. 56(4).899-910. D.I: 10.2307/1130102

Disability, Relationship and Inclusion Path

Suman Sharma

Abstract

Disability, relationship and education is a web of understanding and this understanding is required to make a disabled person “SAHAJ” (normal) in present-practical life scenario. In this present paper I have tried to get an understanding for the same.

Key words: Disability, Relationship, Education and interrelation of these three concepts and Inclusion.

Why I chose this topic

Being a disabled (OH) person, I come across various moments where I experience the fact that achievements, defeats, working processes and styles affect the quality and patterns of relationships which exist in our life.

Relationship is a term which is used for the connections among people. These connections are generally based on some mental concepts or phenomena as – feelings, thoughts and direct-indirect needs etc. of the person.

During my M.Ed and M.Phil study, I dealt with the concept of Identity formation among disabled people and Inclusion of disability in school system consecutively. In both the studies, I found that relationship plays a vital role in the life of a disabled person. It is found in my work experience that If a disabled person avails good relationship in his/her life, he/she has a positive identity in one’s personal self and has better inclusion in their life surroundings and vice versa. In the context of disability, relationship is found in layers, which is very unfortunate but it is true. People use idealism and practicalism together at the same time to deal with the disability and disabled person. This happens not only in the outside circle but it happens in day to day life in the close family and friends circle as well.

From the above a lot of questions arise in my mind that-

- Why it is so?
- How it is so?
- From when the things and attitudes of other people started to change towards disability and disabled people?

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- Do education and educational processes have any impact on relationships?
- Does education really help to make the life of a disabled person ‘Sahaj’?
- Why and how ‘needy condition’ of a disabled person becomes the means of his/her exploitation (any kind of exploitation) by an educated / uneducated one?
- Does spiritual and moral education affect the health of relationship of disabled person (relationship of normal and disabled, disabled and disabled etc)?

So to make my life journey enriched in this regard, I started to work on this subject :-

Disabled, handicapped, specially abled or other similar words have a notion or understanding that the concerned person has problems to do his / her normal routine works. Disability can be understood in following ways :

State of Disability:

1. Physical State as – orthopedic and other visible state

- a) Non workingness of an organ.
- b) Improper working of an organ.

2. Mental State - Disability concerned with the intellectuality of a person.

- a) Acceptance and Non Acceptance of Disability
- b) By handicapped person oneself
- c) By family/friends and other people of society.

3. Infrastructural Level :

- a) Accessibility to the spatial locations.
- b) Accessibility to the personal instrumental facilities, by which work pattern and style can be made easier (for handicapped people).

We see that politics of words, deals and defines the Disability in general at micro and macro levels. People use different words for disability as – handicapped, disabled, specially-abled etc. Each word promotes the different ideologies. And these ideologies create different world of idealistic statements and attitudes which are generally found beyond the realities. And to stay far away from the realities is not good for a disabled person and even not good for a non disabled person. It actually hampers the strength of a person to deal with different situations.

Each word has its own energy, and the energy of group of words creates an imaginary or fictional world around a person:

- Imaginary world helps keep the person away from the factual world.
- Research found this fact that Disability is essayed in two worlds as –
 - Realistic world, which is full of hurdles.
 - Fictional world, which is full of idealistic words/statements and stories.

For a disabled person, gap between real and fictional world is very wide. It can be true for the Non-Disabled persons too but the intensity and degree for disabled persons of this gap is much wider. Inclusion is a notion/process which helps us to fulfil this gap. Only by filling this gap a normal style of life can be promoted among disabled. This gap can be filled by inclusive process as –

- Through acceptance
- Through adequate maintenance of infrastructural system with instruments.
- By making the disabled person self aware, etc.

We can say that inclusion is a further step to make the disabled person's life comfortable and easy. Here one thing is considered that how this inclusive process translates into practice.

Some more important points here to discuss are:

1. How awareness can bring in the disabled people and non disabled people. acceptance and understanding for one another is essentially required in both the groups.
2. Arrangement of resources/infrastructural facilities: It requires a deep study/research on types of disabilities, requirements of these disabilities and accessibility to the available resources etc.
3. Arrangements of funds and distribution of funds, etc.

Under topic of awareness, we will see awareness about self in detail- as strength/weakness, behavior and attitudinal patterns and most importantly the explored perception about personal self as well as of others.

Here explored perception means –

- See the personal self with the wholeness of world.
- See the others with the wholeness of self as well as world.

Such perceptions play an important role to shape the behavior and attitudes of disabled person. Relationship between the Non Disabled person and Disabled person is generally based on the ideologies of both the persons.

Education is a life long process in which a person learns :-

- To survive by one self and in the world.
- To deal with the various situations of life.
- To solve the problems of life, fulfilment of various needs of life and much more.

In the present study, I would prefer to take institutional education system scenario at three levels as-

1. Graduate level;
2. Post Graduate level; and
3. Research Scholars.

Objectives of the study

- To know the relationship among disability, relationship and education.
- To know the patterns that how these three concepts influence each other.

Findings of study

Disability, Relationship and Education are related concepts. They affect each other. From my study following facts were revealed-

Effect of disability on relationship-

Generally person with disability does not initiate for a relationship.

When persons with disability enter in a relation, they always stay in a confusion about their relationship.

Person with disability prefers to have relation with non disabled person.

Persons with disability have a big gap between inner self and the self percept by the others (society).

Effect of relations on disability

Persons with disability get first illusive perception of their personal self from their own close family members.

Through providing excessive care (which is conditional as it is based on disability specially, not for the development of person with disability) family makes them emotionally dependent on others, so persons with disability feel uncomfortable with practical decisions. On major level they take feeling based decisions.

Effect of Education

Through education (curriculum, teaching methods, workshops and conferences etc.) people have been sensitized to disability and persons with disability.

Education became a medium for persons with disability and Non-disabled people for exchanging and sharing their views on large scale. It provides a platform for discussion and understanding all the differences of life.

The platform of education has become a medium for persons with disability and non disabled people for exchanging and sharing their views on a large scale.

But it is a long way to go.....

Mindfulness and Contemplative Educational Practices for Holistic Education

Geetika Datta

Abstract

The present paper tries to highlight the main aim of education which is Holistic development of a person. This paper also tries to bring to focus the issues, difficulties and challenges which teachers face in their daily deliverance of professional responsibilities; which is basically because of a reductionist perspective towards education i.e. covering of content and catering to vocational aims of education. In such a scenario, how Mindfulness as an ideology and Contemplative Educational Approaches can go a long way in addressing to the needs and requirements of individual teachers, students and society as a whole. The paper in the last section elaborates upon some of the very simple and practical ideas which can be incorporated into classroom practices, which will foster deeper contemplation and mindfulness among students, thereby bringing holistic teaching-learning experiences for the students and touching upon the mental, physical, social, emotional and spiritual aspects of their personalities.

Key Words: Holistic Education, Mindfulness, Contemplative Education, Contemplative Practices.

“When teaching, three important paths must be taken -intellectual, emotional and spiritual - and none can be ignored. Reduce teaching to intellect, and it becomes a cold abstraction; reduce it to emotions, and it becomes narcissistic; reduce it to the spiritual, and it loses its anchor to the world. Intellect, emotion, and spirit depend on one another for wholeness. They are interwoven in the human self and in education (at its best).” (Palmer, 1998)

Education in order to be meaningful to a person and to the society cannot be restricted to only transacting of syllabi and curriculum. It has to encompass and transform the entire persona of an individual. The concept of Holistic Education, as a field of study and practice is an emerging field since mid-1980s (R.Millar, 2004). Holistic education is not to be defined as a particular method or technique; it must be seen as a paradigm, a set of basic assumptions and principles that can be applied in diverse ways (Millar, R, 1992 in Mahmoudi, S. et.al., 2012). In the words of Singh, K (1996), Holistic education must acknowledge the multiple dimensions of the human personality – physical, intellectual, aesthetic, emotional and spiritual – thus moving towards the perennial dream of an integrated individual living on a harmonious planet.

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Holistic education focuses on the fullest possible development of the person, encouraging individuals to become the very best or finest that they can be and enabling them to experience all they can from life and reach their goals (Forbes, S.H., 2003).

Therefore, Education has to be a process which strives to bring out the best in an individual on a multitude of aspects of cognitive and affective levels such as mental, physical, social, emotional, creative, moral, spiritual, aesthetic and others. We would want our future generation to be an evolved individual who is able to contribute his/her best to the well-being of society and at the same time realize his/her true potential. Though this is considered to be a general aim of educating our young generation, the processes, the methods, the by way of which we strive to achieve these aims are not so simplistic. The processes of education are in a state of flux. Globally, the paradigms are shifting to more emancipator frameworks. Therefore, we see lot of reforms being introduced in educational systems. But many a times students and teachers are at a loss to understand the perspectives behind the changes. These days, students as well as the teachers are a harried lot. Suddenly, the profession of teaching has become extremely challenging. Teachers across levels (Primary, Secondary, Senior Secondary level) are finding themselves burdened with lot of expectations which were not there a few years back. Data collected by the author, who has been working with in-service teachers across levels all over the country, regarding issues and challenges faced by in-service teachers pointed that over 80% of teachers find themselves over-burdened with the challenges of reforms in the field of education and assessment. They point out that there are too many expectations out of them and there is lot of paper work involved. Major challenges and issued pointed out by practicing teachers are as under:

1. Class strength
2. Managing school and parental expectations
3. Excessive documentation work
4. Different backgrounds and levels of learners
5. Balancing academic and other life skills among learners

Majority of teachers felt that students fail to realize their role in the processes of education. More than half students don't realize that it is for their own good and also they don't learn for the joy of learning, rather they take up learning as a task for an exam which needs to be done. Jenning (2009) has pointed this dilemma as: We ask an awful lot of teachers these days...Beyond just conveying the course material, teachers are supposed to provide a nurturing learning environment, be responsive to students, parents and colleagues, juggle the demands of standardized testing, coach students through conflict with

peers, be exemplars of emotion regulation, handle disruptive behavior and generally be great role models....the problem is we rarely give teachers training or resources for any of them.

On the other hand, students feel over burdened with all the curricular and co-curricular activities. They feel that they are being tested over and over again and observed on all aspects all the time. In addition, comprehensiveness is being interpreted as a constant watch or in Foucauldian terms “surveillance” (Gipps, 1996) on all the dimensions of pupils learning. Pupils pointed out that it seems I’m watched by an external eye, may it be in class, during recess, or in playground.....hmmm..... it is stifling at times (Bansal G, 2014). The present practices have actually widened the gulf between ‘good’ and ‘poor’ students. Teachers, as well as students, pointed out that they are unable to deal with the pressure. The students have developed an avoidance towards academic work perceiving it to be irrelevant (Brown and Hirschfeld, 2008 in Bansal, 2014) and assessments as arbitrary, irrelevant, inaccurate and simply a necessary process for accruing marks. This group of students develop a casual attitude towards academic work and stops performing (Duffield and Spencer, 2002 in Bansal, 2014).

The responses from the student as well as the teacher group point to a lack of involvement in the processes of education by both the parties. Though teachers contend that they have switched to newer methods of instruction which are basically Group-oriented and individual Student-oriented so as to increase student participation, but these methods of instruction are yielding fewer meaningful results. Primarily, it is also due to the fact that even if the teachers are involving students in group activities, in majority of instances, it is the teachers who decide almost everything for them viz. how many students will be there in each group? How are they going to proceed with the task at hand and decisions regarding who is going to do what, in what time frame etc; since majority of teachers feel that students will not be able to deliver the task. So effectively, these innovative and progressive approaches are also executed in the same fashion as other teacher-dominated activities. Therefore, we can say that there is a huge disconnect between what the teachers are supposed to be inculcating in students as a result of educational processes and what the students are actually learning/ gaining. The students need to be drawn into and made part of the processes of learning and education.

The focus of this paper is to explore into the possibilities of Mindfulness and Contemplative education practices in order to bring about qualitative changes in landscape of education towards Holistic education.

Mindfulness in Education

Mindfulness, as a concept, is not a new one. Its genesis can be traced to practices of Buddhism.

Mindfulness is the awareness that emerges through paying attention on purpose, on the present moment and non-judgmental to the unfolding of experience, moment by moment (Kabat- Zinn 2003). Drawing from Kabat-Zinn, one of the most prominent personalities in the discipline of Mindfulness, it is being in the present, having a clear awareness about what is happening in every moment, giving conscious attention to the present i.e. it is to live with full awareness in the 'Here' and 'Now'. Mindfulness is generally described as intentionally focusing one's attention on the experience occurring at the present moment in a non-judgemental or accepting way (Baer, 2003).

Burnett, R (2009) advocated one of the most succinct and compelling ways of explaining mindfulness is to show a short clip from the animated Dreamworks film Kung Fu Panda. This clip doesn't describe what you do, it doesn't give a textbook definition of what it is, nor does it even use the word mindfulness, but it captures the flavour of it in a way that is easily understood.

Our troubled hero, a panda called 'Po', is very stressed about life. He stands in the moonlight beneath a blossoming peach tree and laments his many failures. "I probably sucked more today than anyone in the history of kung fu — in the history of China — in the history of sucking!" he declares. His anguished monologue is an engaging compendium of contemporary malaise: he thinks he is rubbish at everything (low self-esteem), he knows he eats too much (eating disorders), he worries a great deal (stress/anxiety). Confronted with many difficulties, he is on the verge of giving up his dream of kung-fu glory and going back to making noodles. Thankfully, staff in hand, the wise old turtle Oogway arrives, a kung-fu master approaching the end of his turtle years, and gently reprimands the troubled panda: Quit, don't quit! Noodles, don't noodles! You are too concerned about what was and what will be. There is a saying: yesterday is history, tomorrow is a mystery, but today is a gift. That is why it is called the 'present'(Adapted from Burnett, R (2009).

It is the realization of being absorbed with the present and giving oneself fully to the experiences at hand which is required not only by our students but everyone. Mindfulness brings 'being present in the moment' and 'being aware of one's physical and mental experience in the moment', its about conscious awareness and focused attention. It enables one to become more aware of our

own behaviours and interaction. Mindfulness is more than just paying attention to the present moment, and is closely related to wisdom. Only paying close attention will not make one mindful; for example animals pay close attention to their prey and its each and every movement. But this won't be classified as being Mindful. Without memory, attention towards an object, would furnish merely isolated facts, as is the case with the perception of most animals (Nyanaponika, 1962).

As a discipline, mindfulness delves very neatly with the increased emphasis in schools on the social and emotional aspects of learning. Education is a process which is endeavoured to bring about all round development which includes physical, mental, emotional and social. And since Mindfulness is our ability to be aware of what is going on both inside us and around us i.e. the continuous awareness of our bodies, emotions and thoughts. So educational process ought to draw a lot from Mindfulness in order to make teaching-learning experiences more meaningful for our students. When Mindfulness is applied to education, it becomes, what today is known as, Contemplative Approach to education.

Contemplative Approach to Education

Education should be nourishing and must lead to growth and development of the capacity of humanity. And by the ability to relate to oneself in a loving, creatively enlarging manner to all other human beings and oneself (Montagu, 1962 in Grossenbacher, P.G and Parkin, S (2006). When mindfulness is applied to education, it becomes what today is called contemplative education (Mackler, J et.al 2008). Contemplative education has, in recent researches, been recognized as one of the most important approaches for holistic education and holistic education for all. Contemplative education or contemplative pedagogy are comparatively newer approaches in the field of education, and recently given lot of significance in an endeavour to touch upon social, emotional, moral and spiritual aspects.

Naropa University, Colorado (USA) which is the leading university in the world, in practicing Contemplative Education, defines it as ‘..a philosophy of higher education that infuses learning with the experience of awareness, insight, and compassion for oneself and others through the practice of meditation and contemplative disciplines’. Though Dictionary meaning of Contemplation is ‘look thoughtfully for a long time’, or ‘thinking about’, the approach when applied to education, it is about bringing the heart and mind together to make the learning process more significant. It is basically rooted in Buddhist traditions but it is also supposed to or related to Humanistic Psychology or Positive Psychology. The focus of these approaches is to

activate life-long learning for students, since these approaches bring together mind, body and spirit together into play. They are thought to bring about receptive and constructive teaching/learning atmospheres at all levels. Contemplative education is ‘learning infused with the experience of awareness’, insight and compassion for oneself and others, honed through the practice of sitting meditation and other contemplative disciplines (Naropa University, 2008). The following are the three main thrust areas of Contemplative Education according to the University:

- Rigorous Academics
- Contemplative Practices
- Experiential Learning

A lot of research is being generated to see the interconnection between Mindfulness, Meta-cognition, Constructivism and Contemplative education practices. At the helm of all of these ideologies is the idea that learners need to be given opportunities to interact with concepts and learn them or gain them as a result of being involved in constructive processes of learning. Now the question arises - How do we inculcate mindful practices among students and at what levels?

Contemplative Practices:

As educators and practitioners, questions arise what kind of practices can be adopted in our day to day school practices that will increase mindfulness among students and thus bring about Holistic development; keeping in mind the limitations of our classrooms. Generally, as a concept, Mindfulness is considered to be elitist and something which is meant for adults or senior students. But it’s time that our students are oriented right from the very beginning, right at the primary stages. Below are some of the practices which can bring about a sea-change in the way in which students get themselves involved in their own education processes. These practices can be adopted by teachers across levels and subject areas; and though it might appear that they are time consuming processes, but keeping in mind the resultant outcomes for the students, these are definitely worth it.

Following are the practices which can be adopted in day to day teaching by educators which have been shown to inculcate Mindfulness as well as meta-cognitive skills among students:

1. **Reflection:** Reflection by the students by way of writing in Diaries or Reflective Journals are considered to augment learning in a profound

way. The students need to be oriented towards coming out with their experiences in a reflective and introspective manner. Students learn to reflect on their course of development, identify difficulties and barriers to learning, and learn to identify their mistakes and beliefs and consequently learn to avoid them. Therefore, the main purpose of using reflective journals in education is to encourage students to be more aware of what they do, how they do it, why they do it, and for them to be able to identify useful problem solving strategies, as well as recognize their own strengths and weaknesses with regard to their understanding of content knowledge, procedures and practical skill development and application. Reflective Journals are excellent means for promoting self-awareness and self-recognition. Writing Reflective Journals also leads to development of Meta-cognitive skills among learners. Also these are excellent sources of feedback for the teacher to come to know about each and every student's strengths and weaknesses. The teachers can fruitfully decide which course of action needs to be taken to help each individual student. Also these can help the teacher in assessments, especially in case of collaborative exercises where the teacher is not in a position to observe groups' working, these reflective logs can be a great source to get to know the process of functioning of each and every group. In addition, the aim of reflection is to develop an orientation toward open-mindedness and a willingness to accept responsibility for self-directed learning as well as foster a keen sense of observation, critical thinking and reasoned analysis (Brookfield, 1995; Clift, Houston & Pugach, 1990; Sparks-Langer, Simmons, Pasch, Colton & Starko, 1990 in Judy.J, 2003).

2. **Centering:** Researches have found that students are not able to focus on processes of classes because their attention is somewhere else. This needs to be drawn to the activities of the classroom. Hart, T pointed out that if the student's attention is somewhere out it will be fruitful not doing something for a few moments. At the beginning of a class or during a transition time, switch off lights and direct students to close their eyes and concentrate on their breathing, let their bodies loose. Let thoughts come and go... don't fight with the thoughts, let these be like bubbles on a lake....which float and then burst and disappear. There can be bell or some other sign to signify this time and give a kind of a ceremony. After the exercise, bringing the students back from the depths of contemplation to activity of classroom is also equally important. Let them feel the peacefulness, a clear mind or a centre within themselves. And gradually let them lead to the topic of

discussion. They can be asked to share their experiences during contemplation exercises. During turmoils of day, this strategy can be very effective in finding our own centre and more in position to handle things positively.

3. **Slowing Down:** It basically refers to deliberately slowing down the processes of doing things. As it is said that ‘sometimes less is more’ and also in the processes of education, ‘processes of learning are more important than products of learning’. Slowing down refers to not rushing after a pre-specified syllabi, but giving lot of experiences to the students to internalize, to feel and absorb the learning experiences. The focus has to be on learning experiences and not just the content, especially at primary levels. In these situations, the content becomes a medium through which students imbibe new learnings and experiences. The teachers generally are in a mad rush to finish the syllabus, forgetting the entire purpose and context of the said content.
4. **Deep listening:** As it is said that there is lot of difference between hearing and listening; similarly there is lot of difference between listening and listening deeply. Active listening involves listening with concentration, asking questions and having and being able to summarize, paraphrase and giving one’s own interpretation. Deep listening refers to making students go into a contemplative mode via specific instructions.... Take a deep breath, close eyes, feel comfortable.....and listen to this very carefully (a concept, a poem, text, theory etc.). And then ask them to share their perception about the idea shared. Repeated exercises like these are likely to inculcate Mindfulness among students.
5. **Thinking/ Pondering questions:** Children have a natural inquisitive mind and ask lot of questions, which may mean a lot, but we as adults or teachers may not respond to them due to lot of curricular burden. This methodology is about asking students to go deeper into their own self and respond to questions like: what is the most disturbing/ nice thing about our class/ school/ city/ nation? If you could change one thing about our class/ school/ country, what would that be? What is the most important thing about you (Identity questions)? Given a situation, how would you distinguish right from wrong (Ethics)? If you were there in any person’s position (a character in a story/ incident/ student etc.) what would you have done?

6. **Free Writing:** This is a very effective technique of making students go into a contemplative mode. It requires orienting students to sit quietly for some time and then a situation, a problem, a scenery, a character etc. can be given. They are asked to write on it freely, without bothering about the rightness or wrongness of it, without bothering about grammatical mistakes. They can even be asked to write about how their mind works while solving a mathematical problem, or finding solution to a problem. If they are not sure where to start, they can even start with 'I don't know where to start'. Later on they can be asked to share their experiences while working on it. Certain reflective questions, which can prompt them to go further into self-exploration and self-discovery can be given like: 'where do you see yourself 5 years/ 10 years from now?', 'what would you like your life to be like?', 'who is your role model?' 'Whom you would want to emulate?', 'who is the most important person in your life?', 'for what things you would want to thank God?' etc.
7. **Collaborative and cooperative activities:** Engaging students in collaborative and cooperative activities are also very effective methods for invoking contemplation among students. The very genesis of collaborative activities is sharing of responsibility of learning by students. The teachers ought to act as facilitators only. They do not get themselves involved with the working and decision-making process of students. Let the students learn as a result of being involved in the processes of learning, and learn to do things themselves. If we let the students take on the processes of doing things themselves, their contemplation prowess increases, making them think, concentrate on task at hand, how to go about doing it, how to overcome the obstacles, convince others, negotiate with others.
8. **Dialectic Approaches or Dialectics:** Dialectic methods are age old methods to make students go into reflective and contemplative mode. The famous Greek philosopher Plato has described it as 'a discourse between two or more people holding different points of view about a subject but wishing to establish the truth through reasoned arguments (Wikipedia, 2016). It is also generally referred to as Socratic Method. It's a method in which there is constant interaction between the teacher and the taught or between two equals. There is constant flow of ideas concerning a topic. And consequently an entirely new understanding may also develop or emerge out of this. This method is also considered to be very conducive to constructivist pedagogy.

The crux of the matter is that learners need to be given opportunities to develop understanding and internalizing their learning. Merely chasing numerical marks or grades is not going to be beneficial to either the individual students not the society at large in the long run. Research on cognition shows that students who think about their learning are better learners than those who do not (Weinstein and Meyer, 1991). The most fundamental tenet of constructivism is that students cannot learn from teachers, they can learn only by thinking about what they are going to do or what they believe, or thinking about the thinking they have just engaged in. Researches in the field of Neuroscience have suggested that Mindfulness has the potential to benefit teachers and students alike in bringing about a measurable change in physiological and psychological benefits, reduction in stress physiology. Mindfulness has also been found to be extremely fruitful to not only young and old people but also children as young as seven year olds. These methods have also been found useful in dealing with behavioural issues like ADHD, ODD, CD, managing CWSN, students having other behavioural disorders, sleep disorders etc. Therefore, it is incumbent upon the educators to imbibe the tenets of Mindfulness and Contemplative practices for bringing about a Holistic development in the future generation of our country.

References

- Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), 125–142. doi:10.1093/clipsy.bpg015
- Bansal, Garima. (2014). Beware of the Consequences of Continuous and Comprehensive Evaluation: Implications for Students' Learning. *IOSR Journal of Humanities and Social Sciences*. Vol 19, Issue 6, Ver III Pg 31-36. Retrieved from <http://www.iosrjournals.org/iosr-jhss/papers/Vol19-issue6/Version-3/E019633136.pdf>
- Blinne, Kristen C. (2014). Awakening to Lifelong Learning: Contemplative Pedagogy as Compassionate Engagement. *Radical Pedagogy*. Vol. 11 No. 2. Retrieved from http://radicalpedagogy.org/radicalpedagogy.org/Awakening_to_Lifelong_Learning_files/Blinne.pdf
- Brudy, Richard. (2007). Learning to Stop, Stopping to Learn: Discovering the Contemplative Dimension in Education. *Journal of Transformative Education*. Vol 5, No 4, 372-394. Retrieved <http://www.mindingyourlife.net/articles/learning.pdf>, DOI: 10.1177/1541344607313250

- Burnet, R. (2009). Mindfulness in Schools: Learning Lessons from the adults – Secular and Buddhists. Retrieved from: <https://westallen.typepad.com/files/mindfulness-in-schools-burnett.pdf> . pg 7
- Center for the Advancement of Contemplative Education . (2014). Naropa University of Boulder Colorado.. Retrieved March 16, 2018 from <http://www.naropa.edu/cace/index.cfm>
- Forbes, Scott H.(2003). Holistic Education: An Analysis of its Ideas and Nature. Brandon, VT. Foundation for Educational Renewal.
- Gipps, Caroline V. (1994). Beyond Testing: Towards a Theory of Educational Assessment. The Falmer Press. Taylor and Francis Group. London
- Grossenbacher, Peter G and Parkin, S.S. (2006). Joining Hearts and Minds: A Contemplative Approach to Holistic Education in Psychology. Journal of College and Character. Vol VII, No 6. July 2006. Retrieved from https://www.researchgate.net/publication/274280998_Joining_Hearts_and_Minds_A_Contemplative_Approach_to_Holistic_Education_in_Psychology
- Jennings, P. (2009).Garrison Institute’s CARE Program for Teachers Receives Federal Funding. Retrieved January16,2018 from:http://www.garrisoninstitute.org/index.php?option=com_content&view=category&layout=blog&id=108&Itemid=1138&limitstart=0.
- Judd, Judy F.(2003). Reflective Journals. Retrieved from <https://www.csus.edu/indiv/j/juddj/reflective%20journals.pdf>
- Mackler, Jane, Aguilar, Argelia Peña, Serena, Karina Camacho & Roo, Universidad de Quintana. (2008). What is Contemplative Education and What are some ways to introduce it into higher education in Mexico. MEMORIAS DEL IV FORO NACIONAL DE ESTUDIOS EN LENGUAS. Retrived from http://fel.uqroo.mx/adminfile/files/memorias/Articulos_Mem_FONAEL_IV/Mackler_Jane_et_al.pdf
- Garrison Institute Report on Contemplation and Education: A Survey of Programs using Contemplative Techniques in Educational Settings. Retrieved April 3, 2018 from <http://www.garrisoninstitute.org/home.php>
- Hart, Tobin. (2004). Opening the Contemplative Mind in the Classroom. *Journal of Transformative Education*. January 2004 vol. 2 no. 1 (28-46). Retrieved: <http://jtd.sagepub.com/content/2/1/28.full.pdf+html>, doi: 10.1177/1541344603259311
- Hanh, T.N. (2008). Mindful Movements. California: Parallax Press.

- Hart, Tobin. (2004). Opening the Contemplative Mind in the Classroom. *Journal of Transformative Education*. January 2004 vol. 2 no. 1 (28-46). Retrieved: <http://jtd.sagepub.com/content/2/1/28.full.pdf+html>, doi: 10.1177/1541344603259311
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10, 144–156.
- Miller, R. (2004). Educational Alternatives: A Map of the Territory. *Paths of Learning*. Retrieved from <http://pathsoflearning.org>
- Nyanaponika, Thera. (1962), *The Heart of Buddhist Meditation*. Buddhist Publication Society. Sri Lanka. Retrieved from https://terebess.hu/keletkultinfo/the_heart_of_buddhist_meditation.pdf
- Singh, K. (1996) 'Education for the Global Society', in *Learning: The Treasure Within, The Report to UNESCO of the International Commission on Education for the Twenty First Century*, Paris: UNESCO
- Weinstein, C. E. and Meyer, D. K. (1991). *Cognitive Learning Strategies and College Teaching*. *New Directions For Teaching And Learning*, No 45. Springer

Science and Quality of Science Education

Rumesh Chander

Main Concepts : Nature of Science, Quality, Teacher Education

Science education ought to be closely linked to nature of discipline of Science. The turning point in development of Science has undergone major changes in last few decades and many debates have underlined the need for change in both research and education (Kuhn. The essential Tension.). It is pertinent to see whether corresponding changes have happened in teacher education and Science education in general. They have a crucial impact on the quality of Science education at various levels.

We can recall that Kothari education report in 1966, with an emphasis on education and national development had, besides other, recommended that education of Science and Mathematics be made compulsory up to secondary stage. In this context some recommendations need to be underlined.

- Teaching of Science be compulsory up to secondary stage.
- Teaching of Science be as a discipline instead of general science from class 6th .
- Physics, chemistry and biology be taught separately.
- Relevant science kits be made available.
- Science based vocational education be introduced, particularly at senior secondary stage.
- Teacher guide and in-service training programmes be introduced.

Subsequently, changes in school science curriculum were towards making it closely related to daily life experiences of children. There had been attempts at controlling teacher education programmes by way of discontinuing distance education. NCTE was created to control and improve teacher education programme. A major change occurred in the year 2014 for qualitative improvement of teacher education programme. The curriculum as proposed by NCTE substantially reduced the component of pedagogy. Only five subjects were proposed namely, English, Hindi, Mathematics Social Studies and General Science, the weight age was also reduced to 50 marks. On this score, this was a retrograde move. However, some universities modified the curriculum as proposed by NCTE.

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In the light of foregoing discussion regarding developments in nature and method of science over the last few decades, it is pertinent to highlight some of the concerns in teaching and teacher education programmes.

The primary concern of Science is to explain, not only describe the empirical phenomena; this requires an understanding manner of causal relations. The place of empirical experiences is not to arrive at laws and theories but possibility of refutability. Concepts are free creations of human mind and need to be encouraged. Turning points in any discipline of science are significant as they show how to expand the horizon of comprehension. Experiments can't confirm but have the potential of refuting any theory, so theories are tentative till refuted. New theories have to be proposed so that wider area of phenomena can be explained; this is a constant struggle which needs to be understood and appreciated at all levels of learning science. The basic notions have a wider impact as explanations become possible not only in a particular discipline of science but across disciplines, keeping the nature of discipline intact.

Some of the instances as they appear in school science can be cited here. The laws formulated by Kepler are explained by Newton's law of gravitation. The phenomena of Magnetism Electricity and Light were found related, the direction of time is comprehended by study of relation between heat and work. The idea of atom, its detailed organization throws up understanding going beyond physics to chemistry, biology and a host of other disciplines of science.

Experimental work in teaching-learning of science should be left open in nature and not as a proof of laws and theories as practiced these days. As a result, comprehension of such basic notions and limits to know ability need be kept in mind while learning Science. This should lead to qualitatively better comprehension as also future contribution towards development of science.

References

- Popper Karl: Conjectures and refutation.
- Kuhn Thomas: Structure of Scientific Revolutions.
- Kuhn Thomas: Conjectures and Refutations.
- Lakatos, Imre: Scientific Research Programmes.
- Plank Max: Turning points in Physics.
- Einstein Albert: Ideas and opinions.
- Feynman Richard: Lecture on Physics.
- Edington Arthur: New pathways in Science
- Lovelock: Story of Gaia.

Knowledge at Crossroad: What We Have, What We Need in Social Theory of Education

Sandeep Kumar

Contextualizing Knowledge in Critical Perspective

In social theory of education, the role of social theories or we can say purpose is to help an individual to make sense of itself and the world around him/her. It helps in making the existing reality more leaner to us. The theoretical frameworks also provide a way to criticise the existing social order and to achieve the modicum of freedom as we can retain the exiting social order for a longer period of time. We need to deconstruct it and then reconstruct it. Social theories help in fulfilling the purpose.

But if we closely look at these exiting theoretical frameworks that exist in the social theory of education, then we find that these are majorly driven from the West. According to Sandeep Kumar (2017) these western governed theories are just imposed on us rather than generated or developed by us as per need of the context.

The aim of present day education is now reduced to perpetuating the ideas of a few bundle of books in the institutions of education. Through this, the western world is still maintaining a hegemony over the knowledge production, which leads to a mental slavery among our scholars that they are no more able to think about something new and unique. Take examples of either sociology or psychology, the situation is equally troublesome. It is believed by the so called educationists that if one has not studied Michael Apple, Durkheim, Marx etc. about society then one has no right to claim himself as a scholar of Sociology. Even if a teacher in classroom talks about critical thinking, contemplation etc. but s/he also asks the student to substantiate it with theoretical references, and without theoretical framework, their ideas are not considered to be valuable and useful.

This kind of hegemony of West over knowledge production is prevailing in Third World nations. Third World nations are considered as satellites that do not have their own light, rather they rely on western world to enlighten them. They have accepted the supremacy of western knowledge, not only this, the universities and faculties are also contributing in this knowledge expansion.

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Even if Third world nations focus upon generating their own knowledge for example; subaltern discourse, this also could not get deserving recognition in the mainstream knowledge pool. It also happens because the way and kind of social theory we study does not equip us with tools to generate theories and therefore, the theories generated in the Third world nations exist as personal beliefs only and not as established theories. Whereas, western world has found other ways of maintaining their hegemony over knowledge, expansion of their knowledge and for getting their knowledge recognised worldwide. For instance, they have provided “open access links” to the world in which there is a free floating of western governed knowledge. Now, any one can easily get access to this knowledge, but what we are reading there is not under our control. So West has used easy access of lots of information freely as a tool to distribute the knowledge generation in Third world nations and this easy access is resulting in the socialization and Sanskritization of young minds in the already established theoretical frameworks, which encumber creative thinking and new ideas. The objective of this whole process is to make our minds crippled into the forced fabricated pots that lead us not to develop something new as far as theoretical constructs are concerned.

These frameworks do not provide us with appropriate way to analyse and understand the contextual needs. But the problem occurs when Third world nations criticise these theoretical frameworks but do not have any alternative theory to replace it. The supporters of western knowledge make the possibilities of alternatives invisible to us in order to maintain the status quo and this creates an impasse in theorizing knowledge.

Although, we do not have much alternatives to replace the existing enforced western discourse, but it does not mean that we are left with no choice. We have to start with zero and it will happen only when we stop relying on these existing mismatched enforced theoretical frameworks and leave the grand narratives behind. This will be done through encouraging more and more field based researches which would lead to the emergence of contextual knowledge. We can not deny the fact that knowledge of existing theoretical frameworks do help us to develop an understanding about what is already available to us and what are the gaps. But important to keep in mind is that it talks about gaps which exist in existing theories and not the gaps which are existing in actual field which is more contextual to us.

Further, it can be hardly contested that those, in possession of power, will hold on to their power and retain their hegemony at any possible cost. The western

world, which has remained the centre for ‘conservation’ of power since the beginning, is thus trying to retain their hold on ‘knowledge power’.

We must remember that when the rest of the world was grappling with internal wars and conflicts, some countries of the Europe were already sailing out on the ships to discover and conquer rest of the world. The territories they occupied on their truce were used greatly for their benefit, thus developing at a faster pace. The countries that were occupied by them suffered from acute damage. Not only were the natives exploited and looted, but even when these ‘occupied’ territories got free from the rule of foreign countries, they continued to be their mental slaves. The First and Third world order that came into existence (due to colonization and imperialism), thus became the defining feature of new social order.

The third world countries continue to look at ‘development’ from the lens of the apparently developed countries. There is a tendency among the natives of Third world countries to accept what is coming from the West, without questioning it. For example, the term ‘middle east’ that is used to demote a group of countries of Asia, is actually coined by West. It is because these countries lie in their east, and at the centre of the globe. For us (Indians), these countries lie at ‘north -west’. Yet the term ‘middle-east’ is used by not only India but rest of the countries in the world too.

Another example of this ‘blind consumption’ is the recent news, that is being sold by media channels about North Korea. Based on the relations of the said country with America, the image of ‘North Korea’ and its leader is being sold as ‘mindless dictator’ because they are not agreeing with American ideology.

In the academic realm, what is obstructing the development of new theoretical epistemological stances are the ‘Grand Narratives’ emanating from the West. Any research, be it theoretical or field based, is incomplete without the mention of these ‘classics’. In the domain of cognition, it is vital to mention Piaget and Vygotsky, and as said earlier for studying Sociology it is inescapable to study Durkheim, Mannheim, Marx, Parson etc. One has to extensively review these works to do any kind of research in concerned discourse, irrespective of the context and the need.

The hegemony of West is not only confined to the content, but also the way in which this content is delivered. Those who are in possession of resources have an edge in the field of education. Here, resources mean certain habits, interest, dispositions that are valued in the institutionalized education. Knowledge of

English and exposure to literature, paving way for a ‘taste’ in literature are some examples of these resources. The possession of these resources comes from imitating the culture of the West.

The development of neo-liberalism, that is evident in our policies today is also a reflection of the ‘development’ in western economics. The process of industrialization, which was a need in the West, was superimposed and ‘artificially’ created need in the Third world countries. While western world has swiftly moved from liberalism to Keynesianism- that highlights the role of state as a welfare agency, to again revival of liberalism (as neo-liberalism) has been replicated in India without having the necessary conditions required for them. Thus, the Third world countries are developing on the lines of existing understanding of development, focusing only on economic aspect of development. The social aspect of development, which is essential in the country (like India) which is grappling with social issues like casteism, acute gender discrimination etc. is not at all on the priority list. This can be substantiated by the government funding to education, where the defence budget is shooting up. The conflict-ridden history of India and Pakistan and their rugged relationship is advantageously used by western countries in their favour by turning the two countries into markets of their obsolete weapons. This is often done at the cost of education.

Recognition of Knowledge

Recognition provides a basic medium of social integration and also provides us an understanding about what holds a society together. It is also crucial in the process of socialization and identity formation.

Now, the process and importance of recognition within the intellectual history can be traced back from Adam Smith, who advocates the importance of ‘others’ in our identity formation. This still holds significance in contemporary world as well. As now different institutions such as caste, family, school etc. recognize a person and perceive him as a greater impact on how a person will form his own identity. Hegel stresses that there are many ways to recognition and there is a multidimensional struggle for recognition in the society. Such as different institutions provide different kinds of recognition as they have their distinct culture.

Marx stresses on the importance of recognition in the labour process. He named ‘alienation’ to the experience of disrespect in the work. According to him, there will always be a discomfort in the society between ‘haves’ and ‘have not’ and this leads to struggle which results in the formation of new form of

knowledge. The idea of struggle is closely related with the idea of recognition as we can recognise a particular form of knowledge through struggles. For instance, the whole discourse of feminism was a result of various struggles and movements. Third world nations adopted this medium of recognition to get their knowledge recognised in the world. But it hardly proves fruitful to them.

Durkheim, gives importance to consensus or mutual recognition and perceives it as a basic medium of social integration, because consensus is essential for the survival of any society. But, only people in power enjoy the right of creating this consensus among people. Marx, perceives this as false consensus because it is influenced by the ideology of powerful people. They use multiple tools to create this awareness such as education.

Paulo Freire, suggests that the oppressed should have consciousness of being oppressed by the oppressors and this will come from education. He believes that consciousness is necessary condition for recognition.

Now, if we look at the debates of Axel Honneth (1995) and Nancy Fraser(2003) over the issues of redistribution and recognition, then it is proved that both advocate different views. As, on the one hand, Axel suggests that distribution conflict should be perceived as struggle for recognition in relation with the 'principle of achievement' as the experience of disrespect for their achievement leads a social group to struggle for greater self esteem through raising their claim over economic redistribution. These conflicts are morally informed conflicts/struggles for recognition triggered off with the experience of injury and disrespect.

On the other hand, Nancy Fraser stresses an analytical distinction between economy and culture, class and status. She advances a 'perspective dualism' that distinguishes between economic struggles for redistribution and social struggle for recognition. Axel Honneth (2002) believes that redistribution subsumes recognition, while for Nancy Fraser both are distinct and can not be seen as mutually existing. Although their debate did not provide us with final answer but it does provide us some insights in the process of recognition.

Now, if we look at recognition in work, than it is suggested that the work is not the medium of earning living only but it is also a sphere that provides experiences of injury or disrespect / recognition to a person.

In Taylorism, it was expected from the workers that they should leave or at least minimise their subjectivity at work place because they perceived it as a

possible disturbance in the process of recreation of what is established. This reduces the possibility of creation of something new. Also, the person loses the sense of belongingness to the work he is doing because of the mechanical process. In this way, the worker never has experience of recognition in the whole process of work.

Hence, there is a need to provide space to the subjectivity of the workers. But increasing subjectivity of work also poses threat of 'strategic instrumentalization' of the worker. Because due to this only, end results are admired and appreciated rather the process of work. So, the workers will provide only those end products that are demanded by the market in order to get recognition. So, there is a need to analyse this as well in the realm of social integration as well as system integration.

In social theory the process of recognition can be done through 'struggle' to make diverse knowledge recognised.

Central to the idea of recognition and its role in social integration lies the process of 'redistribution of knowledge.' The prefix 're' denotes the repetitive distribution. It is essential for the knowledge to be redistributed so that weak and marginalised sections of the society can have a claim to the knowledge and once the weaker and marginalised are recognised by the way of redistribution of knowledge, social integration is said to have taken place. Drawing from the works of Alex on 'struggle for recognition', he says that injury to the sentiments of deprived and weak, which makes them feel disrespected, starts the process of redistribution. This feeling of disrespect compels the deprived to struggle for redistribution of knowledge and economic resources and thus giving them their due recognition'. As said earlier Nancy Fraser (2003), however extends this theory by disintegrating the 'social integration' from 'systemic integration.' The former is the struggle for redistribution of social position and recognition in the social sphere, while, systemic integration, according to Nancy is the struggle for redistribution of economic resources. This disintegration is what she calls as 'perspective dualism.' The two processes go on simultaneously.

An example of recognition by the way of redistribution can be drawn from the attempts of Third world countries in getting their work recognised in the form of Folk Paradigm, and alternative theories deconstructing the Grand Narratives. Drawing from the work of Durkheim – mutual recognition is central to the process of social integration (which he calls solidarity).

Recognition to subjectivity of an individual are central to the process of his socialization. Looking at the recent trends, the canon of orthodoxy that exists in all spheres of life, recognizes only those who do not deviate from the normative. An example of this could be seen in educational assessment, where children (or adult) who reproduced what is taught in the class get recognition in the form of good grades. This recognition is integral part of his / her socialization and identity formation that teaches them to curb the subjectivity and mechanically reproduce the existing knowledge, creating conditions for reproduction of the existing social order.

The same process of recognition is carried on in the work place where subjectivity of individuals is discouraged and their labour is as uniformized as the product being manufactured. This Taylorism model restricts the workers from bringing in any creativity which is seen as deviation.

If subjectivities of the subordinated or the folks can be given spaces in the work, they will also bring their creativity into work and produce better results, achieve higher success and thus higher recognition. So, the recognition needs to be given to those who are less successful because using their subjectivity, they can be more successful and highly recognised. Recognition can also be brought through motivation. When in the market or capitalistic society, one is told that not a satisfactory or very good work done, one is not kept at ease, so he/she will be motivated to achieve satisfaction and hence recognition. If the labours' skills are appreciated and recognised, it can lead to their development of skills too and they will be more confident. And this confidence will bring competence which will lead to striving for recognition. Recognition in social theory of education is also done through providing convincing arguments without thinking whether it will be recognised or not. This is the way to develop parallel discourse which may receive recognition in long run.

Why Social Theories are Failing

The acidic social theories are getting alienated from the social issues in an unhealthy manner. The theories generated by them are failing to address the social problems faced by the society, as they fail to convey a convincing and meaningful understanding of all the modern social changes and conflicts faced by the society.

Our so called culture bearing elites or social scientists or philosophers are becoming less culture-bearing as their academic work is getting segregated from the present social trends.

The gap between these two fields is getting widened day by day. One of the reasons behind this is their epistemological stances. The epistemological beliefs behind both social theories and social problems are different in nature. As former is scientific in nature while the latter is subjective in nature. Both the fields of Sociology are the most abstract as well as the most concrete branches of Sociology but the latter has got more attention over former.

The aim or we can say purpose of the social theory is to help us to make sense of ourselves and the world around us. It should also help us to understand the existing social structures in order to criticise them. But social theory is failing to fulfil either of these purposes. There is an increasing tendency in social theories that these are becoming more and more abstract, static and non-historical. There is a lack of touch with empirical reality in these social theories that is why these failed to analyse the social problems that are dynamic in nature. Also, the social theories exist in an hierarchy such as high range theories, mid-range theories and low range theories. Each of these has their own limitation, as these deal in parts of a problem. For instance: Parsons theory as a mid-range theory explains the structure of the process of alienation and segregation in the educational institutions but does not explain the process behind it. Hence, it fails to provide a deeper insight into this particular phenomenon.

Also, the nomenclature of ‘theory’ is derived from sciences as it is. Theories in sciences demand universality of facts but it cannot be achieved and claimed when we deal with dynamic social reality. So the epistemological stance behind social theory is in itself problematic. (Sandeep Kumar (2017)) In constructing and justifying social theories the biological stances have been quite common among theorist to rationalize certain social, political and economic structures. These assumptions based on biological differences and innate human nature have often been used as basis to rationalize inequalities grounded in class, gender, race, ethnicity and so on.

It is important to know that the subject matter of social problems is closely bound with social changes and conflicts that are taking place due to modern urbanization and industrialization. The scientific analysis of these social problems deals with superficial empiricism that fails to penetrate beneath the surface of the phenomenon. It just provides explanation about the structure of the problem rather than transcending it.

So, we can see that there is an imbalance between the theory and subject matter of the social problems due to which the gap between these two fields is

increasing. But, it does not mean that we have no choice. There are ways to bridge the gap and these are as following:

- The abstract and static nature of social theories fails to explain the dynamic social reality. Hence, there is a need to incorporate more and more empirical data in order to develop a social theory.
- It should be timeless as well as theoretical that can cater to the requirement of analysis of dynamic social realities.
- Analyses of social problems can only be advanced if it not only provides deeper insights into the problem but it also illuminates what is hidden or untouched and provide remedies.
- Field based research such as ethnographic research, longitudinal research, exploratory research, action research, grounded theory research etc. should be encouraged, so that more empirical and realistic data can be obtained to support a theory.
- A dynamic social theory, set in the context of social change, can only bridge the gap between social theory and social problems.
- Also an ideal social theory should encompass a formal structure, an ideological stance and an exploratory format. There is a need to break the existing binaries of objective and subjective realms, as a combined understanding of both of these will help us to get clearer picture of reality and in this way we can deal with social problems in parts as well as whole.

Conclusion

In the field of social theory, the research process followed by the scholars or researcher is highly standard research process which is neither developed nor formed by us, rather it is imposed on us by the western nations in order to maintain their hegemony of knowledge. This research process is legitimized by our educational faculties and we are forced to conduct our researches according to this process only.

Through this, we are getting enculturated in a particular system of knowledge generation which is not resulting in the creation of something fresh, new and unique, rather we are just reproducing the already existing knowledge. This situation becomes more problematic for the Third world nations such as India which reflects the knowledge of western notions only. After experiencing the colonialism for about 200 years we are still not able to free ourselves from their hegemony and we are carrying their legacy and perpetuating their ideology and knowledge in our educational institutions.

In institutions, this West driven process of research is so much legitimised that any diversion from this standard research process makes your research worthless and meaningless. The significance of a research is assessed in relation to this standard research process and we are bound to adopt this.

The particular standard process of research is derived from science and we have adopted it in a social science which hinders the quality of researches happening in social sciences, because we are dealing with human minds and not with materialistic facts.

Generally, in social sciences the relevance and significance of research is assessed by the theoretical frameworks that you have read to develop your understanding, the research questions that are based on this theoretical framework, objectives that are designed to answer these questions and the methods that are adopted to serve these objectives. This whole method, and especially research questions are problematic in themselves as these are not leading to creation of something new and fresh, rather we are just keeping ourselves restricted to what theory is suggesting us to do, which takes us away from reality and creativity. This process of enculturation of researcher's mind leads to the maintenance of the existing hegemony of knowledge only.

There is a need to strengthen the process of research in social theory and this can be done only by rejecting the standard form of research process. There is a need to conduct researches on the 'research processes' followed by the universities in order to analyse their significance as such.

Also, there should be scope to question the universally accepted standardized research process in social sciences. It should be kept free from rigid standardization. A few researches should be conducted in field without standard method and process of research and without any theoretical framework. In this way a new method, process of research and new form of knowledge can be developed. In this way, new ideas and new knowledge which is contextual will be flourish.

References

- Fraser, N. & Honneth, A. (2003). *Redistribution of Recognition? A Political-Philosophical Exchange*. London, NY: Verso.

- Honeeth, A. (1995). *The Struggle for Recognition: The Moral Grammar of Social Conflicts*. Cambridge, MA: Polity Press
- Honneth, A. (2000). 'Grounding Recognition. A Rejoinder to Critical Questions', *Inquiry*, 45: 499-520
- Kumar, S. (2017). *Social Theory: Debunking Assumption*, *The Communications*, 25 (1), 39-44.
- कुमार, संदीप (2017) सैद्धांतिक परिप्रेक्षों से खतरा: शोध के विशेष संदर्भ में अध्ययन, *विद्यावार्ता*, 8, पृष्ठ 153-156

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