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Editorial.....

It is heartening to note that our journal is able to sustain the enthusiasm and covering various facets of knowledge. It is our hope that IJMER would continue to live up to its fullest expectations savoring the thoughts of the intellectuals associated with its functioning .Our progress is steady and we are in a position now to receive evaluate and publish as many articles as we can. The response from the academicians and scholars is excellent and we are proud to acknowledge this stimulating aspect.

The writers with their rich research experience in the academic fields are contributing excellently and making IJMER march to progress as envisaged. The interdisciplinary topics bring in a spirit of immense participation enabling us to understand the relations in the growing competitive world. Our endeavour will be to keep IJMER as a perfect tool in making all its participants to work to unity with their thoughts and action.

The Editor thanks one and all for their input towards the growth of the **Knowledge Based Society**. All of us together are making continues efforts to make our predictions true in making IJMER, a Journal of Repute

Dr.K.Victor Babu
Editor-in-Chief

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THE EFFECT OF USING SCIENCE SONGS ON STUDENTS' ACHIEVEMENT

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Abstract

The desired intention of this study was to observe the effect of using science songs on students' overall achievement for young learners at a school in Tyre region. The study implemented an experimental quantitative methodology approach in order to reach the final conclusions. The population and sample consisted of overall 54 grade two students, in which there are 5 boys and 49 girls. The two intact classes were distributed as a control and experimental class, where one class integrated the use of science educational songs whereas the other didn't. Pre and post tests were executed in both classes to examine the achievement levels and how they will differ. The results were promising since they revealed that songs played a distinctive role in improving and enhancing the overall progress of young learners. It displayed statistically considerable correlation among students' motivation and achievement. At last, the researcher recommends that schools and teachers enhance the utilization of educational songs and music for it plays a significant role on the learning outcomes, positive environment, motivation and creativity levels of young learners.

Introduction

Education is an evolving and flexible concept that always requires advanced strategies and teaching methods in order to thrust learners to their highest potentials. Nowadays, education is not about simply holding a pen and paper all day. Education is more based on students' interests, desires, anticipations and real life experiences. Learners enjoy classrooms full of lively activities, fun and eye-catching videos, real life models, etc.

Educational songs have been used for several years in the classroom, and many teachers depend on them for almost every objective they teach their students (Jensen, 2005). They are a superb way to engage students in the lesson you are instructing. Turning on a fun and energetic song immediately catches the attention of students, especially young learners, and builds their curiosity to see what's going to be taught next. Music and songs are the essentials for every individual these days. It is critical to know when and how to use educational songs in the classroom since not all songs are fit, or shall we say "appropriate" to be used as a teaching aid.

There are countless science songs that are available online, yet most teachers don't have the knowledge about their existence. Why is it important to study the effect of songs on students' achievement? Simply, technology is invading our minds and slowly drifting learners to dislike education. Why not integrate technology, in the form of educational songs, into a student's life.



Teaching science can be somehow challenging due to the dense vocabulary words that are taught. It's not easy for a child to acquire unfamiliar concepts without actually experiencing them. Van der Linde (1999) outlines various reasons why the importance of music and movement activities should not be underestimated, yet educators are still using old-school techniques and strategies, specifically speaking about Lebanese schools. Teachers should be more aware of their students' desires, interests, strengths as well as weaknesses. The main concern these days is the inefficient integration of science related songs in the classroom. Add to this, if songs are actually used, some teachers don't thoroughly understand how to assess the students' reactions after hearing the song. Moreover, there are inadequate sources and access to songs that fit the objectives and goals of the curriculum.

Based on the above, the purpose of this study is to basically examine the effect of integrating science songs on the achievement and success of young learners. It is crucial to realize the accomplishment levels before and after using songs, as well as the differences between classes that assimilate songs into their lesson and those that don't.

The flexibility of education has been advancing day by day, yet there are always gaps to be filled in particular domains. The incorporation of songs into the science classroom has not been studied enough and there is no proven evidence regarding their effectiveness on students' achievement. Also, most researches that are studied concentrate and shed light on the use of English language songs to improve English acquisition rather than a study about using science songs. This is a gap that is worth filling. Furthermore, there are no significant studies that are examined in Lebanon concerning this concept. Researchers have studied the impact of using songs in various schools in America, Georgia, France and many others. I did not encounter any article that deals with using songs in the Lebanese context. As for the replication of such study, there is limited information and researches completed. Some examiners believe it is beneficial to integrate songs in the science classroom. Medina (2002) assumes that the major advantage of using songs and music is the pleasant experience they convey to students and the relaxed atmosphere they produce in a class. Murphey (1992), in his work "Music and Songs" exposes some disadvantages of the use of the songs: teachers do not take the music critically, it can perturb neighbouring lessons, you can lose control of the class easily and sometimes the vocabulary of the songs is too poor.

Research Questions

1. How can the use of science-content music as a teaching strategy impact student interest, engagement and understanding of science content and concepts?
2. What does the experience of students and teachers using science-content music suggest about its potential for teaching and learning science?
3. In what ways do teachers use science-content music in the curriculum to enhance instruction in the science classroom?
4. How does the implementation of songs affect young learners' achievement and learning outcomes?
5. What are some techniques that are utilized by teachers when using science songs in the classroom?



6. Does music-based teaching enhance educational achievement in science? How does music-based teaching have an effect on student motivation for learning science?

The implementation of using songs in the science classroom has limitless branches in which can be extended for further research. The idea of studying the effect of science songs on students' achievement may benefit educators that are interested in this field since a successful and up to date teacher is always in search for ways to improve the outcomes of learners. This research provides a twist in the science curriculum due to the addition of educational songs in regular science plans and lessons. It is intended for all head teachers and school principals in Lebanese schools specifically, and is aimed at developing effective and sustainable strategies in schools to improve the quality of teaching and learning and enhance the learning experience of young pupils.

The results of this study may shed light on the importance of integrating music and dance into the classroom since it may necessitate further observation. The major gap in this methodological research is the lack of studying the topic in the Lebanese context which is why the research is intended to fill this gap and provide baseline information for examining the effect of songs on students' achievement.

Furthermore, this research provides teachers, who are interested in fun approaches, a chance to gain insight on such a topic. Some teachers don't realize the importance or even think about the usage of songs until someone points it out to them. When thinking about differentiation, songs are capable to provide weaker students with the knowledge they are not able to acquire during normal lessons. As a result, this type of study is useful to apply as an intervention method that can improve students' progress and prosperity.

Finally, the research opens wider doors for further inspection of such a study, whether science related or revolving around other subjects.

History of Using Science-Content Songs

"The history of people is found in their songs" (Jellinek, 2005).

The integration of educational songs, specifically science songs, has been implemented for many years. This type of integration allows students to think critically about a concept which is reachable in their daily lives. It is often said that music to the ears is like a fresh summer breeze. Music and songs are fixed in humans' minds, and they trigger emotional awareness, enjoyment, satisfaction, and more. According to Root (2005), songs drive the poignant foundation of human existence and connect people to "what was". In addition, they bring back vital memories of value as one listens and recites the lyrics or simply observes the moving figures. From here, we can already realize the roots of songs and music in our life.

"Someone once said that music is what feelings sound like" (Whitmer, 2005). All through history, songs and music have been utilized as a source of passing on cultures, traditions, learning and entertainment. They are energizers that employ recognizable action. Such action is executed in the form of deep engagement or progressive achievement.

Teachers have been using music efficiently to boost the self-confidence of learners and provide them with a sense of "change" from the daily routines. They have been using songs for as long as there has been music. There is an obvious reason to why we can



recall the words of specific songs more than we can remember the words of a teacher (Ferroni, 2012). This is all encoded in the brain and soundtracks are just an easier technique for the brain to be motivated.

As technology is evolving quickly over the past several years, it is an asset to also advance teaching strategies to accommodate with these rapid changes. Jensen (2000) suggests that by incorporating creative strategies, which is songs in this case, educators can engage students in the learning process and influence their overall achievement level. Although students of all ages are easily motivated by music, it is most recognizable in young learners between the ages of 3-12 (Foran, 2009). In addition, we can realize that in the years that we were young learners, songs were being used but not in the same sense as compared with nowadays. More and more songs are being added on the web than ever before, which sheds light on the significant progression of such a concept.

It is a difficult dispute for teachers to satisfy the learning desires of all students since not all students acquire in the same way. There are high achievers, average achievers and low achievers. Students are more productive when they are exposed to material that is fit for their level. Over many years, integration of songs has been proved useful to help students of all three levels. Different tasks can be assigned before and after listening to a song in order to measure the acquired knowledge. As a result of this, music-content strategies may enhance and play a role in differentiated instruction (Palekcic, 2009).

Students' Interest in Science

Science is a subject that is crammed with astounding and beneficial concepts. Students, especially young learners, tend to enjoy science periods to a level that they like to practice and experiment with concepts outside of the classroom. Science comprises what we are actually composed from and includes realistic situations that one experiences every day. Education has been transforming from a passive approach to a more active approach (Borota et al. 2006). In this way, a teacher can ensure that learners are the center of attention, and the need for "over" elaboration is not necessary anymore. There are some obvious factors that affect students' interest in science. Some of these factors include: the value of science, the atmosphere of the classroom, the charisma of the science teacher, the methods and strategies used, and students' achievement.

Value of science. When students commence to learn science at an early age, it is crucial to explain the importance and value of science in life. When students learn the significance of science and its concepts, they develop more appreciation for the subject. This increases their interest to pay attention in class and thus reflects success. Our common sense informs us that the more we experience avail in a certain matter, the better possibility that we'll enjoy and engage in it. Values are apprehended in different ways depending on the students' personality and perseverance (Godes, 2010). Valuing the same concepts or things doesn't mean that students will necessarily value the same subjects at school. This is why it is important to allow students to understand the value of science and what its worth for our well-being. Allowing students to appreciate the value of science content, may encourage those students who are dispossessed of self-confidence in their science abilities (Hulleman, Hendricks, 2010).



Atmosphere of the classroom. No one enjoys a dull, boring classroom that is deprived from pleasure. A science period should be full of stamina, and a positive learning environment should be developed. When there is affirmative communication between the educator and learners, a better atmosphere is present. Research has proved that if an optimistic and healthy environment is produced in the classroom, results in improved learning outcomes, more engagement, motivation, and increased student interest (Shumow & Schmidt, 2014). The atmosphere of the classroom can also be linked to situational interests. A positive situation or task in a positive environment can boost the learners' cognitive performance, concentration, and participation (Rana, & Akbar, 2007).

Charisma of the science teacher. The teacher is the most influential key that may boost a students' success or destroy it. Students tend to achieve more when they are fond of the teacher rather than disliking him or her. The overall outcome of a learner tends to decline when he or she is struggling to accept the teacher. Every student must have a sense of safety and comfort in the classroom in order to maximize their ability to prosper. The teacher is the one who creates this safe place by his or her character and personality traits. A teacher who is overly strict with students, and doesn't allow them to be flexible in the classroom often makes her students push away. On the contrary, a sweet and well-managed teacher who knows when it is crucial to make proper policies into action will push students towards liking her and her subject (Shumow & Schmidt, 2014).

Methods and strategies. A successful educator should be professionally equipped with diverse teaching methods and strategies. Using plain paper and books is "old school". Today's students are more open to strategies that involve them to use their critical thinking skills into practice. More student-centered methods are being implemented today. The use of integrating technology in the form of videos, songs, posters, Smart boards, and many more will positively increase students' interest and raise his or her love for education. Regarding science based knowledge, the more creative the strategies and methods are being used, the greater the interest for science will grow. When students are assigned tasks that require observation and explanations, there will be a form of interaction created in the classroom, thus leading to a more interesting approach to learning (Levin, 2011). In order to educate in this way successfully, teachers ought to be aware of how his or her learners process information and knowledge, and know when to use science content technology in the classroom (Goldberg & Fargason, 2012).

Students' achievement. Students who excel in a subject tend to have more interest in leaning it. On the contrary, when learner's grades are low in a subject, they are less likely to enjoy the class. Kuśnierek, A. (2016) believes that music and songs play a major role in the outcome and student performance. By common sense, one can decipher that if they are more into a subject and the more their success is, the more they are interested in learning about it. There are many factors that play roles in the achievement of students, which some of them were previously mentioned. The integration of new and creative ideas into the classroom may boost the achievement of young learners and take them further to an advanced level.



Importance of Integrating Science Songs in the Classroom

Science is an enjoyable subject for students since it contains information that learners can implement in their real-life experiences. Young children tend to take pleasure in inquiring about the world, engaging in hands on activities, understanding about their bodies and its transformations, and so on (Angier, 2007). One technique to keep science fun, significant and applicable is to integrate music into the given lesson (Emdin, 2011). Using songs has various advantages and plays a major role in students' scientific vocabulary, memorization, engagement, achievement and progress.

Increases scientific vocabulary. Using songs that are enriched with scientific terms that are required by young learners makes the process of acquiring new vocabulary much easier. Students begin learning how to “talk science” through engaging in diverse science-content songs that teach students the key terms in a lesson. Some educational songs also define the meaning of the terms throughout the song in order to further fix the words in a learners' mind. Songs also offer students with supplementary assets to create understanding of science related concepts. This is a result of various things. Firstly, songs present material in a totally different way and perspective as to what the teacher may present. Thus, students gain a more in depth approach to build upon the concept that the teacher began to explain. Also, the use of more than one example, especially real life examples, plays an effective role in enhancing student engagement to learn science.

Memorizing through songs. Music is one of the most enjoyable activities for anyone, regardless of age, and it has unique capacities. Its fascinating function for spontaneous recall makes it promising for science songs to remain enclosed in the head. This is due to the recurring, rhythmic words that are associated with an interesting tune that catches the ears of young learners and manages to take over part of the brain responsible for memorizing (Cunningham, Downie & Bainbridge, 2005). Music and songs are involuntarily fixed into memory using a controlled arrangement that is built from the matter at hand (Liikkanen, 2008). It may be difficult for learners to remember all terms of a specified lesson or objective, so integrating the use of songs is a positive motivator to enhance the memorization of science and its content. It is crucial to play the song more than once in order to allow for musical imagery repetition. This results in easy recall of lyrics (Crowther, 2006).

Increases students' engagement. How do you imagine students' reactions when the teacher says that they will listen to a song? One of the best and most effective ways to catch the attention of young learners is through music, or in this case, songs. When students are engaged and exposed to music-content, this contributes to a deep learning experience. The major reasons for this enjoyment and engagement are due to innovation, creativity and “new exposition”. Students are obviously going to feel thrilled to watch and listen to an educational science song and have a chance to sing along (Governor, 2012). It is crucial to take into consideration that the song should possess a clear purpose, and not only used for the sake of entertaining the learners. If songs are executed inappropriately, students will feel that listening to science-content songs is just a matter of allowing time to pass.



Students' achievement and progress. The subject in study is the effect of using science songs on students' achievement and progress. Although there aren't much studies related to this specified variable, yet it is highly promising that there is a consequence, whether negative or positive, on the achievement level for students. Introducing a novel song to the class is the first step towards "thinking out of the box". It is a way to proceed to different paths than the regular science lesson performed. Music allows low achievers and weak learners a chance to acquire scientific content and be able to discuss it with their peers. Science-content songs allow learners to connect and reflect what they have heard to a variety of activities and tasks they are asked to accomplish. Following with the lyrics of the song is an effective way to build an understanding of the content at hand. After students are exposed to songs, an educator is able to assess if the student has actually gained knowledge about the given objective or if more elaboration is needed. McCammon (2008) believes that music is a tool that can be implemented by any teacher in order to enhance a more progressive and successful learning environment. It is acceptable to note that teaching science through songs possesses countless educational merits.

Related Studies

Various articles have been published around the idea of integrating science-content songs into the science classroom. The integration could be in the form of video-songs, songs created by the teacher, songs created by the students or songs displayed with lyrics. Studies have been formed regarding the importance of utilizing science songs in the classroom, teacher and student experiences, student engagement and more. This section focuses on the related studies that paved a helpful path to the study the researcher is willing to accomplish.

A research study entitled: "Teaching and Learning Science Through Song: Exploring the Experiences of Students and Teachers" by Donna Governer is a qualitative study that sheds light on the usage of science songs and how they were implemented in the classroom (Duschl, R.A., Schweingruber, H.A., & Shouse, A.W. (Eds.). (2007). The study was performed at a middle school level and students were observed during a science class with songs being used. Donna was hoping to acquire how teachers put the songs into practice, and how students reacted to such approach. The results of the study revealed that teachers integrated video-songs to enhance students' understanding and inquiry of scientific concepts and to provide students with different approaches for a better science experience. This article was a fruitful help to the current study at hand, yet no significant concentration was forecasted on the idea of how science songs affect students' achievement level.

A significant study about the use of English songs for teaching English as a second language, was studied by many authors. The idea of integrating new learning strategies, such as video songs, dance and puppet shows enhance students' motivation and engagement level. Researchers focused on the usage of songs in order to improve the language of young learners (Borota et al. 2006). According to the results of the study, educators realized that educational songs boosted learners' pronunciation, grammar skills, vocabulary content, spelling and overall language. This is due to the fact that learning to speak a foreign language necessitates a lot of skill and being able to extend



knowledge by imagination and figurative language is a must (Becerra Vera and Muñoz Luna 2013). Although this article was mainly about the integration of English songs to aid in learning a second language, it was beneficial since it shed light on the importance of such integration. Also, research indicates that songs have great effect on learner's progress in various ways.

Niland (2012) discovered the means behind how innovative songs could become part of the musical cultures of young learners. Children's songs are inspirational, and all children adore the music to their ears. They don't just teach tuneful and pleasing skills, yet they promote interpersonal contact and play a major role on cognition. In addition, educational songs, which have an inspiring impact on every moment in a child's life, play a chief function in transferring values to children. There are many categorizations of value education, but Schwartz's value classification is a very widespread. In the literature research, no studies have been completed to inspect the children's songs in terms of values. The article that was published aimed at examining 59 children songs using content analysis method. The findings demonstrated that many aspects such as achievement, self-direction, compassion, and universalism were affected by the utilization of songs. The researcher benefited from the article due to the productive amount of information it provides about using songs. The current study has some similar investigations and research questions which came in handy.

An interesting study titled: "Using Science Songs to Enhance Learning: An Interdisciplinary Approach" written by Gregory Crowther provided the researcher with some insight about the study topic. The article tackles the idea of limited evidence on the impact of incorporating music and songs into the classroom. It concentrates on the affect at the college level, not young learners. Researchers believe that songs allow the students to have a sense of relaxation while listening to important content through music. Also, the atmosphere of the class would be more comfortable and less stressful (McFadden T, 2011). The appealing thing in this study was the idea of actually allowing the students to create their own songs instead of listening to one previously created (Schulkind MD, 2009). Peers enjoy creating songs that have a rhythm and melody. This study revealed the important of music to the creativity of students, yet the grade level was not very useful since the researcher is pinpointing young learners.

"Using Songs in Primary Education: Advantages and Challenges" This research is fixed to the concept of observing how songs influence Primary students learning. It is also based on the investigation of how correctly the teacher is executing the lesson using the integration of video songs. Classes were observed, specifically focusing on English language. Mol (2009) states that there are various types and styles of songs which can be utilized in a class. These may spread from simple nursery rhymes to loud pop music. It depends on the students' needs, culture and many other factors. The research studied the motivation of students while a song was being played and drew some conclusions relating everything presented. Beneficial images and sample questionnaires were useful in this study; yet again the concentration was more on the effect of using English songs, not science songs.

Another useful article was: "Attitudes Towards Science: a review of the literature and its implication." This article was written by Jonathan Osborne. It displays some literature about the ongoing reduction in the interest of studying science among students. The



attitude of students towards science, and their different values towards the subject were studied (Donnelly 2001). With respect to the results, gender, culture, curricula and quality of teaching were major factors that were found to play a role in this reduction. It is an important step to understand what motivates students to enjoy or dislike a subject and how to improve this trend. The useful part was the fact of pointing out some of the major factors that affect student engagement, and the elaboration of these factors.

“Enhancing Secondary Stage Students’ Writing: Effects of Context of Songs in Teaching Grammar Implicitly” is a recent article written by Azza Ashraf. The study concentrated on the observation of using songs to enhance students’ writing. It was performed on 60 students in which some were experimental group whereas the others were control. The researcher measured the achievement of students in writing without grammar mistakes after they were exposed to a certain song that included lyrics. The control group wasn’t exposed to any song, yet the traditional grammatical rules lesson (Jaeger, G. 2011). As for the results, the researcher realized that the context of songs affected students’ writing level in a positive way, and it was a promising strategy to improve language (Thornbury, S. 2012). Even though this fruitful article measured achievement of students’ writing, it gave the researcher an idea about investigating the use of science-integrated songs on the overall progress of young learners.

For further information, an article entitled “Science Pedagogy, Teacher Attitudes, and Student Success” was valuable (Munck, 2007). This shed light on the effort that teachers impose in order to provide students with the best quality of education that is possible. The study examined the correlation between using diverse teaching strategies on the overall learning accomplishment of fifth grade students. Also, the attitude of the science teacher was taken into consideration. It is a mixed research, including both qualitative and quantitative records. With respect to the benefits to the current study, this article is rich in similar aspects since the use of different teaching methods could include science-content songs, and the variable measured was the success of young learners. There seems to be a clear and obvious effect.

In order to decipher about the relationship between student success and teaching methods, the researcher benefited from the article: “Student’s Interest in Science and Technology and its Relationships with Teaching Methods, Family Context and Self-Efficacy.” This discovered the attitudes and interests of students towards science and technology (Foster, 2010). A questionnaire was created and distributed to 1882 students. The questionnaire included questions regarding general interest in school, specifically the subject of science and technology, teaching strategies, preference for subjects, and more (Potvin & Hasni, 2014). The most promising result was found that majority of students prefer student-centred teaching strategies such as group work, peer checking, etc. This is significant to reveal that most students enjoy a class full of exploring and creativity. Although the article didn’t focus on the use of songs as a teaching method, yet it is a fundamental strategy that pinpoints student-centred strategies.

“Composing Songs for Teaching Science to College Students” is an article that explored the enhancement of learning through songs. This study showed that songs containing educational content may influence learning as it functions to improve memorization (Levine LJ, Edelstein RS., 2009). The research concentrated in more difficult subjects such as Chemistry, to distribute a questionnaire amongst students. It was



studied on college students in order to explore the students' behaviour towards using songs in the lecture hall or classroom at such an age. The results were promising. 87 % of students agreed that songs were enjoyable in the classroom and helped them to recall important concepts in science. The researcher had a great benefit from this article due to the fact that a high percentage of students actually enjoyed the integration of content-songs into the classroom, which is the base of the current research. This enjoyment could have a positive effect on the student achievement level overall.

One of the beneficial articles the researcher came upon was the one entitled "Chemistry to Music: Discovering how Music-Based Teaching Affects Academic Achievement and Student Motivation in an 8th Grade Science Class". This article, written by William Lodge, fosters the idea of innovate teaching and creative tools that improve student motivation in the classroom. The use of songs is especially important for students who feel that school is just a boring and bleak environment. As a result, music is a tool for learning that can be implemented by almost any educator that has the will to create a welcoming class atmosphere. The study was done on 8th grade students in a public school class. This class was active since the usage of songs created a fun learning environment. Data was collected to decipher the consequence of music content on student success and inspiration, compared to a control classroom. Although limited research is found and proven for this kind of learning approach, it is still possible to say that through this observation, many students were more motivated and willing to prosper.

"Music in the Science Classroom: The Impact of content based songs on learning and engagement" is a beneficial article written by Tom Mcfadden in New Zealand. Clearly, we can see the influence that songs have on improving student engagement in the classroom. This article explored how science class can become more interesting and content-based by the usage of video songs. The power of music in young learners is generally being studied more and more (Emdin, 2010). This is a result of current articles that found the impact of music to be a dramatic up rise. An experimental group and a control group were taught the same content but by utilizing different techniques in teaching. The experimental group learned through science-content songs, and the findings were quite astonishing. This group gained more long-term concepts than the control group. So, this goes to show the effect of integrating music and how songs can achieve maximal pedagogical value when students and teachers cooperate with each other. The article was advantageous to the researcher due to the similar content for insight.

In order to gain more understanding regarding the employment of music (songs), the researcher benefited from the article "Using Music to Support the Literacy Development of Young English Language Learners". The writer of this article included that music and sings supported literacy development to those young learners in the preschool level (Pearson, 2008). The article portrays the pros of utilizing musical occurrences into everyday classes. Even if the educator is not fully aware of how to incorporate such content through songs, it is worth a try to explore something new and creative. Every learner acquires in a different way, and creative approaches should be adopted to allow a child to reach for more. Also, this article discovers the countless advantages that music offers to students, including a positive learning environment, open-ended activities, and



the allocation of joy. The only con of reading this article was that it only focused on English literacy skills, not anything that revolves around science.

Another interesting article related to the current research is one entitled: “Perspectives Upon Integrating Music into Freshman English Pronunciation Training Classroom.” This study was a means to decipher the consequences of integrating music through songs onto English pronunciation for freshman students. Although the study is English-related, not science, the research still benefited from the realization of the findings and how songs affected the success of students. In the study, 95 students in Taiwan were subjected to different songs that included specific pronunciation rules. By listening to the lyrics, students were then quizzed in order to observe if the songs assisted them in pronouncing some of the vocabulary. The results appeared promising, since 77% of students were found interested in listening to songs. Chou (2013) believes that English song teaching may affect student listening skills and motivation.

Due to the fact that language is one of the crucial aspects of education, various articles focused on the idea of using songs to improve English language proficiency. In the article “The Application of Humorous Song in EFL Classrooms and Its Effects on Listening Comprehension” written by Marzieh Rafiee, he believes that a language teacher should be equipped with varying teaching methods and the usage of effective tools that fit the modern education today. The effect of using funny songs on listening comprehension skills was studied. An experimental research was implemented where a pre and post evaluation was conducted. This was done in order to explore how these types of songs could boost listening skills in EFL pupils. As a result, it was found that humorous songs actually influenced the way students listened to oral scripts and majority of students prospered in listening tests. This was a fruitful article to the researcher given that the integration of any song into the lesson can leave a major impact on the young learners thinking, imagination, knowledge, motivation and finally achievement.

Songs are not the only means of technology that can be integrated into the science classroom. The usage of educational videos in addition to the song lyrics is a promising approach to promote student engagement and prosperity. This is why the researcher found the article: “Using Educational Video in the Classroom: Theory, Research and Practice.” This article revolved around the idea that young learners, whose age ranges from 8-18 years old, are obsessed with technology and media these days. Educators can benefit from this interest by creating educational videos that integrate the objective to be taught at hand. This was stated by the Kaiser Family Foundation:

“Without question, this generation truly is the media generation, devoting more than a quarter of each day to media. As media devices become increasingly portable, and as they spread even further through young people’s environments— from their schools to their cars—media messages will become an even more ubiquitous presence in an already media-saturated world. Anything that takes up this much space in young people’s lives deserves our full attention.”

Silverman (2006) stated that there are three modalities through which students absorb knowledge, and these modalities affect how students process the information, which songs and videos assist in doing so. It was a beneficial article to the researcher due to the fact it shed light on the importance of technology in the daily lives of both learners and teachers.



In order to observe the importance of science in everyday lives of children, the researcher found the article “The Dynamics of Learning Science in Everyday Contexts: A Case Study of Everyday Science Class” to be valuable. The main target of this article was to study the reasons behind students’ lack of interest in the subject of science. A program titled “Everyday Science Class” was created in order to realize some aspects related to the things that attract students to enjoy a subject. These include the contexts being learned, the learning and teaching environment, teaching strategies and methods, etc (Zeidler, Sadler, Simmons & Howes, 2005). The results were founded by using a thematic coding technique, and they were found to be quite interesting. It was shown that students are massively affected by the everyday context and learning environment, which would either increase or decrease their science interest. More studies need to be performed regarding the cognitive function and development of young learners. This study was beneficial in some ways since the main focus was on the interest and attitudes towards science. It is one of the pinpoints of the current research in study.

“Envisioning Technological Literacy in Science Education: Building Sustainable Human Technology- Life world Relationships” is an article that observed the importance of integrating technology in all its forms into the science curriculum. It explores the idea that research lacks debate regarding the support for techno-scientific strategies. Technology education needs to be more crucially taken into consideration due to its emphasis on improving the level of achievement. Also, relationships should be built regarding the life-world experiences and connecting these experiences to the daily lives of learners. The article focuses on recognizing human responsibility, thus educators, for modern technology usage nowadays. Roth (2008) suggests studying the point of views on the reasons behind the nature of technology on affecting the relationships between the world and experiences. It is important to study the circumstances of integrating technology into our daily lives, especially if technology is in the structure of beneficial information to education. This technology can be in the form of songs, videos, power points, educational games and many more.

As we have noticed, science is obviously a critical part of education, and it can be taught and experienced in a variety of diverse ways. Countless articles and researchers have observed the idea of integrating technology, not specifically science songs, into the classroom to enhance motivation, enjoyment, success, perception and overall commitment to strive. Also, it is crucial to keep in mind the factors that affect students’ interest towards science or other subjects at school. The factors may include teaching pedagogies, charisma of the teacher, atmosphere and environment of the class, and last but not least, students’ achievement. The more a young learner is motivated, and the more practical teaching is, the better attitude a child may impose. Various educational songs are available from many sources. These songs may be utilized in daily lesson plans in order to improve the atmosphere in the class and to create a more enjoyable learning environment. Educators should not forget the importance of integrating science-content songs in a beneficial and productive way, not just for the sake of using technology.



Method

Design of the Study

This study is classified as experimental quantitative due to the fact it analyzes data collected by testing a hypotheses. Specific conclusions were reached about the effect of using science songs on the achievement of students. Also, pre and post tests were distributed in order to analyze the results more carefully.

What is quantitative research? According to the SIS International Research, quantitative studies are a prearranged technique of collecting and analyzing specified data that is retrieved from diverse resource. The research includes the utilization of statistical and computational tools to develop outcomes. The most relevant ways to collect data for a quantitative research is by experiments and surveys. This is the reason that the research is an experimental quantitative research.

Population and Sample

The researcher conducted the study based on a control and experimental group. This study was examined in grade 2 during the period of science subject in a school in Tyre region of Lebanon. Two intact classes at Imam Sadr Foundation in Tyre were under study in order to discover the effects of utilizing science songs on the students' achievement and success level. The researcher chose this population since she is the teacher of the class under study. The composition of students in each class, control and experimental, is demonstrated in the table below.

Table 1: Population and Sample

Kind of Class	Boys	Girls	Total
Control	2	25	27
Experimental	3	24	27

Procedure

In order to implement the study and achieve accurate findings, the researcher took permission from the school administration in Tyre region (Imam Sadr Foundation). The researcher explained the purpose of performing such research, and how the results were going to affect the class being studied.

The researcher executed the study in her science classroom by distributing a pre-test to the students in both control and experimental classes. The pre-test (Appendix A) examined the understanding and knowledge that students possess prior to transitioning to the next phase. In the experimental group, an educational song related to the lesson was demonstrated to the students.

After the song, a post-questionnaire (Appendix B) was distributed amongst students in order to assess their understanding and achievement levels after singing the song. As for the control group, a post-questionnaire was distributed after a normal lesson procedure without the utilization of songs.

Intervention

Using songs in the classroom is not as simple as it sounds. Educators use a variety of techniques in order to integrate songs into the material being taught. How exactly are



songs used in a beneficial and fruitful way in the class? Since the researcher is a teacher to young learners, she usually integrates science songs that are repetitive and consists of simple language that can be acquired easily. Repetition is important in order for young learners to be able to memorize key terms and concepts that are required for the lesson.

At the beginning of a lesson, the concept may be introduced through a song which catches the attention of students and allows them to become interested to learn more. During the lesson, songs may be utilized to further enhance understanding and enrich students' knowledge of the science concept. For an assessment, students may listen to a song and repeat it to a partner or a group of peers to make certain they have learned the required material.

The researcher uses plenty of science songs in diverse ways. Some songs are made up by the teacher and students. Others are songs with lyrics in order for students to follow and sing along. Songs may be in the form of videos with animations that attract student's attention more, and they may be accompanied with gestures and body movements for more excitement and fun.

Instruments

The achievement and student success level may be measured in several ways, using altered assessment tests and prognosis. In order to assess students' knowledge and understanding after the use of songs in the class, two achievement tests were implemented. An achievement test (Appendix A) prior to the introduction of the song, and an achievement test (Appendix B) after the usage of the song was put into study. These tests were used in both the control and experimental groups. The difference is that the control group was exposed to a normal period whereas the experimental group to a science song of the researcher's choice.

Data Analysis

The statistical analyses were conceded by using the SPSS. This was used in this research in order to study the significance of the results that were obtained. Also, the analysis was executed to check if there is a clear difference between the achievement scores of the pre-test to the achievement scores of the post-test.

Results

In this chapter, the study data collected through pre and post testing are recorded and discussed. The purpose of this study was to examine the effect of using science educational songs on students' achievement and progress level. Students acquire in different ways, and some students are shown to achieve more when taught concepts in a creative manner.

In this study, both the control group and the experimental group were handed a pre-test (Appendix A). The pre-test included questions and fill in the blanks about the three states of matter (solids, liquids, gases) and a task asking the students to provide examples for the three states of matter. Lesson plans for both the control group and experimental group are included in Appendix C and Appendix D respectively.



Control Group Results

After completing the pre-test, prior to any content exposure, the researcher performed two separate tasks at two different time intervals. The control group were assessed first, followed by the experimental group. In the control group, a normal session was carried out with a normal lesson plan (Appendix C). After instruction, a post-test was distributed amongst students. This was implemented in order to decipher the achievement level after a normal instructed period.

Experimental Group Results

As for the experimental group, instruction was implemented differently. After students accomplished the pre-test, they were exposed to an entertaining science song that explains about the three states of matter, and provides real examples as well as descriptions for each state. When the researcher stopped the song and made a small discussion, the post-test was handed out. Students' achievement grade was recorded. In order to study the effect of using educational songs on students' achievement, a t-test was performed for both the control and experimental groups and the results showed that $p < 0.001$

Conclusion

The major target of this chapter is to draw up conclusions regarding the study at hand and endow with recommendations for any changes that may have been done for future research. After the researcher studied the two groups, control and experimental, various conclusions were drawn regarding the targeted hypotheses. In general, a significant result was deciphered between the control and experimental groups, where experimental group displayed an increase in the achievement grades after integration of a song. The t-test result showed that $p < 0.001$ for experimental group which is a statistically highly significant result. By comparing the control and experimental with respect to pre and post tests, the researcher realized that the majority of students' grades increased by 0.5 to 1 mark with the usage of an educational song. For example, Rokaya Oseily's grade in the pre-test was 3.5. After the instruction of the lesson in the form of a song, her grade in the post-test improved to 4.5. The same case goes for the students Zahraa Aboud and Fatima Terkiya.

On the contrary, a boost in achievement grades wasn't so significant in the control group, where a normal lesson was taught using textbooks and worksheets. Students' grades either increased by a 0.5 mark, stayed at the same level, or went down. For instance, the student Amir Bawab's mark improved slightly from a 4.25 to 4.75, whereas Asil Hamze's mark stayed the same. This slight difference in achievement level demonstrates that a normal instructed lesson has a minor effect on the achievement of students and their progress level. As for the achievement levels of the group taught with songs, a more significant change was measured regarding pre and post test levels.

In conclusion, the researcher can answer the proposed research questions as follows:

How can the use of science-content music as a teaching strategy impact student interest, engagement and understanding of science content and concepts?

- The usage of educational songs and strategies that implement music affected students' interest and engagement to a high extent in which



approximately all students were focusing well in order to catch the lyrics and concept of the song that was demonstrated in front of them. They had a sense of entertainment through learning.

What does the experience of students and teachers using science-content music suggest about its potential for teaching and learning science?

- Science is a fun and flexible subject to teach. The more engaged the students are, and the more creative a teacher is in delivering the required content, the better the students will react. This will be reflected on the achievement of students and their rate of success.

In what ways do teachers use science-content music in the curriculum to enhance instruction in the science classroom?

- Some lessons in science require more emphasis than what is specified in the curriculum. Lessons such as human body systems can be enhanced and taught in a simple, entertaining way through science-content music and songs. Students can listen to a song about their body while performing a task set by the teacher.

How does the implementation of songs affect young learners' achievement and learning outcomes?

- After the research, it is significant to conclude that the implementation of songs affects the learning outcomes of students in various perspectives. Their achievement level is better with the usage of songs. Also, students' focus and engagement is more effective than a class with simple textbooks only. Motivation is a key indicator for student success as well. The researcher realized the effect of using songs on all of these levels, and they all seemed to be reasonable.

What are some techniques that are utilized by teachers when using science songs in the classroom?

- Songs can be used in a variety of ways depending on the needs and quality of students being taught. Some techniques can be in the form of listening to a song and following with the lyrics in order to memorize the concept. Teachers may display a song in the form of an educational video where students clap and sing along. Also, a mix of the two can be utilized to enhance understanding. Educators may also ask students to create their own song and tune that suits the concept and content of the lesson.

Does music-based teaching enhance educational achievement in science? How does music-based teaching have an effect on student motivation for learning science?

- Yes, music-based teaching enhances the educational achievement in science. It plays a major role on motivation and engagement. In this way, students actually look forward to science class, and feel more comfortable sharing their thoughts with others.

Recommendations

Every research can have slight changes that make it more effective and reasonable. These changes are necessary for future research revolving around the topic in study: The effect of using science songs on students' achievement. The following are some recommendations proposed by the researcher for future development.



1. The utilization of science songs and educational fun is momentous in the classroom since it provides students with the freedom to express their ideas in a more comfortable environment. As a result, teachers should use educational songs more often during or after instruction in order to allow students' imagination and creativity to widen.
2. Schools should specify at least 2 periods of integrating songs and music into teachers' lesson plans for this provides a more motivating and innovative atmosphere for the students to capture knowledge.
3. Curriculum of science should be slightly adjusted in which songs are integrated, and music links are provided for each lesson and concept that is asked for instruction.
4. Teachers and educators may be trained on diverse strategies and techniques that they can be able to use in the classroom, whether it is training to look for the right educational songs, the way to use them, how to create your own song, or even the proper music and tools to be utilized.
5. It would be more effective in such research to study more than one class and more than one level in order to precisely specify the significance of the obtained results.

Further Study Directions

The intrinsic purpose of this study was to discover the effect of using science songs on students' achievement and overall learning outcome. This study was implemented by the researcher at Imam Sadr Foundation in two intact grade two classes.

This study is significant since it converses and sheds light on a vital concept of learning and teaching, which is the integration of music-content into the curriculum. This strategy plays an effective role in the progress of young learners and their engagement level. The results contribute to a theoretical framework that informs the importance of using science –based songs and videos. This research also offers the next level for further research as certain matters obviously still need to be investigated. After instructing with science songs, what are some of the techniques teachers can use in order to measure how effective the songs were? What other ways can teachers integrate songs in the classroom? What is the role of the coordinator and school administration in these cases? These issues and various other inquiries call out for further investigation in the future.

References

1. Becerra Vera, Beatriz, and Rosa Muñoz Luna. 2013. "Teaching English Through Music: a proposal of multimodal learning activities for primary school children." *Encuentro* 22: 16–28.
2. Borota, Bogdana, Vesna Geršak, Helena Korošec, and Edi Majaron (2006). *Critical, Cultural and Multimodal Approaches to Using Song as Literature in Language Learning*
3. Chou, Y.L., 2013. *The use of YouTube in English song teaching in elementary EFL classrooms- empowering EFL learning in terms of listening comprehension and learning motivation* (Master's Thesis). Taiwan: National Cheng Kung University, Taiwan.



4. Crowther, G.[J.] (2006). Learning to the beat of a different drum: music as a component of classroom diversity. *Connect*, 19, 11–13.
5. Cunningham, S. J., Downie, J. S., & Bainbridge, D. (2005). "The pain, the pain": Modelling music information behavior and the songs we hate. In *Proceedings: Sixth International Conference on Music Information Retrieval. ISMIR 2005: 11-15 September 2005, London, U.K.*
6. Donnelly, J. (2001). 'The nature of science' in the National Curriculum for England and Wales. *International Journal of Science Education*, 23, 181–195.
7. Duschl, R. A. (Ed.), Schweingruber, H. A. (Ed.), & Shouse, A. W. (Ed.) (2007). *Taking science to school: Learning and teaching science in grades K-8. Committee on Science Learning, Kindergarten through 8th grade: National Research Council, Board on Science Education, Division of Behavioral and Social Sciences and Education. Washington, D.C.: The National Academies Press.*
8. Emdin, C. (2011). Moving beyond the boat without a paddle: Reality pedagogy, black youth, and urban science education. *The Journal of Negro Education*, 80(3), 284-295.
9. Foran, M. (2009). *Listening to Music: Helping Children Regulate Their Emotions and Improve Learning in the Classroom*
10. Godes, O. (2010). Enhancing Interest and Performance with a Utility Value Intervention, *Journal of Educational Psychology*, v102 n4
11. Governer, D. (2012). *Teaching and Learning Science Through Song: Exploring the Experiences of Students and Teachers*
12. Governor D, Hall J, Jackson D. (2013).1.*Teaching and Learning Science Through Song: Exploring the experiences of students and teachers. International Journal of Science Education*, 35, 3117-3140.
13. Hulleman, Hendricks (2010) *Enhancing Interest and Performance with a Utility Value Intervention, Journal of Educational Psychology*, v102 n4 p880-895 Nov 2010
14. Jaeger, G. (2011). *Enhancing Secondary Stage Students' Writing: Effects of Context of Songs in Teaching Grammar Implicitly*
15. Jellinek, G. (2005). *Amazing grace: A country salute to great gospel hymns. Nashville, TN: Nelson, Thomas.*
16. Jensen, E. (2000). *Music with the brain in mind. Thousand Oaks, CA: Corwin Press.*
17. Jensen, Eric (2005). *Top tunes for teaching, 977 song titles and practical tools for choosing the right music every time. Thousand Oaks, CA: Corwin Press.*
18. Kusnierek, A. (2016). *World scientific News.: The Role of Music and Songs in Teaching English Vocabulary to Students*, 43 (1), 22-28.
19. Levin, D.M. (2011). *Supporting scientific inquiry among students with exceptionalities. Paper presented at the Annual Ethnography in Education Research Forum, University of Pennsylvania. Philadelphia, PA*
20. Levine LJ, Edelstein RS. (2009). *Emotion and memory narrowing: a review and goal-relevance approach. Cognition Emotion*, 23, 833–875.



21. Liikkanen, L.A. (2008). Music in everymind: Commonality of involuntary musical imagery. Paper presented at 10th International Conference on Music Perception and Cognition, Sapporo, Japan.
22. Medina (2002). "Using Music to Enhance Second Language Acquisition: From Theory to Practice".
23. McCammon, W.L. (2008). Chemistry to Music: Discovering how Music-Based Teaching Affects Academic Achievement and Student Motivation in an 8th Grade Science Class.
24. Mol, H. (2009). Using Songs in Primary Education: Advantages and Challenges
25. Munck, J. (2007). Inquiry-based science supported by technology: Achievement among urban middle school students. Ann Arbor, MI: University of Michigan School of Education.
26. Murphey, Tim (1992). Music and song. Oxford: Oxford University Press
27. Niland, A. (2012). Exploring the lives of songs in the context of young children's musical cultures. *Israel Studies in Musicology Online*, 10, 27-46.
28. Palekic, M. (2009). The role of students' interests in self-regulated learning: The relationship between students' interests, learning strategies and causal attributions, *European Journal of Psychology of Education* 24(4):545-565
29. Peregoy, S., & Boyle, O. (2008). Reading, writing, and learning in ESL (5th ed.). Boston: Pearson.
30. Potvin, P., & Hasni, A. (2014). Interest, motivation and attitude towards science and technology at K-12 levels: a systematic review of 12 years of educational research. *Studies in Science Education*, 50(1), 85-129.
31. Rana, R. A., & Akbar, R. A. (2007). Relationship between Classroom Learning Environment and Student's Achievement in Higher Education. *Journal of Education Psychology*, 29, 23-48.
32. Root, D. (2005). Music as a cultural mirror. *OAH Magazine of History*, 19(4), 7.
33. Schulkind MD. (2009). Emotional organization of autobiographical memory. *Memory & Cognition*. 2005;35:1025–1035
34. Shumow, L., & Schmidt, J. A. (2014). Enhancing adolescents' motivation for science: Research-based strategies for teaching male and female students. Thousand Oaks, CA: Corwin.
35. Silverman (2006). Using Educational Video in the Classroom: Theory, Research and Practice
36. Thornbury, S. (2012). Enhancing Secondary Stage Students' Writing: Effects of Context of Songs in Teaching Grammar Implicitly
37. Van der Linde, C.H. (1999). The relationship between play and music in early childhood: Educational insights. *Genetic, Social and General Psychology Monographs*, 119, 2-8.
38. Whitmer, M. (2005). Using music to teach American history. *OAH Magazine of History*, 4-6 July 2005.
39. Zeidler, D., Sadler, T., Simmons, M. & Howes, E. (2005). Beyond STS: A research-based framework for socioscientific issues education. *Science Education*, 89(3), 357–377



Appendices
Appendix A
States of Matter Pre-Test

***Fill in the blanks with suitable words from the box, then complete the task.**

Matter is _____ around us. It is anything that takes up _____ and has mass.

There are _____ states:

- 1) _____
- 2) _____
- 3) _____

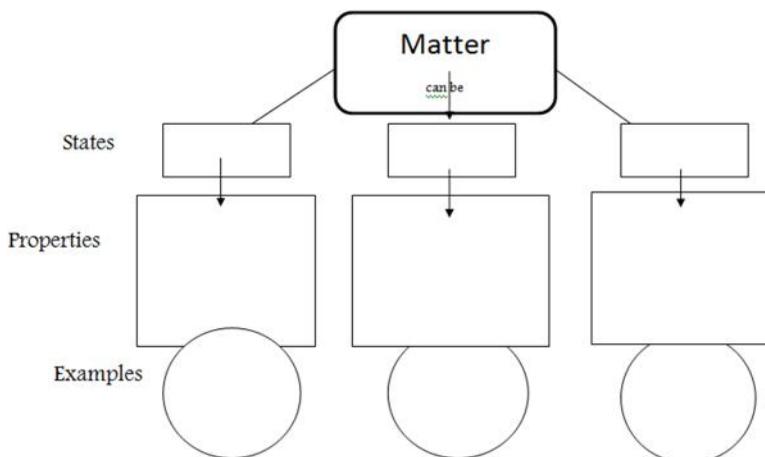
space
three
everywhere

***Write three examples for each state of matter.**

- 1) _____
- 2) _____
- 3) _____

Appendix B
States of Matter Post-Test

*** Fill in the concept map:**



Appendix C Lesson Plan for Control Group

Warm-Up:

Teacher distributes a KWL chart amongst students. In groups, have students discuss what they know about the three states of matter. Students share their thoughts and ideas.

Teacher assesses students with the pre-test prior to instruction.

Main Activity:

-Teacher displays three different objects. Have students discuss the differences and similarities between the objects.

-Teacher explains the states of matter and their properties. Students follow along with teacher and share ideas acquired.

-Have students read and discuss about matter in their science book.

-Teacher distributes activity (Appendix E) and students match the state of matter to the correct object.

-Assessment: Post test is distributed amongst students to solve.

Wrap-Up:

Have students write as many solids, liquids and gases they see in the classroom.

Appendix D Lesson Plan for Experimental Group

Warm-Up:

Teacher distributes a KWL chart amongst students. In groups, have students discuss what they know about the three states of matter. Students share their thoughts and ideas.

Teacher assesses students with the pre-test prior to instruction.

Main Activity:

- Teacher introduces the lesson through a song. Students follow along the first time by listening to the song.
- Teacher plays the song a second time and students follow by repeating the gestures and singing along.
- Teacher allows students to sing the song to one another and repeat the properties of matter that they have listened to.
- Teacher distributes activity (Appendix E) and students complete the task.
- Assessment: Post test is distributed amongst students to solve.

Wrap-Up:

Have students write as many solids, liquids and gases they see in the classroom.

Appendix E States of Matter Activity

Matter		Name: _____
Under each picture of matter, print if it is a <u>solid</u> , <u>liquid</u> or <u>gas</u> .		
		
		
		
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CONSTRAINTS OF STUDENTS' MATHEMATICAL PROBLEM SOLVING AND PROVING SKILL COMPETENCIES IN THE CASE OF SOME SELECTED HIGH SCHOOLS IN I/A/ BOR ZONE.

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Abstract

This research was about the constraints of students' mathematical problem solving and proving skill competencies. Incorporating general problem solving strategies in teaching mathematical problem solving and proving was very mandatory for alleviating the difficulty that students faced while they were solving and proving mathematical statements. Problem-solving strategies, according to O Connell (2007), were what we do in our heads as we make sense of and solve problems. They were our tools for simplifying problems and revealing the possible paths to solutions. Developing students problem-solving abilities can be a challenging task. Building problem-solving skills through the teaching of strategies requires attention to building both mathematical skills and the thinking process (O Connell, 2007). One of the most commonly referenced approaches to teaching problem solving involves the use of keywords. This has also been described as direct translation. Students were taught to look for particular clue or indicator words in their word problems. The typical strategy was to search for a keyword information such as more which can sometimes mean to add, and use this information to directly translate the problem into its computational form (Woodward, 2006). It was, of course, also easy to write story problems with key words alone, that suggesting correct operations for the problems. Problems related to learning Mathematics were common Phenomenon among students around the world (Fenna and Shermann, 1976). This holds true in the Ethiopian context too. As Mathematics teachers in secondary Schools, High schools, Colleges of Teachers Education and University, we had the opportunity to observe closely the overall competencies of students in mathematics problem solving and proving skills, which was unsatisfactory. The general objective of the research was to assess some of the possible constraints in the students' mathematical problem solving and proving skill competencies. To analyze the data generally statistical method of data analysis was used. These are, descriptive and followed by inferential statistical particularly, percentage, mean and mode will be used.

Keywords: Constraints, Problem solving, proving skill



I. Background of the study

In view of growing worldwide importance of the usage of mathematics in science, technology and everyday life activity, research on problem solving skills and students learning and teaching in school and university have become a prominent topic in the recent decades. Ugbebar (2009) professed that prioritization of mathematics teaching and learning in the bid for national development is inevitable. Mathematics is the aggregate of mathematical problem solving, statement proving skills and the theoretical knowledge. Problem solving is the process through which required solutions for a given problem are found as a process of moving from a given state to a goal state with no obvious way to progress from one state to the other state (mathematical problem solving encompasses the use of knowledge, skills and strategies to solve problems (Xinand Jitendra, 2006). Problem solving is the most important component of mathematics (Janssen, 2003). The ability to solve and justify problems is the ultimate goal of mathematics (OConnell, 2007). The mathematical processes that support active learning in mathematics include problem solving, resolving and proving. Ontario curriculum, grades 9 and 10 Mathematics, 1999. The prominent and powerful tools for a person to have good competencies in solving and proving mathematical problems, which were marked by different investigators, were the general problem solving strategies and methods of mathematical proving, ability to identify key words during mathematical problem solving and proving, use of appropriate diagrams for mathematical problems solving and proving, use of worked examples for the development of problem solving and proving skills, ability to personalize and relating mathematical problems with real word experience, language and culture similarity in the learning of mathematics, students positive attitude towards mathematics and use of technology for mathematical problem solving and proving.

Another theme from the research teaches children to draw diagrams that represent the relationships among quantities in a given problem. Shigemitsu and Sowder (1994) recommended students to "Make a drawing" and further, Diezman and English (2001) and [6] indicate that drawing a diagram would make the relationships in a word problem become clear, thus providing a foundation to solve the problem correctly. Research by Van Garderen (2006) showed that a student with learning disabilities were less likely to include schematic information in their diagrams than typically-developing students. Moreover, when students were able to create schematic diagram, they were more likely to produce a correct answer. Fusion and Willis (1989) worked with students of all ages, employing drawings to illustrate three addition and subtraction situations they found that students who created correct drawings almost always selected a correct solution strategy. Leveling drawings also helps students better to identify the problem type and allow them to solve more difficult problems.

Another line of research on effective instruction in the area of problem solving has focused on the utility of providing students with worked examples of word problems. A worked example involves the teacher modeling the problem solving process prior to students engaging in the problem solving process independently. Research by Cooper and Sweller (1987) has examined the role of worked examples in problem solving and suggest that worked examples help students break the process into clear sub goals to aid them in discovering the relationship to the problem situation as well as to solution



strategy. Furthermore, Cooper and Sweller (1987) found that providing students with worked examples increased their instructional efficiency in addition to improving their transfer for learning.

II. Statement of the problem

Incorporating general problem solving strategies in teaching mathematical problem solving and proving was very mandatory for alleviating the difficulty that students faced while they were solving and proving mathematical statements. Problem-solving strategies, according to O Connell (2007), were what we do in our heads as we make sense of and solve problems. They were our tools for simplifying problems and revealing the possible paths to solutions. Developing students problem-solving abilities could be a challenging task. Building problem-solving skills through teaching strategies requires attention to building both mathematical skills and the thinking process (O Connell, 2007). One of the most commonly referenced approaches to teaching problem solving involves the use of keywords. This also has been described as direct translation. Students were taught to look for particular cue or indicator words in their word problems. The typical strategy was to search for a keyword information such as more which sometimes mean to add, and use this information to directly translate the problem into its computational form (Woodward, 2006). It was, of course, also easy to write story problems with key words alone, that suggest incorrect operations for the problems. Problems related to learning Mathematics were common Phenomenon among students around the world (Fenna and Shermann, 1976).

Objectives of the study

General Objective of the study

The general objective of this research proposal was to assess some of the possible constraints in the students' mathematical problem solving and proving skill competences.

Specific Objective of the study

The specific objectives of this research proposal were:

- To assess existing problem in relation to the teaching and learning of Mathematics
- To identify the major reasons for students' inability to solve mathematical problems
- To identify the theoretical back ground and basis of proving skill of students

III. Methodology and procedure of the study

In this chapter, the study presents: the research questions, the research design and Methodology of the study. Methodology of the study presents the following: Research design, study population, sampling techniques, tools of data collection, and method of data analysis etc.

Description of the study

This research was conducted in Six Woredas such as Bacho, Yayo, Alge, Bure, Hurumu and Darimu those were found in western Oromia regional state Ilu Aba Bor zone, 600km far from Addis Ababa.



Research Design

To investigate the real constraints in students' competencies of Mathematical problem solving and proving skills, it would be preferable to use different data collection strategies. That was different designs and instruments (triangulation of instruments). The more we use different designs and instruments, the more our data would be deep, reliable and valid. If you generate ending by a qualitative method, perhaps you can check it by using a quantitative data collection method (Gall et al, 2003). In this study, the researchers would use mixed designs of quantitative and qualitative designs. In relation to the qualitative design, Curriculum assessment would be conducted and to the quantitative designs, questionnaires and sample problematic questions would be developed and use to collect information from teachers and students who will be selected randomly.

Methodology of the study

Study population

The study population would be High schools students in I/A/Bor Zone, Oromia Regional State, Ethiopia.

Sampling Techniques

In this study the researchers used simple random sampling technique for selection of high schools, sample students and sample teachers.

Sample Size

From the total of Thirteen Woredas in Ilu Aba Bor zone, 6 Woredas were selected for this particular study. From the total population, 500 students and 60 teachers were selected using $n = \frac{N}{1+Ne^2}$ formula, where n = no. of sample size, N = Total population and $e = 0.05$ which was the level of precision provided by (yemane, 1967).

Tools of data collection

A. Questionnaire: Questionnaire will be used as the major instrument to collect information from the subject of study. Both open and closed questionnaire will be prepared and distributed to gather relevant information.

B. Observation: Observation was also used to collect reliable information from Mathematics class. The researcher will undertake observation in all Mathematics classes once while they were teaching. In the observation process a non-participatory observation method will be used.

C. Interview: Interview will be used as a second data collection instrument to get the views of and opinions of teachers and students for cross-checking purpose. During the interview 60 Mathematics teachers will be selected randomly from 6 High schools (five teachers from grade 9 and five teachers from grade 10) and interview on the semi structure items.

Methods of Data Analysis

After collecting and tabulating the necessary data generally statistical method of data analysis was used. That was both descriptive and inferential statistical tools will be employed. Descriptive statically analysis was limits generalization to the particular group of individual observed (Best and Kahn 1993). Hence the descriptive statistical helps to



collect valuable information about the nature of the participants. After the collected data were grouped and tabulated in table form preliminary analysis was made using percentage, mean, standard deviation, mode and other relevant statistical tools will be used.

According to Best and Kahn (1993) inferential statistical analysis was always involves the process of sampling and the selection of small group that was assumed to be related to the population from which it was drawn. Therefore, inferential statistical will be applied depending on the nature of the data collected

IV. Method of Data Analysis

Analysis of the main Data

This chapter presents the analysis and interpretation of data and the major findings of the study. In doing so, the data collected through the questionnaires and classroom observation are presented with the help of tables. The chapter is divided into two sections. analysis of the main data and discussion of the major results are presented respectively.

1. for students

Data Obtained Through Questionnaire

Using the teachers' and students' questionnaire, responses about their perceptions of problem solving and proving skill were calculated and presented. The data taken from the surveys were analyzed in line with the research questions. In analyzing the perceptions of teachers and students on problem solving and proving skill, questionnaire entitled "Knowledge and experience on of problem solving and proving skill served as the primary source of information.

Table 1 Title attitudes of students towards learning Mathematics

No.	Questions on Students Attitude	Yes		No		Don't know	
		Fre q.	%	Freq.	%	Freq.	%
1	Do you like Mathematics?	31	14.02	189	85.5	1	0.45
2	Do you find mathematics easy?	104	48.6	110	51.4		
3	Do you have good concepts on mathematics at primary school?	39	18.1	169	78.6	7	3.6
4	Do you like problem solving?	51	23.3	164	74.9	4	1.83
5	Do you find problem solving easy?	110	48.5	114	50.2	3	1.32



The attitude of problem solving and proving skill of students affect learning Mathematics In relation to this, 5 items were presented to students to find out their attitude of problem solving and proving skill of students.

In table 1 question 1 states “Do you like Mathematics?”. In responding to this item majority (85.5%) of the students said no whereas 14.5% of them said yes. About 0.45% of them says they don't know. This indicates that the students have no good attitude toward Mathematics.

Item 2 states “Do you find mathematics easy?”. In responding to this item 51.4% of the students said no whereas 48.6% of them said yes. This indicated that some of the students found Mathematics was easy for them and more than half of them found it difficult.

Item 3 states “Do you have good concepts on Mathematics at primary school?” In responding to this item 18.1% of the students said yes whereas 78.6% of them said no. About 3.6% of them says they don't know This indicated that almost majority of the students are not good in Mathematics at primary school. That is there were skill gap at primary level.

Learning by “doing” is a theme that many educators have stressed since ohn Dewey’s convincing argument that student must be engaged in all active quests for learning new ideas. Students should be presented with real life problems and then helped to discover information required to solve them (Jones, et al. 1994).In line with this, respondents were given an item which states “Do you like problem solving?” In responding to this item 23.3% of the students said yes whereas 74.9% of them said no. About 1.83% of them said they don't know. This indicated that majority of the students dislike problem solving.Item 5 states” Do you find problem solving easy?” In responding to this item 48.5% of the students said yes where as 50.2% of them said no. About 1.32% of them said they don't know. This indicated that majority of the students (50.2%) find out that problem solving is difficult for them.

Table 2 Questions describe students approach to and attitudes toward problem solving and proving skills.

Sl.No.	Questions describe your approach to and attitudes toward problem solving.	always	Usually	Sometimes	Rarely	Never						
		freq	%	freq	%	freq	%	freq	%	freq	%	
1	If I am given a problem quite a bit different from the one in the book, I can.....figure it out myself	18	8.2	53	24.1	82	37.3	60	27.3	7	3.2	
2	Drawing pictures or imagining real physical situations.....helps me do mathematics	38	17.3	52	23.6	100	45.5	19	8.6	11	5	
3	Reading a problem more than once is.....a waste of time	68	30.9	66	30	48	21.8	14	6.4	24	10.9	
5	Itry to restate a new mathematics problem in my own words	26	12.3	58	27.4	69	32.5	39	18.4	20	9.4	
7	I am.....interested in knowing how mathematical formulas are derived or where they came from	59	27.7	54	25.4	70	32.9	16	7.5	14	6.6	
8	I.....have trouble getting started on a problem that is new to me	69	32.2	64	30.3	42	19.9	37	17.5		9.0	
10	Ilearn mathematics best when someone shows me exactly how to do the problem and I can practice the technique	68	32.5	44	21.1	65	31.1	19	9.1	13	6.2	
11	After reading a problem, I.....try to remember if I have ever done a similar problem before	25	11.8	54	25.5	59	27.8	69	32.5	5	2.4	
12	I can.....think of at least one way to begin to work on a mathematics problem that I have never seen before	36	16.8	54	25.2	83	37.8	29	15.6	12	5.6	
13	I.....enjoy solving problems that are similar to a problem I have been solved	49	23.0	67	31.5	67	31.5	17	8	13	6.1	
14	After obtaining a correct answer, I.....want to know an explanation for why the solutions works			49	22.6	58	26.7			108	50.8	
15	If I know a few concepts, I can.....figure out the rest	20	9.6	59	28.2	76	36.4	43	20.6	11	5.3	
17	I.....take time to estimate what the answer to a problem will be before actually doing the problem	25	12.3	52	25.6	72	35.5	37	18.2	17	8.4	



The pedagogical shift from, teacher- centered approach, to student centered / active learning, requires a fundamental change in the role of the educator from that of a didactic teacher to that of a facilitator of learning. The common element in the active learning approach (problem solving) is that teachers are removed from their role of standing at the front of a classroom and presenting the material. The students are placed in to the position of teaching themselves, and the instructor is converted into a coach and a helper in the process. Chet et al (1993)

Items in table 2 try to find out whether students are placed in the position of problem solving.

The students were asked If I am given a problem quite a bit different from the examples in the book,

I Canfigure it out myself. In response to the item, 37.3% and 27.3% of the respondents said

‘Sometimes’ and ‘rarely’ respectively. This indicated that most of the time the students face difficulty on problem solving other than book.As item 2 drawing pictures or imagining real physical situation sometimes and rarely (45.5% and 8.6%) respectively helps the students to do mathematics. But by Larkin and Simon (1987) ,diagram is worth than ten thousand words. It concisely stores information, explicitly represents the relation among the elements of the diagram and it support a lot perceptual inference that are very important for human. In contract to this the students perception on drawing or imagining real physical situation is less.Problem-solving is “the ability to identify and solve problems by applying appropriate skills systematically”. Chamberlin (2006) defined problem solving more generally as: “a higher-order cognitive process that requires the modulation and control of more routine or fundamental skills. Students response on item 3 " Reading a problem more than once is.....a waste of time" is always 30.9% and usually 30% total 60%. This contradicts with the above definition of problem solving. The students are trouble getting started on a problem that is new for them. In line with this 62.5% of the students are trouble to do problem. This response is agreed with the response on item 1, 2, 3 in the table above.

In line with item 10, 53.6% of the students say that they learn mathematics best when someone shows them exactly how to do the problem and they can practice the technique. Here it means that the students need some guidance to involve themselves in problem solving.

On Item 14 the majority of students (50.8%) never want to know an explanation for why the solutions they obtained is works. This indicated that if they obtained the right answer they are not eager why the solution is true

One of the reasons why students attitude towards mathematics is negative is that students are no able to see its relevance in daily life or in relation to other science, and hence the felling that why learn if it has no use prevails among most students (Fennma and Sherman, 1976) Students have mistaken impressions about mathematics and dislike mathematical activities; many seem to fear, even hate mathematics (NEALE, 1969).



Table3 : Different strategies used by teacher to solve problems

No.	Strategies	very often		often		not often		never	
		freq	%	freq	%	freq	%	Freq	%
1	RAVECCC - Read, Attend to key words, Visualize, Estimate, Choose numbers, Calculate, Check;			7	28%	18	72%		
2	RUDE-Read, Underline, Draw, Estimate	1	4%	11	44%	13	52%		
3	ROSE - Read, Organise, Solve, Evaluate			8	33.3%	16	66.7%		
4	LUVCC – Look, underline, visualise, calculate and check	2	8%	7	28%	16	64%		

Table 3.Above indicates that all strategies are not well performed by the teachers. For example, many instructors do not use **RAVECCC (72%)** often or very often. Similarly they do not use **RUDE, ROSE** and **LUVCC** very often or often. Even if the strategies above are very important for problem solving and proving skill, the teachers did not use them often. This indicated that there is lack of preparation of resources on the side of teachers to apply these different strategies in the class.

But incorporating general problem solving strategies in teaching mathematical problem solving and proving is very mandatory for alleviating the difficulty that students faced while they are solving and proving mathematical statements. Problem solving strategies, according to O Connell (2007), "Are what we do in our heads as we make sense of and solve problems. They are our tools for simplifying problems and revealing the possible path to the solutions". Developing students' problem solving abilities can be a challenging task. Building problem solving skills through the teaching of strategies requires attention to building both mathematical skills and the thinking process (O Connell, 2007).



Table 4: Difficulties in using problem solving methods

No.	Statements	St. agree		Agree		Neutral		Disagree		St. disagree	
		freq	%	freq	%	freq	%	Freq	%	freq	%
1	Problem solving is difficult when students are larger in number in the classroom.	7	28	12	48	2	8	4	16		
2	Problem solving is not suitable when time span is short for teaching.	7	28	13	52	1	4	4	16		
3	Problem solving method spend more time to prepare a lesson.	5	20	16	64	2	8	2	8		
4	You need enough space, resources and feasible environment in the class to teach problem solving	10	40	12	48	3	12				
5	It is difficult to satisfy the learners of different abilities using Problem solving	6	24	13	52	1	4	5	20		
6	It is more difficult to satisfy slow and weak learners through problem solving.	10	40	15	60						
7	It is difficult to provide students with worked examples	9	36	14	56	2	8				
8	providing students with worked examples increased their instructional efficiency independent for problem solving but is challenging	8	32	10	40	2	8	5	20		

Generally, the teachers see the difficulties in using this approach, requiring more time in the lesson as well as more demands in preparation. They are also agree on the importance of worked examples to the learners but challenging to implement.

A worked example involves the teacher modeling the problem solving process prior to students engaging in the problem solving process independently. Research by Cooper and Sweller (1987) has examined the role of worked examples in problem solving and suggest that worked examples help students break the process in to clear sub goals to aid them in discovering the relationship to the problem situation as well as to solution strategy. Furthermore, Cooper and Sweller (1987) found that providing students with worked examples increased their instructional efficiency in addition to improving their transfer for learning.

V. Discussion of Results

In this part of the paper, an attempt is made to explain the results of the study with reference to the basic questions formulated under statement of the problem. The major ideas or theme of the discussion are:

- Perception of teachers and students on problem solving and proving
- Practices of problem solving and proving



- Factors affecting implementation of active learning such as problem solving

Perception of Teachers and Students

Various research findings confirmed that there is strong tie between Teachers' and students' attitudes towards problem solving and their effort in implementing it. For instance, a survey study carried out in Botswana, in 1999 proved that Teachers and students who had a positive attitude towards active learning showed a better effort in implementing and using problem solving and proving than those Teachers and students who perceived problem solving and proving negatively (GDE, 1999:69). Similarly, Sguazzin and Grann (1998) showed

that teachers' attitudes have a great influence in the effective implementation of problem solving and proving. In line with these ideas, sixteen statements for the Teachers and fourteen statements for the students were included in the questionnaires with the intention of assessing their knowledge or perception of active learning. Hence, it appeared that almost all of the Teachers and students showed their agreement and strong agreement with the assumption of problem solving and proving raised in the questionnaires.

The level of their agreement with the assumptions of problem solving and proving shows us that the Teachers and the students have perceived active learning positively. But their positive perception doesn't let them to practice problem solving and proving in their classroom. This is also witnessed during the classroom observation.

Practices of problem solving and proving

To assess the extent to which problem solving and proving has been practically implemented in the High schools; the two groups (Teachers and students) reacted either through questionnaire or the interview. To substantiate the data, structured observation was also made. To this end, the Teachers' and the students' questionnaires were developed to determine the frequency of using various problem solving and proving instructional practices. The Teachers and the students marked their questionnaires by indicating how often they practically use these problem solving and proving strategies by ticking a response to each item. By doing so, the magnitude of using problem solving and proving was treated.

Accordingly, the Teachers identified the frequency with which they implement problem solving and proving from the responses of the questionnaire, observation and interview. These data indicate that the Teachers implement problem solving and proving occasionally in their classroom. The responses of the Teachers to question related to their use of problem solving and proving were validated by the responses of the students. Students generally tended to agree with the Teachers about the frequency of the use of problem solving and proving.

The most frequently practiced active learning strategies reported by the Teachers and students were group work, discussion, role-playing, peer-teaching and cooperative learning. These methods were employed widely because most probably, both the Teachers and the students were familiarized with the methods. But these strategies especially, discussion and group work can help to develop only lower level of cognitive domain. On the other hand, other active learning strategies related to higher level of cognitive



domain believed to develop critical thinking called problem solving and proving were not widely practiced. The majority of the students disclosed that these strategies were employed rarely.

In line with this, Bonweel and Eison (2003:76) noticed that students must do more than just listen. They need to read, write, discuss and engage in problem solving activities. In real active learning model, students must be engaged in higher order thinking skills as synthesis, analysis and evaluation.

In general, both the Teachers and students agreed that problem solving and proving practice takes place sometimes. Based on the position of the two groups of respondents and the interview and observation made by the researcher, it is possible to infer that the extent of the practice of problem solving and proving in the high schools is low.

Constraints of students problem solving and proving skill

Like any other educational issue in the teaching-learning process, it is also possible to think that problem solving and proving may have shortcomings or constraints during its implementation in the real classroom conditions. Of these constraints, the researcher has selected four most serious

possible factors affecting the practice of problem solving and proving in the high schools. These factors are selected on the basis of their frequencies in the responses of the Teachers and students. Shortage of time is among these factors. With respect to this problem the two groups of the respondents agreed that the time table was the major problem negatively affecting the practice of problem solving and proving. Supporting this fact, Farant (1980) explains the effect of time. The author stresses that shortage of time limits Teachers and students from implementing active learning in the classroom.

In this study, the Teachers' tendency towards traditional lecture method is blamed as an obstacle in the implementation of active learning method called problem solving by many students and some Teachers. With respect to this problem, the two groups of respondents again agreed that the tendency of Teachers and students to the traditional method of teachers' explanation or lecture was the major problem negatively influencing the effective implementation of problem solving and proving. In this connection, Hailom (1998) explains the tendency of teachers to the traditional lecture method. He stresses that, many teachers perceived teaching as a transmission process where the teacher transmits knowledge to students and the students receive that knowledge based on specified official syllabus.

On the other hand, Bennet et.al (1996) noticed that most students fall into "old" curriculum and expect their Teachers to lecture to them in traditional classroom manner. Sometimes, it is observed that students categorize teachers who initiated them to practice problem solving and proving in the class as either not well prepared or incompetent. The question here is why Teachers tend to use traditional method of teaching. It is observed from their background information that most of them did not get training on active learning. Furthermore the classroom condition and the lack of resources force them to prefer lecture method.

VI. Conclusion

Based on the findings of the study, the following conclusions were drawn.



1. Although they lack the necessary commitment to implement active learning problem solving , the teachers of Mathematics in the high schools seem to be aware of the importance of problem solving and proving . Thus, it can be concluded that the teachers perceived problem solving positively.

2. problem solving is practiced sometimes in the mathematics periods of the high schools.

3. Concerning the key factors that affect the students problem solving and proving, the following are found to be negatively affecting.

- Instructors and students tendency to favor traditional/lecture method.
- Large class size.
- Lack of recourses.
- Shortage of time.
- The design of the teaching material.
- language
- luck of using keywords

VII. Recommendations

Based on the findings of the study, the researcher would like to forward the following recommendations for the improvement of the practices of active learning.

From the background information of instructors it was observed that majority of them did not get training on active learning. This hinders their implementation of active learning. Therefore, it is important to conduct in- service training so that their use of active learning strategies will be improved.

The background information of the instructors shows that some of them did not get training on general method of teaching. This leads the magnitude of practicing active learning to be low. Hence, short-term training for the instructors on the issue should be emphasized in the university.

Class size

Class size was one of the major constraints which hinder the students problem solving and proving skill. The condition of the classrooms and the number of students do not match in the study area and this affects the implementation of problem solving and proving. Having appropriate class size may not always be possible. Therefore, the teachers should see alternative solutions such as, dividing students into two groups.

Classroom conditions

The result of this study revealed that the classroom condition to implement active learning tends to be low. The major reasons appear to be, large class size, lack of resources and other instructors and students related factors. Hence, an overall assessment and discussion is needed between implementers of active learning (instructors and students) to enhance the implementation of active learning.

Reference

1. Casey, M. B., Pezaris, E., & Nuttall, R. L. (1992). Spatial ability at a predictor of math achievement: the importance of sex and handedness patterns. *Neuropsychologia*, 30(1), 35-45.



2. Ferrini-Mundy, J. (1987). Spatial training for calculus students: Sex differences in achievement and in visualization ability. *Journal for Research in Mathematics Education*, 18(2), 126-140.
3. Fennema, E. & Tatre, L. A. (1985). "The Use of Spatial Visualization in Mathematics by Girls and Boys." *Journal for Research in Mathematics Education*, 16, 184-206.
4. Boekaerts, M., Seegers, G., & Vermeer, H. (1995). Solving math problems: Where and why does the solution process go astray? *Educational Studies in Mathematics*, 28(3), 241-262.
5. Sweller, J. (1990). On the limited evidence for the effectiveness of teaching general problemsolving strategies. *Journal for Research in Mathematics Education*, 21(5), 411-415.
6. Lawson, M. J. (1990). The case for instruction in the use of general problem-solving strategies in mathematics teaching: A comment on Owen and Sweller. *Journal for Research in Mathematics Education*, 21(5), 403-410.
7. Van Garderen, D. (2006). Spatial visualization, visual imagery, and mathematical problem solving of students with varying abilities. *Journal of Learning Disabilities*, 39(6), 496-506.
8. Hegarty, M. & Kozhevnikov, M. (1999). Types of visual-spatial representations and mathematical problem solving. *Journal of Educational Psychology*, 91, 684-689.
9. Arcavi, A. (2003). The role of visual representations in the learning of mathematics. *Educational Studies in Mathematics*, 52(3), 215-241.
10. DeLoache, J. S., Scudder, K.V., & Uttal, D.H. (1997). Manipulatives as symbols: A new perspective on the use of concrete objects to teach mathematics. *Journal of Applied Developmental Psychology*, 18, 37-54.
11. Alexander, S. 2002. Making the most effective use of homework. *Mathematics teaching*, 178:36-38.
12. Squazzin, T. and Grann, M.V. (1998). Education Reform and Innovations in Namibia. Okahandja: Namibia.
13. Bonwell, C and Alison, A (2003). Active Learning Creating Excitement in the Classroom. Rhen: Grips
14. Farant, J.S. (1980). Principles and Practice of Education (New Edition). Singapore: Longman.
15. Hailom Banteyerga (1998). "Explorations Towards An Alternative Model in Teacher Education Classroom in focus" in quality Education in Ethiopia, Visions of 21st Century. Addis Ababa: IER.
16. Bennet et al (1996) Researching in to Teaching Methods in Colleges and Universities. London: Kogan Page.
17. National Council of Teachers of Mathematics [NCTM]. 2000. Principles and standards for school mathematics. Reston, VA: National Council of Teachers of Mathematics.
18. Mupinga, D.M., Nora, R.T. & Yaw, D.C. 2006. The learning styles, expectations, and needs of online students. *College Teaching*, 54:185-189.
19. Leu, E (1998) Designing Integrated Curriculum Materials for Primary Education: a Paper Presented at the Workshop in Oromia Education Bureau. (Unpublished)
20. National Council of Teachers of Mathematics (NCTM) (1980). An Agenda for Action: Recommendations for School Mathematics of the 1980s, Reston, Virginia: NCTM.
21. Polya, G.(1973). How to Solve It-A New Aspect of Mathematical Method, Second Edition, New Jersey: Princeton University Press.
22. Siu, M.-K. (1993). Proof and pedagogy in ancient China: Examples from Liu Hui's commentary on Jiu Zhang SuanShu. *Educational Studies in Mathematics*, 24 , 345-357.
23. Harel, G., & Sowder, L. (1998). Students' proof schemes: Results from exploratory studies. In A.



THE ROLES OF SCHOOL STAKEHOLDERS IN INTERVENING SCHOOL DROPOUTS IN SOME HIGH SCHOOLS OF ILU ABA BOR AND BUNNO-BEDELE ZONES: THE CASE OF GRADE 9 AND 10

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Abstract

The central aim of this research was to assess the roles of school stakeholders in intervening school dropouts in some high schools of Ilu Aba Bor and Bunno-Bedele Zones. To attain this objective, descriptive survey research method was employed. The sample consisted of 640 students from both grade 9 and 10, 85 teachers, 8 school principals, and 16 parent-teacher association members. Purposive sampling technique was used to select the target schools while comprehensive and simple random sampling techniques were employed to select the sample teachers, students, and PTA. Data collection tools such as questionnaire, interviews, and document analysis were employed. Quantitative data were analyzed in percentage but qualitative data were narrated. The results of the study stakeholders are not exerting the best effort in alleviating school dropouts. Furthermore, the finding of the study indicated that high dropout rate is increasing because of the lack of stakeholders' commitment. Thus, based on the findings of the study; recommendations are forwarded to alleviate the aforementioned problems in the schools under study.

Keyterms: School Dropout

Introduction

Background of the Study

Education is the main power of changes that mainly contribute to national development. As to O'Donoghue (1971, as cited by Yaikob, 2014) education is a great investment made on people's mind in order to have success in human resource development. To achieve education as a power of changes for national development-poverty reduction, the slogan, "Education for All," must be given attention and implemented. The slogan begins its first stance when all school age children get access to school (enrollment). This slogan of Millennium Development Goal (MDG) got acceptance by Ethiopian government and started to be implemented. Accordingly, the report on MDG 2014 organized by both National Planning Commission and the United Nations in Ethiopia states that the net



enrolment rate in primary schools was 21% in 1996 and increased to 93% in 2014, indicating that net enrolment in primary education grew by about 18% per annum. If this trend continues, it will reach 100% in 2015. The net enrolment rate for secondary education was 8.8% in 1996 and grew to 20.2% in 2014. However, net secondary enrolment is still very low, having increased by only 6.8% per annum between 1996 and 2014. The literacy rate has increased from 27 % in 2000 to 47% in 2011. Such growth is perhaps the result of the increase in gross enrolment in primary education. Overall, it is stated that Ethiopia is on track to achieve universal primary education but the growth in net enrolment has been slow in recent years and primary education has suffered from grade repetition, children dropping out and poor learning achievements, such as low competencies in reading and mathematics.

Of all these challenges, school dropouts contribute a lot in failure to achieve the intended goal. As a result, reducing the number of dropouts has become a national policy concern. (Ministry of Education(MOE,2010) Higher rates of unemployment and lower earnings cost the nation both low productivity and reduced tax income. Dropouts cost the nation money in other ways as well. Research demonstrates that dropouts are also more likely to have health problems, engage in criminal activities, and become dependent on welfare and other government programs than high school graduates (Rumberger, 1987). These problems generate large social costs.

This study mainly aimed at the assessing actions being taken by school stakeholders to minimize school dropouts, particularly 10 high schools which are found in both Ilu Aba Bor and Bunno-Bedele zones.

Statement of the Problem

In the ideal situation, all students admitted in the beginning grade of the education level will reach the second grades in the following academic year and continue until they complete that level of education. But in reality “an alarming phenomenon in education”, wastage (dropout and repetition) obstructs this “ideal scheme” (UNESCO, 1984).

The severity of the dropout problem in the Ethiopian education system has got due attention by Ministry of Education (MOE) in its latest Education Sector Development Program (i.e. ESDP IV) to set clear targets to reduce dropouts rate at all level.

A serious dropout problem exists both nationally and in our local communities. This problem is not confined to the high school population, but exists among our younger population in middle schools as well. When students drop out of school, there are negative consequences not only with their academic and co-curricular activities, but also with their emotional, physical, mental, and social development, and the ability to live a productive life. There is also an impact on the entire local community when students drop out of school.

High school dropout problems are everyone’s concern. Schools do not solely own this problem and they cannot solve it alone. Dropping out of high school has significant negative consequences for the individual and society. The cost of doing little or nothing about high school dropouts is enormous, while the investments in dropout prevention promise significant benefits.



Different studies have been conducted on the issue of educational wastage in the zone recently sectioned into Ilu Aba Bor and Bunno-Bedele zones. First, Yaikob(2014) focused on identifying the problems (educational wastage) and its magnitude in some secondary schools found in the zone before being sectioned. Descriptive survey research method was applied. Data were gathered through the tools such as questionnaire, document review and semi structured interview. Seven districts where 10 secondary schools were taken as sample proportionally selected out of the total 24 district found in the former zone. School facilities, illiteracy parents, shortage of textbooks, low economic background, and negative attitude to education, health problem and limited parents' educational awareness were addressed as factors that caused educational wastage in the zone. The other research done focusing on the same zone and topic by Kitessa, Ch.et.al (2017) also used the same research design and tools and came up with similar findings addressed by Yaikob (2014) after three solid years.

This study is different from others as it gives more attention to the actions being taken by school stakeholders to minimize school dropouts. Certainly, the secondary first cycle, which we call grade 9 and 10, is the bridge to transfer to either preparatory or vocational schools in which students are expected to complete so as to make them ready for the rest of their career. Moreover, the focus areas of the study were 10 high schools which are found in both Ilu Aba Bor and Bunno-Bedele zones.

Research Questions

The study tried to answer the following questions:

1. What measures are being taken by school stakeholders so as to minimize school dropouts?
2. To what extent the actions taken by the stakeholders are effective?
3. What supports are being given to students who are back to school from dropouts?
4. What are the major problems that the stakeholders facing in taking measures to alleviate school dropouts?

Objectives of the Study

General Objective

The general objective of the study was to assess actions being taken by school stakeholders to minimize school dropouts, particularly at 10 high schools which are found in both Ilu Aba Bor and Bunno-Bedele zones.

Specific Objectives

Specifically this research intended to:

- Find out actions being taken by stakeholders in order to minimize school dropouts.
- Analyze the effectiveness of the actions being taken as to reduce school dropouts.
- To identify the supports given to students who are back to school from dropouts.
- Identify the major challenges that stakeholders are while taking actions to minimize the dropouts.



Research Design and Methodology

The Research Design

As it was mentioned in the preceding chapter, the main objective of this research was to assess the roles of school stakeholders as to minimize school dropout towards education quality assurance. To achieve this purpose, descriptive survey research design was employed. In line with this, Kumar(2006) stated that descriptive surveys or studies also serve as direct sources of valuable knowledge concerning human behavior. Thus, as the study aimed at assessing actions being taken by stakeholders in order to minimize school dropouts, descriptive survey method was used on the ground to reveal their practice. Moreover, Creswell,(2003:153), noted “.....a descriptive design provides descriptions of trends, attitudes or opinions of population by studying a sample of population.”

Participants of the Study

The participants of this study were students and teachers, principals, Parent-Teachers Associations (PTA) in the schools under the focus of this study and heads of district education offices as well. Students who dropped school for some time and back to schools of the sample schools were also the participants of the study. There are 40 and 17 high schools found in Ilu Aba Bor and Bunno-Bedele zones respectively. In order to make data collection analyses easy and manageable in this research, purposive sampling technique was used to select sample schools. The reason for using the technique was that school dropout problem was studied by both Kitessa, Ch.etal (2017) and Yaikob, T. (2014) in the schools specified below. In their findings, they identified that from the total students enrolled to school every year more than 20% of them quit school. They underlined that beginning from 2011, the dropout rate increases as students' enrollment increases every year. Based on this evidence, four high schools from each zone were taken as sample for this study. Bure, Gore, Hurumu, Yayo were sample schools taken from Ilu Aba Bor zone; Bedele, Gechi, Dabo, and Dambi high schools were samples taken from Bunno-Bedele zone. Simple random sampling technique were employed and two sections were identified (one section was taken as sample from every 9th grade and 10th grade) from every school that the study concerned with. Snowball sampling technique was used for those who dropped school and back to school.

Data Collection Tools

The following tools were employed to collect data for the study. Both quantitative and qualitative data and the data were gathered by the help of instruments namely, questionnaires, interview and document review.

Questionnaire

Close and open ended questions were used to collect data from the teachers and students. Before administering it, the purpose of the study was briefly discussed to minimize low response rate in order for the study to be valid.

Interview

Interview is one important research tool employed in order to get in-depth information from the respondents. It was designed in order to gather the details of the roles being played by school principals, parents and teachers associations and/or concerned bodies (district education office). Therefore, semi-structured interview guideline was used to



gather data for this study. That is, as Dornyei(2007) states, in semi-structured interviews, the interviewer designed guiding questions or prompts that encourage interviewees to express their ideas on certain issues in an elaborated manner. Semi-structured questions were designed to explore strategies that school communities are using to reduce dropout. The technique/strategies teachers were also using in order to get students dropout back to school were incorporated in the interview.

Document Analysis

This instrument was especially set to see the current school’s annual dropout reports and research based school dropout findings regarding the sample schools as to compare the magnitude of dropout rates.

Data Collection Procedure

Firstly, the researchers contacted each school director and explained the purpose of the study ahead of time. This helped the researchers to collect the data effectively. Then, all questionnaire papers were distributed. Next, interview was held. All the principals of the schools and sample teachers were interviewed based on related theoretical background reviewed for the study.

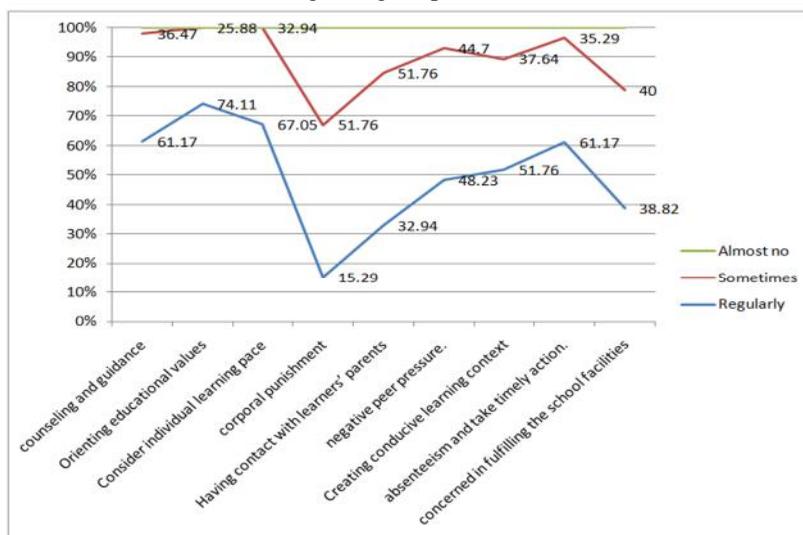
Methods of Data Analysis

Data was analyzed through both qualitative and quantitative methods. The responses of close-ended questionnaires were tabulated and presented on bar-graph and graphs. Then analyses was by using percentage . However, the analysis of the data that was collected via the interview, open-ended questionnaires and document analysis were analyzed qualitatively through descriptive narration.

Data presentation,Analyses and Discussion

Questionnaire for Teachers

Graph 1: Teachers’ intervention regarding dropouts





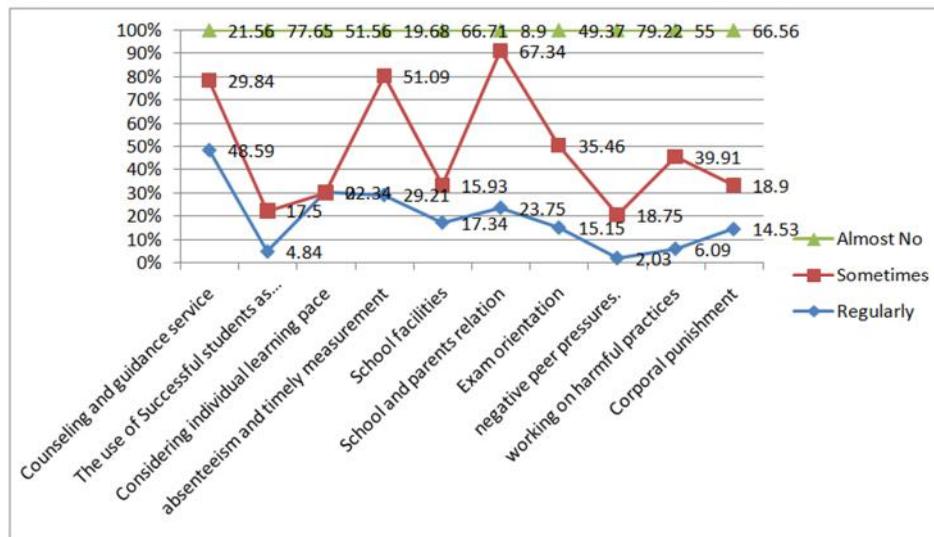
As it is shown in the above graph, 74.11% and 61.17% of the respondent teachers addressed that they regularly orient their students the importance of education supporting with significant examples and regularly follow students who are absent from school and take immediate corrective actions respectively. However, about 25.88% and 35.29% sometimes (not regularly) orient their students the importance of education, follow absenteeism and take immediate actions respectively. Moreover, 69%, which is more significant in number, of respondent teachers stressed that they regularly aware their students about the harmful practice and negative peer pressure that may force them to drop school. Some others, about 29.41%, sometimes aware their students the negative influence that peer pressure and harmful practices exist in the society have on their education life.

In case of treating students based on individual learning difference, 67.06% of respondent teachers pointed out that they regularly consider individual learning differences during their lesson delivery when 32.94% of the respondents indicated as they sometimes consider the individual learning differences. In addition to this, 61.17% of the respondent teachers reported that they regularly play the role of counseling and guidance when their students face any problem in their school life. On the other hand, 36.17% reported as they sometimes counsel and guide when their students face problems in any aspect of their school life. Moreover, 51.76% of the respondent teachers pointed that they regularly play their roles in making the schools/learning classes more attractive for students. Similarly, 38.82% addressed that they play unreserved roles in mobilizing the society to be involved in fulfilling school facilities. 37.64% and 40% of the respondent; on the other hand, indicated as they don't regularly play the role of making school environment and classroom attractive for students learning and mobilize the society in rare case respectively when 31.75% of the respondents almost play no such activity. As it is shown on the above graph, 51.76% of respondent teachers sometimes use corporal punishment when their students misbehave. It is not as such insignificant that 15.29% of the respondent teachers regularly use corporal punishment when their students deviates school rules and regulation. On contrary, about 32.94% of them manage students misbehave. They never use corporal punishment. Concerning the relations that teachers and students' parents ought to have about students learning progress and/or challenges ,32.94% the respondent teachers addressed as they have regular discussion but 51.76% indicated as they have no regular discussion. Still about 15.29% pointed as they neither have discussion. Even though teachers have no equal orientation and mechanism of supporting students with different economic and family related problems, it can be understood from the graph above that 28.23% of the respondent teachers regularly try to create some kind of mechanisms in order to support students with economic and family related problems when 37.64% of them take the actions sometimes. Though it is not significance, 34.11% of the teacher respondents never give due attention to students' economic and family related problems.



Questionnaire for students

Graph 2 Students' Reaction to School based role in Intervening Dropout



It is indicated in the above graph, 48.59% replied that the target schools of study give counseling and guidance service regularly to their students when 29.84% of them addressed as the service is not given due attention. Moreover, about 21.56% said that the service is almost forgotten. In conclusion, near to 50% of the high schools under the study are giving the counseling and guidance service to their students. On the contrary, 79.22% and 55% of the respondents pointed as their schools are not working on negative peer pressure, harmful practices and traditional views about education in the society respectively.

Concerning the use of students who can be model in their study life and behavior for other students, 77.65% of the total representatives responded that they didn't get such service. In similar way, more than 50% of the teachers don't consider their students learning pace when 26.09% of the response indicates as teachers sometimes consider individual learning differences in the classroom. 22.34% of the response given implied that teachers regularly consider individual learning differences during their lesson delivery. 50% of the schools under the focus of the study indicates that there is irregularity of following up of students absent from school and taking timely measurement like discussing the issue with the concerned bodies; while 29.21% of the respondents indicated that their schools regularly follow up and take corrective actions timely, and 19.68% of the respondents pointed as there are no follow up and taking corrective actions in their schools. In supporting these idea, 66.56% of the respondents confirmed that their schools do not use corporal punishment when students are absent from class but about 34% indicated that their schools use corporal punishment when they are absent. Moreover, 67.34% of the respondents added that their parents are not regularly invited to discuss on the issue of students' school dropout, but about 23.75% of the respondents addressed as their schools have strong relation in order to discuss and



minimize students' school dropout. As a result, more than 80% of the respondents indicated that students who have health problem (sick) and/or family related problems (poorness, disintegration) have been given little attention.

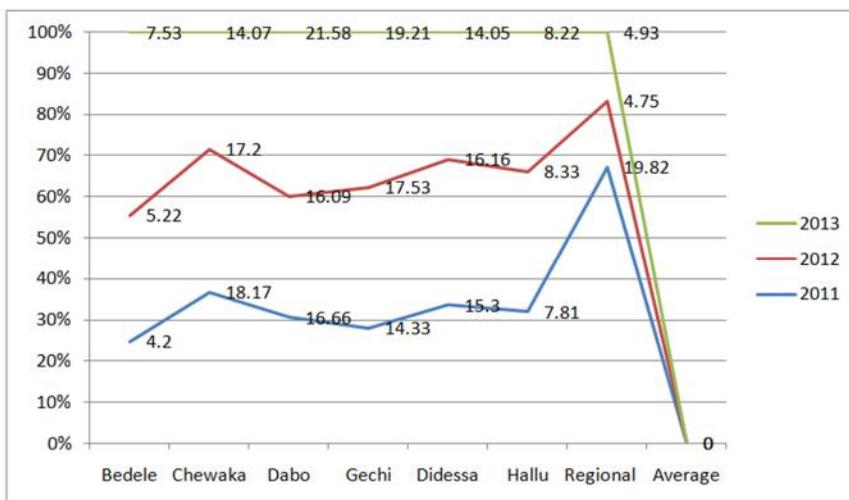
It is addressed in the above graph that from the angle of the role of school facilities, 66.71% of the respondents addressed as they have no facilities such as library and laboratory access in their schools. More than 34% of the respondents pointed as no regular service in their schools. Examinees need orientation on their psychological and academic reading a head of exam days. However, 49.37% of the respondent students addressed that they are almost not given the necessary orientation a head of exam when 35.46% of them indicated as they are sometimes given orientation.

Document presentation and Analyses

The researchers tried to analyze studies previously undertaken and the sample schools annual dropout reports for four consecutive years .Here is the result of the analysis.

Previously reported dropout rate by Yaikob Temesgen

Districts Level trends in first cycle Secondary Education (9-10) Dropout Rate



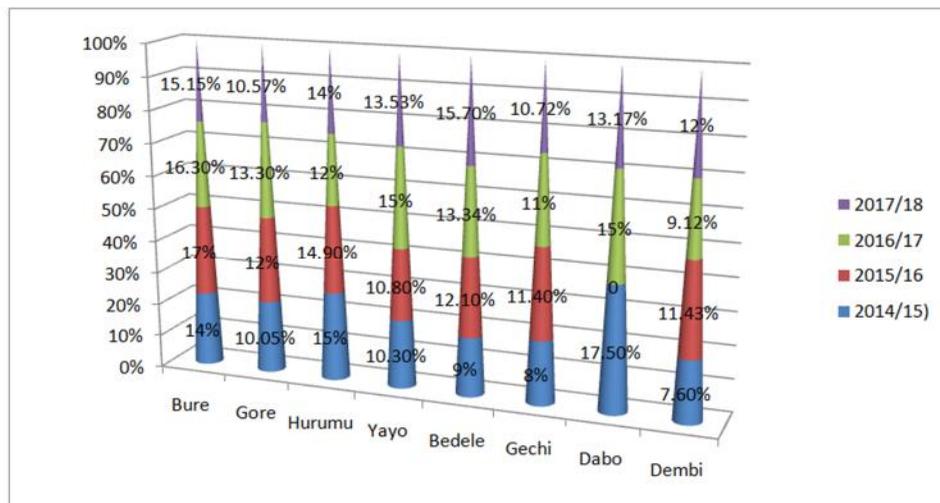
Source: (WEO Report 2011-2013) as reported by Yaikob Temesgen

As the researcher reported, the trend of secondary education repetition rate at district level revealed that the trend is inconsistent. These data suggest that repetition rate is relatively increasing where also indicate the district education offices challenge to reduce wastage in secondary education and to increase their effort at increasing educated manpower at their district level in particular and regional and national level in general. According to Kitessa Ch. et al, 2017 the trend of dropout rate of Illu Aba Bora Zone is increasing up when compared with Oromia region for three consecutive years (2011/12 to 2013/14). The scholars addressed as dropout and repetition rates indicates that there are serious problems at Oromia Regional State and Illu Aba Bor Administrative Zone,



the depletion rate of the zone has been more serious that needs to be tackled by concerted effort at local level (at zonal, district and school levels).

Chart4: Analysis of sample schools annual dropout rate for four consecutive years



One can understand from the above table that there is no significant improvement in the dropout rates of the schools under investigation. Even in some schools, it is increasing from time to time. This indicates that due attention has not been given for reducing school dropouts. Here, it is logical to say that all stakeholders are not playing their active roles in intervening dropouts for realizing the motto “Education for All!”.

On the other hand, the researchers tried to analyze staff’s and PTA’s minutes so as to see the extent to which the issue of dropout had been given due attention. Nonetheless, even if the schools’ dropout rate is alarming, they discussed on the issue for maximum of three times on staff minutes and only two times on PTA minutes. In addition, their discussions were shallow for they didn’t have deep analysis of the causes, solutions and responsibilities of the stakeholders. Similarly, the researchers examined documents of clubs so as to determine their level of movement and devotion in fighting dropouts. Specifically, clubs like HIV, Reproductive Health, Civics and Ethical Education, and Girls’ Clubs were seen and the good thing is that the clubs are already established in each school. However, even if there were some kinds of movements in some schools like Gore, Bure and Dembi High Schools, their documents confess that rigorous attempt was not being made for the realization of the clubs’ mission and vision.

In addition, the schools’ and district Education Offices’ plans were analyzed in the light of dropout reduction. Even if they all had incorporated the issue of dropout reduction in their plans with specific strategies and techniques, the reality on the ground shows that nothing had been changed. In other words, the specific strategies and techniques for dropout reduction were not adequately changed in to action.



Analysis of Interview with Students who were back from Dropout

The researchers tried to interview 120 students who were back from dropouts. They were interviewed individually. The first question was designed to ask whether there was active counseling and guidance service in their school. Almost all of them in one or another way said that there was no such service in their school- no separate office, no professional person on the area. During our observation time we were able to confirm the students' responses. This shows that counseling and guidance which has a paramount role in saving students from misbehavior, dropout and stay on the right track has been neglected.

The second question was to identify whether there was anything being done to raise the students' interest towards learning. Most of them said that their teachers attempt to advise them on why and how they should pay considerable attention to their education. They encourage them that the only way to success in their future life is commitment to their school work. This sounds good. Even if they were advising and encouraging their students by themselves, it would have been more effective if they had invited different guests who had attended that school and now at good position, other national and international experiences in line with this.

The third item demands the interviewee to reply on the question whether their teachers try to consider the needs of most of the students. About 80% of the respondents said that their teachers never worry about their students' difference in learning style preference, strategy use etc. They said that the teachers treat all students in the same way besides the students' difference in various aspects which implies the absence of any attempt to satisfy the students' need based on their level of understanding.

They were also asked how their schools react to absenteeism. Here too, most of them said that the teachers/ schools reaction to absenteeism seem unsatisfactory. As to them, rebuking, oral warning, sometimes using corporal punishment, and letting them bring their parents to schools were some of the reactions. This indicates that most schools and teachers were not exerting their best effort to positively recognize the root cause for the students' absenteeism and take appropriate actions.

Next, they were asked about what their schools' stakeholders were doing in collaboration in line with fulfilling the school' resources and equipments. Similarly, most of the respondents replied that even if there were some efforts, it was not satisfactory. They said that the schools mostly rely on school grant which is meager. Specially, interviewees from some schools like Bure, Bedele, and Gore High Schools said that there was some trial to fulfill their schools facilities though preparing bazaars in collaboration with PTA, administrative bodies, some NGOs and enterprises nearby their schools, and as to them, it is not enough. Here, it is logical to say the stakeholders are not playing their active role in fulfilling the schools with facilities which could be one cause for dropouts.

The respondents were also asked whether there was corporal punishment in their schools. Most of them said that there is no such habit in their schools. Here, we can conclude that corporal punishment cannot be a cause for dropouts.

The other point was about whether their schools work hand-in-hand with parents so as to alleviate school dropouts. Most of them said that there is no such a strong collaboration between their parents and their schools. They further explained that except calling students' parents when their children commit something wrong in the schools, there is no



habit of regular interaction between them so as to facilitate their students learning. Hence, one can conclude that what is done to eliminate the gap between the schools and parents is not enough which could be another main cause for dropouts.

The interviewees were also asked whether their schools support students with health problem which is another reason for dropouts. Here too, the respondents claimed that except some accidental efforts when serious problems happen, there is no organized and sustainable effort for assisting such students.

It is obvious that there are times when the disagreements between parents force students to stop their classes. In line with this, the respondents were asked if their schools have some mechanisms of intervening parents'/ families' disagreements in order to help students from such problems not to quit on their schooling. They replied even if there are many students, who have dropped out because of parents' disagreement in their surroundings, nothing is done from the schools part including PTA to rescue the students from quitting on their education.

Respondents were also asked if their teachers and schools work on psychological readiness before exam for the absence of which can be a cause for dropouts. As to most of them, their schools advise and encourage them to get ready for exams ahead of times that they sit on exams without frustration. Here, it can be concluded that things are good and it should be kept on.

Another point was about whether their schools rigorously work alleviating negative peer-pressures. About 90% of them said that nothing is being done. This issue is, as to them, linked with the absence of organized counseling and guidance in their schools. Thus, one can say that working on eliminating negative per-pressure is neglected which results in increasing rate of absenteeism and dropouts.

Similarly, the interviewees were asked to reflect their experiences on whether their schools had identified and had been working on harmful practices of their society that force students to stop their classes. The student respondents said that their teachers try to advise them not to be abiding to harmful practices like early marriage, sending only some of their children to school and forcing the others to stay at home to work with them, evaluating the out education with getting government work etc. However, as to them, it is not organized, sustainable and inclusive.

Analysis of Interview set with School Principals

Eight school principals were interviewed and the first point was about the presence and being active of counseling and guidance in their schools. The school directors said that every teacher advises and guides his or her students, yet their schools don't have separate office and professional works on the area. They were also asked if there is any activity they were doing to raise the students' learning interest. Some of them said that they advise, reward successful students every year at the end of school year, they use billboards to post the photographs of successful students so as to motivate other students. One can conclude from this that the schools' work on motivating their students to is not satisfactory.

On the other hand, they were asked the way they were reacting to absenteeism, and they said that rebuking and advising were what they were doing besides writing letters to parents via the kebele administrative bodies. They were also asked the things that they



are doing to fulfill their schools' facilities, and most all of them replied that they were preparing bazaars, collecting dues from parents, asking college and university for help though they don't get adequate response, etc. They further explained that the result of these all effort is not satisfactory that they rely only on school grant, which is not sufficient, to fulfill the school facilities bit by bit over time.

The next point was to identify the principals' perception towards corporal punishment, and almost all of them responded that it is not important. On the other hand, the school directors were asked whether their school has the scheduled habit of discussing and working hand-in-hand with parents on eliminating dropouts. Here, almost all of them said that besides having regular meeting with PTA once in a month, they have meetings 2 or 3 times in a year with parents. On the other hand, they were asked about their reaction as a school when a student faces some kind of health problem which would lead to dropout. Almost all of them said that all they were doing was coordinating staff and students so as to collect some amount of money and help the student's parents for medication, especially when it is accidental and serious health problem. This indicates that the schools were reacting to only serious health while chronic health problems, handicap, and others which inevitably lead to dropouts are neglected.

The school principals were also asked about their reactions to negative peer pressures among their students. They all responded that they were working on negative peer pressures which force some students quit on the classes through establishing HIV, Reproductive Health, and Drama clubs. However, during our stay in each school, we could see neither any active clubs nor documents that show their movements. Similarly, they were asked about their effort to identify and combat any harmful practices specific to their school community which paves the way for quitting on education. Their responses to this question confirm that nothing was being done on this area.

Analysis of Interview setwith district Education Offices

The first point was to identify what the district education office heads were doing in order to make high school education accessible, and they all said that they make a plan at the end of every fiscal year for maintaining the existing high schools and for building new high schools. But, budget is the most hindering factor for the realization of their plans. We were able to identify that the each district has 2-3 high schools, and there are some parts of the were as where students have to walk 2-3 km to get high school education. Hence, we can deduce from this that what is done on making high school education accessible is not satisfactory.

We also asked them whether there were anything they did as district education office when some students face health problems which inevitably lead to dropouts, and they all said they didn't notice such serious problems so far. This indicates that such problems were not being followed. Next, they were asked about what they were doing to fulfill the resources and equipments of their high schools. They said that besides allocating school grants, they were helping, encouraging and giving directions for the high schools to generate income through different activities like bazaars and the like. However, the reality from our observation indicates that the schools lack many things.

They were also asked how they were working on negative peer pressure among students, and they said that they were giving directions to the schools to establish different clubs



through which learners take part and say no to negative peer pressure. They further explained that they were supervising and supporting the schools on this issue. On the other hand, the district education heads were asked if they were doing anything to strengthen the relationship between high schools and parents. Almost all of them replied that they were either calling the PTA to their office or to their respective schools for meeting and give them directions on the way they can bridge and strengthen the relationships between schools and parents. They added that there are times when they make meetings with parents and the society at large make discussions and decisions on how to the schools favorable for the learning-teaching process.

Next, they were asked about if they had any mechanism for following whether teachers were trying their best to satisfy the needs of their students in the teaching process. They responded that they have high school supervisors whose responsibility is to oversee the teaching-learning process nearby and give supports to the school community. They further said the supervisors compile and send reports to them which help them to make sure whether things are on the right track or not. As to them, till then, their teachers were doing their best. Similarly, we asked them if they were applying any mechanism for alleviating dropouts in their high schools. As to them, giving direction to schools to work rigorously on alleviating dropouts, collecting dropout reports and giving timely feedback, and if things got serious visiting the schools and discussing with the concerned bodies were what they were doing. One can infer from this that the district' effort for alleviating dropouts seems unsatisfactory.

Analysis of Interview setwith PTA

We talked to some of the PTA members of each school under investigation. The first point was to realize what they were doing to fulfill their schools' facilities. Almost all of them said that they were properly using school grants. They also said that they collect dues from the community, and they prepare bazaars for fund raising. However, as to them, the money they collect from these things is not enough to fulfill the schools' facilities. This indicates that things being done for furnishing the schools seems not sufficient.

They were also asked how they were bridging the schools and the society, and they said that they have regular schedule with the schools' administrative bodies to discuss about the teaching learning process. They were also supervising the appropriate usage of the schools' budget and properties, and they give timely reports on these issues to the society which results in school dropouts.

The members of PTA were also asked if there was anything that they were doing when students face some kinds of family, health and financial problems. They said that there was no this much effort was done to intervene when students face such problems. Here, it is logical to conclude that dropouts caused by family, health and financial problems are not being intervened by PTAs. Similarly, they were asked whether they were doing anything to save students from being the victims of harmful practices and negative peer-pressures which are the other causes of school dropouts. They replied that, when they get opportunities like meetings, they try to teach the society about devastating consequences of harmful practices and negative peer-pressures.



Summary Conclusion and Recommendations

Summary

The study was carried out to explore the role of school stakeholders to minimize school dropout. In order to attain the research objective, relevant data were gathered through questionnaires, document analyses as main data collection tools and interview as follow up tools to triangulate the validity of the data. The data were analyzed both quantitative and qualitatively.

Findings

After analyzing and interpreting the data, the researchers were able to arrive at the following findings. Counseling and guidance service help students to be successful in their school life when they get their personal problems, family and social problems. The data gathered from the respondents, on the other hand, indicated that the schools under the focus study are giving the service 50% on average but no service center and professional persons are assigned officially. Because of lack of professional persons and service center, students were not getting sustainable service. Schools should inform the students about the exam schedules and orient them the nature of exams. This orientation helps the students to be stable and psychologically ready for the exam. It also helps them to have little stress during exam. Here, the data analysis indicated that schools were giving orientations to students before exams which are expected to minimize dropout from this angle.

On the other hand, considering individual learning difference in classroom and trying to satisfy students' needs can be another technique of intervening dropouts. Even though teachers claimed that they consider students individual learning differences, the respondent students addressed that their teachers consider individual learning differences in rare case. Data found through interview strengthened that factor such as large class size highly challenges teachers intention to consider students' individual learning differences. In line with this, Wood (1994) stated that poor academic performance is the single strongest school-related predictor of dropping out.

Availability of school resources and facilities plays prominent roles in enhancing the teaching-learning process and minimizing dropouts. In line with this, the analysis of the data showed that the schools lack many things. There are no laboratory services almost in all of the schools under the focus of this study. For the sake of saying, there are rooms for laboratory services but no chemicals and apparatus at all. Corporal punishment is one of human right violence. In line with this, some teacher-respondents indicated as they sometimes take corporal punishment when students misbehave or violate school rules and regulations. The researchers also observed when directors, unit-leaders and some teachers in some schools punish students by labor works etc. Arranging program for students who can be good model in their academic study and behavior to make motivational speech has a significant role in minimizing school dropout, but the schools which were target of this study had no such practice in their schools. Parents of the students have the obligation to follow their children's learning progress and challenges. Moreover, schools must have regular or formal discussion schedules with the parents of the students. However, the result of the study indicated that the relationship between the schools and parents seems weak.



The negative influence of peer pressure and harmful practice in the society are other factors for school dropouts. Yet, the result of data analysis indicated that the stakeholders work on the issue of negative peer pressure and harmful practices seems very insufficient; they rather give due attention to academic contents only. On the other hand, it is true that parents play a crucial role in retaining their children in school. Here, too, the parents habit of following up their children so as to check whether they are on the right track or not looks like very poor. The degree and nature of family support are determined by such factors as a stressful/unstable home life, socioeconomic status, minority membership, siblings' completion of high school, single-parent households, poor education of parents, and primary language other than English (Horn 1992). Wells and Bechard (1989) also identified four major risk factors that are school-related, student-related, community related, and family-related. The likelihood of a student dropping out of school increases as the combination of risk factors becomes more multifaceted. It is obvious that sharing students' challenges and problems lets them to endure those factors and keep learning. Nonetheless, the habit of sharing students' challenges and problems like health, family, or economic problems seems very weak in the schools under investigation. In the same way, even if controlling absenteeism, identifying reasons and taking appropriate and timely measures is one way of intervening school dropouts, the result of data analysis revealed that such action in the schools under investigation is unsatisfactory. Controlling absenteeism seems neglected.

Conclusions

Based on the result of the discussion above, although previous research findings identified the root causes of dropouts in the schools under investigation with the ultimate goal of improving educational wastage, it is possible to claim that each and every stakeholders are not severely working on intervening the dropouts. In brief, the following conclusions can be drawn based on the findings of the study.

- Sufficient awareness raising activities about the value of education for the societal transformation is not being done. Teachers and school administrative bodies are not rigorously working on increasing students' internal motivation for learning.
- School facilities and resources like adequate chairs, laboratories with chemicals, libraries with sufficient reference books, mini-medias with facilities etc. are not fulfilled.
- School compounds are not attractive and preferable place for spending time.
- The schools are not working strictly on harmful practices and negative peer-pressure those results in school dropouts.
- There is a big gap between the schools and parents. They are not working hand-in-hand so as to alleviate dropouts and enhance the learning-teaching process.
- No NGOs are helping the schools.
- The schools have a big problem in income generating.
- Clubs are not practical.
- Sharing students' challenges and problems are neglected.
- An attempt to address students' needs based on their level of performance is insufficient.
- Absenteeism follow-up and taking timely measurement is weak.



➤ Almost no school-based action researches are done to find out solutions for dropouts. So, it is logical to claim that because of the absence of the above actions, the dropouts in the schools remained unchanged, and even increased in some of the schools.

Recommendations

Education is precious tool for societal transformation. This outcome can be properly achieved if and only if students stay in schools, get ample lessons supported by necessary resources and equipments and do their best efforts. Hence, in order to avoid educational wastage and achieve the national and international goals of education:

- The government should give due attention to the educational sector, and work determinedly on the quality of education.
- District education administrative bodies should properly carry out their responsibilities: assigning appropriate school administrative bodies, teachers, and supervisors. In addition, they should supervise and give timely feedbacks on school activities. They should deal with administrative bodies on the way how they can assist high schools.
- School administrative bodies should play their unreserved roles in coordinating all the stakeholders in fulfilling school facilities and fighting dropouts.
- Mere establishment of different committees and clubs in schools should be banned. They should be functional.

All stakeholders should work hand-in-hand to alleviate school dropouts.

References

1. Ayalew Shibeshi. (1997). Policy Implication of the Dropout Rates in Ethiopian School. International Conference of Ethiopian Studies. . Kyoto: Nakamishi Printing.
2. Bekele Atto. (2004). A Study of Factors Associated with Wastage in Secondary Education in Kaffa and Sheka Zones. Unpublished M.A Thesis, A.A.U.
3. Bishop, G. (1989). Alternative Strategies for Education. New York: Macmillan .
4. Bray.M. (1981). Universal Primary Education in Nigeria: A Study of Kano State. Great Britain: Routledge and Kegan Paul Ltd.
5. Clengiplerz Weiser. (1982). Improving School, and Why the Formula for Success. New York: Allen and Bacon.
6. Creswell, J. (2003). Research Design:Qualitative, Quantitative and Mixed Methods Approaches, 2nd Edition. London: University of Nebraska Lincoln Thousand Oaks.
7. Darge Wole. (1997). Primary School Participation and Wastage Rate in Different Regions and associated Factors. In Fukui, K; Kurimoto, E. and Shegeta, M. Ethiopia in Broader Perspective, Paper of the XnIth International conference of Ethiopian Sudies. . Kyoto: Nakamishi Printing. .
8. Dorn, S. (1996). Creating the Dropout:An Institutional and Social. New York: Green Wood Publishing Group.
9. Elleni Tedla. (1995). Sankofa: African Thought and Education. New York: peter lang. .
10. Eyasu Debash . (2011). The Status and Challenges of Parent-Teacher Association Role in Leadership of the Selected Secondary Schools in Southern Zone of Tigray. Addis Ababa: Unpublished M.A Thesis, AAU.



11. FAWE. (1995). School Dropout and Adolescent Pregnancy. Nairobi: Forum for Africa Women Educationalist (FAWE).
12. Fine, M. (1991). Framing Dropouts: Notes on the Politics of a Urban Public High School Alban. New York: State University of New York.
13. G/Michael Berihu. (2006). Parent Teacher Involvement in Schools in Southern Zone of Tigray. Addis Ababa: unpublished M.A Thesis.
14. Garry, E. (1996). Trancy: First Step to Life Time of Problem. . Washington, D.C.
15. Genet Zewdie. (1991). "Women in primary and secondary Education"Gcnder Issue in Ethiopia. Addis Ababa : AAU,IES.
16. Habtamu Wondemu. (2002). "A Study of Dropouts in Selected primary Schools of Two Regions in Ethiopia." The Ethiopian Journal of Education vol. XXII No.2 Decembe r 2002. .
17. Habtamu Wondimu. (2002). A Study on Dropouts in Selected Primary Schools of Two Region. The Ethiopian Journal of Education, Vol. XXII:No 2.
18. Hallak, J. (1990). Investing in the Future Setting Educational Priorities . Paris: UNESCO/IIEP .
19. Hopkins, D. & Harris, A. (2000). Creating the Condition for Teaching and Learning: A Hand Book of Staff Development Activities. London: David Fulton.
20. Husen, T. and Thwaite (eds.). (1995/1995). International Encyclopedia of Education,3rd , Vol. 3. Japan: ELSE vier Science LTD.
21. Iqbal.et.al. Effectiveness of Parents Teacher Association (PTA) in Public Education Institutions in Pakistan. Strength for Today and Bright Hope for Tomorrow. Volume 11:12 December.
22. Kitessa. Ch.et.al. (2017). Factors Affecting Internal Efficiency of Secondary Schools of Ilu Aba Bor Zone. International Journal of Multidisciplinary Education Research , Volume 6, Issue 7(1), Page 1-22.
23. Kumar, Y. S. (2006). Fundamental of Research Methodology and Statistics. New Delhi: New Age International (P)Ltd.
24. Lambert, L. (1998). Building Leadership Capacity in Schools. Alexandria,VA: ASCD.
25. Lockheed M. E. and Verspoor. (1991). Improving Primary Education in Developing Countries. Washington D.C. World Bank.
26. LockLeed.et.al. (1991). Effective School in Developing Countries. . London: The flamer Press. .
27. Ministry of Education. (1994). Education and Training Policy. Addis Ababa: St.George Printing Press.
28. MOE. (2010). Educational Statistics Annual Abstract. Addis Ababa: MOE.
29. MOE. (1999). Educational statistic. Annual Abstract, 1998/99.
30. MOE. (2008). General Education Quality Improvement Program (GEQIP). Addis Ababa.
31. MOE. (1994). The New Education and Training Policy. Addis Ababa: MoE/EMPDA.
32. Mulu Nega. (2005). The Current Status of Continuous Assessment Practice. Discussion Paper Presented to the National Workshop on Continuous Assessment. Addis Ababa: AED/BESO.



33. Natriello, G. et.al. (1995). "School reform and Potential dropout" Educational Leadership. 43(1) .
34. Purkey S.C and Smith. (1985). School Reform. The District Policy Implications of the Effective School Literature. The Elementary School Journal 85, 354-389.
35. Purkey S.C and Smith. (1982). Synthesis of Research on Effective School.Educational Leadership . Boston : Allya and Bacon.
36. Roderick, M. (1999). The Path to Drop out: Evidence for Intervention. New York: Green Wood Publishing.
37. Rumberger, R. (1987). "High School Dropouts: A Review of Issues and Evidence." Review of Educational Research vol. 57, No.2.
38. Rumberger, R. (1995). High School Dropouts, Review of Issue and Evidences. Review of Educational Research 57(2).101-121.
39. Rumberger, R.W and Thomas,S.I. (2000). The Distribution of Dropout and Turn over Rate Urban and Sub Urban High Schools. Sociology of Education,73,39-67.
40. Shindu, J. (1999). Wastage in Education: Synthesis of Casual Factors and Strategic Intervention: Paper Presented at a Workshop in the AAU May 4th. . Addis Ababa: OSSREA.
41. Simmons, J. (1980). The Education Dilemma: Policy Issue for Developing Countries in the 1980s. Oxford: Pergamon Press.
42. Tilaye Kassahun. (1999). The Problems of Secondary School Dropouts in East Gojjam. The Ethiopian Journal of Education.Vol.XII. No. 1.
43. UNESCO. (2010). School Drop out: Patterns, Causes, Changes and Policies. UNESCO.
44. UNESCO. (1980). Wastage in Primary and General Secondary Education. A Statistical Study of Trends and PATterns in Repetition and Dropouts. Paris: UNESCO.
45. UNESCO. (1984). Wastage in Primary Education (1990-1981). Prospect Vol 14 no.3.
46. UNESCO. (1984). Wastage in Primary Education 1970-1980 (Vol. 14.No.3).
47. UNESCO. (1998). Wasted Opportunities: When Schools Fail, Repetition and Drop Out in Primary Schools. France: UNESCO.
48. UNESCO. (1998). Wasted Opportunities:When Schools Fail (Repetition and Drop-out in Primary Schools). Paris: UNCESCO.
49. Weizhi, Y. a. (1989). "High dropout rate Among Elementary school and middle school students in changed prefecture" . Education a Journal of Chinese Women. Vol. 2 .
50. World Bank Country Study. (2005). Education in Ethiopia: Strengthening the Foundation for Sustainable Progress. Washington, D.C: The International Bank for Reconstruction and Development/The World Bank.
51. Yaikob Temesgen,. (2014). An Assessment of Educational Wastage: In Selected Secondary Schools of Illu Aba Bora Zone, (Oromia National Regional State).(Unpublished) MA Thesis. Addis Ababa: Addis Ababa University.Department of Educational Planning and Management.



DEVELOPMENT AND VALIDATION OF AGING RELATED ANXIETY SCALE

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Introduction

Anxiety is an unpleasant feeling of uneasiness and worry, usually generalized and an overreaction to an event that is only subjectively seen as alarming (Bournas & Holt, 2007). It is frequently accompanied by muscular tension, restlessness, fatigue and concentration problems.

In the recent years, aging anxiety has occurred as another facet of anxiety. Lasher and Faulkender (1993), defined aging anxiety as the concern and anticipation of adverse physical, mental and personal losses during the aging process. Various studies have found a connection between aging anxiety and ageism (Allan & Johnson, 2008; Boswell, 2012; Harris & Dollinger, 2003). Butler (1969) coined the term 'ageism' including widespread stereotyping and discriminating behaviors against individuals or groups on the basis of their age, while other researches have also included the alteration in emotions and beliefs (Bugental & Hehman, 2007).

A growing body of research has linked personality and aging anxiety. There is a positive relation between neuroticism and overall anxiety about aging. Anxiety about aging is inversely related to agreeableness, conscientiousness, and extraversion and unrelated to openness to experience. Additionally, the Big Five Personality traits were differentially related to the four dimensions of anxiety about aging (anxiety about changes in physical appearance, fear of old people, psychological concerns, and anxiety about age-related losses). These results support the notion that anxiety about aging is related to individual differences in personality traits and suggest that certain aspects of anxiety about aging may be relatively stable and resistant to change (Harris & Dollinger, 2003). Another research supported the correlation between aging anxiety and personality traits (Gao, 2009). Results showed that personality traits (neuroticism, urgency, extraversion, openness, agreeableness, and conscientiousness) significantly correlated with overall aging anxiety.

A link has also been established between gender and ethnicity and aging anxiety. Research reveals that anxiety about attractiveness is higher among women who are younger, white, heterosexual, employed, separated/divorced, less financially independent, and have worse relationships (Barrett & Robbins, 2007). Another similar research proved that when compared to Americans, Koreans portrayed higher overall levels of anxiety about aging, and greater fear of old people, psychological concerns, and concerns over physical appearance. For Koreans, younger adults had greater fear of old



people, whereas among Americans, older adults had greater fear of old people. In both cultures, the older adults had greater psychological concerns and fear of losses than did the younger groups, and American women showed more anxiety about aging and concerns over physical appearance than their male counterparts (Yun & Lachman, 2006).

Aging anxiety can also be related to symptoms of depression, anxiety and other related somatic manifestations. One study found a positive correlation between aging anxiety and depression (Kim & Lee, 2007). Another research demonstrated that higher levels of personal distress predicted higher levels of aging (Allan & Johnson, 2008). A recent study (2016) discovered that lack of social support and negative stereotyping significantly predict more aging anxiety, whereas positive evaluations of one's own mental health predict less anxiety (Ramírez & Palacios-Espinosa, 2016).

Though few studies have been conducted on aging anxiety, the scope for original and innovative research is still broad. With the increased life expectancy, most individuals are now expected to live well into old age. It is important to keep in mind how aging anxiety might affect the older population and the aging process, in general. The society puts a great emphasis on preserving the youthful form of individuals. This leads to reluctance in accepting the aging process which includes behaviors like plastic surgery, trying to follow the latest 'trends', keeping up with the social media, and even failure to plan retirement. All these behaviors consistently suggest that aging anxiety is a widespread concept.

Hence, there is a need to identify aging anxiety and form relevant interventions. This research was conducted to develop and validate a measuring tool for aging anxiety. Few scales have been developed and studied in the researches. The most recent one was developed by Lasher and Faulkender (1993) called Anxiety About Aging Scale (AAS). Their scale was based on the premise that aging anxiety is an important mediating factor in attitudes and behavior toward elderly individuals as well as a mediating factor in adjustment to one's own aging processes. The 20-item scale has four interpretable factors:

- 1) Fear of Old People
- 2) Psychological Concerns
- 3) Physical Appearance
- 4) Fear of Loss

Though the previous scales are robust and reliable, they are more than two decades old. They fail to incorporate the modern factors that play an important role in aging anxiety. Also, no scale has been created keeping Indian population in mind. According to the latest UN Report (2014), India has the world's largest youth population. Therefore, in the coming years, India's going to have a large population on the brink of entering old age. Hence, it was imperative to develop a scale which looked at the already existing as well new mediating factors and could also be applied on the Indian population.



Methodology

Development of Aging Related Anxiety Scale

The previous aging anxiety research has been concerned with identifying factors that are related to its dimensions. The aim of the scale was to have broad and representative items. The initial 41-item scale was developed by two authors. To keep the scale simple and clear, they generated six categories which had five-point Likert type questions. One of the major apprehensions of the researchers was to select the items that were comparatively pure indications of the term aging anxiety. Hence, once the basic factors were clearly identified and expert opinion had been taken, only 30 questions were retained. They later decided to keep the tool as one intact scale and not divide it into sub-scales since there was no major factor loading. Five out of these 30 questions were phrased negatively. The respondents were asked to rate the extent to which he or she agreed or disagreed with each item on the scale.

Sampling

The basic psychometric data was collected predominantly from residents of three cities which were Delhi, Ahmedabad and Mumbai. Through purposive sampling, 503 respondents were selected. These respondents were selected on the basis of following criteria of emission and inclusion:

-Males and Females who fall under the age range of 30-45 years.

The sample collection was done at various levels which are given below:

Level 1: Focused Group Discussion. The sample size was 9 for this level, 3 males and 5 females.

Level 2: Expert Opinion. The sample size was 15 for this level, 1 male and 14 females.

Level 3: Pilot Study. The sample size was 101 for this level. There were 59 males and 42 females. Purposive sampling technique was used. There were 33 females and 19 males in 30-35 age group, 15 females and 11 males on 36-40 age group and 11 females and 12 males in 41-45 age group.

Level 4: Validity and Reliability. The sample size was 337 for this level. There were 176 males and 161 females. In the 30-35 age group, there were 59 females and 66 males. In the 36-40 age group, 45 females and 59 males. And in the 41-45 age group, there were 31 females and 51 males.

Level 5: Norms. The sample size was 503 for this level. There were 275 males and 228 females. In the 30-35 age group, there were 105 females and 104 males. In the 36-40 age group, there were 76 females and 96 males. And in the 41-45 age group, there were 75 females and 47 males.

Procedure

The selected sample of 503 was given the scale to fill it. The sample of pilot study, which was 101, was given the scale to fill and give their responses. Once the required sample size was achieved, the investigator moved to collect the sample for reliability and validity. In this phase, she administered two scales: one, her own and the other Self-Evaluation Questionnaire STAI Form Y-2. Through her acquaintances and friends, she completed the targeted sample size. The sample included data from industries, courts,



companies and investigator's social circle. To formulate the norms of the scale, a total of 503 responses were collected using similar ways of data collection. Once all the responses were collected, they were scored with the help of appropriate scoring keys and directions suggested in their respective manuals.

Results and Discussion

The present study was done to develop a tool to measure aging related anxiety. The data was collected with the help of the current tool and a well-known anxiety tool. There were various steps in this study. Results were processed through computer and are presented in accordance with each step in the test construction. Data was collected at various levels to fulfil the need of the scale.

The first step in the development of this tool, as with any other, was to construct a functional definition. The functional definition served to be the basis of the tool. The functional definition proposed by the researcher is:

“Aging related anxiety is a young concept as not a lot of work and effort has been done related to this side of anxiety in middle-aged people. Aging related anxiety constitutes of 6 components or factors which determine one's outlook towards impending aging:

- 1) Physical Appearance
- 2) Interpersonal Relations
- 3) Professional Life
- 4) Health (Physical and Mental)
- 5) Sexual Life
- 6) Psychological Issues

As aging related anxiety is related to impending aging, it is important to know how a person views the aging process and what their attitudes about the same are. The anxiety they feel towards the looming aging is naturally understandable. But they also have the choice to accept the inevitable and age gracefully and positively.”

Focused Group Discussion

The researchers had a focused group discussion with experts in the field of gerontology, psychology and research about their opinions about aging related anxiety. This constituted of understanding what they thought should be included in the tool as well as what shouldn't. They also provided with their knowledgeable judgements about what people might be most anxious about.

Factor Structure and Item Structure

Keeping the whole discussion in mind, the investigator developed 41 questions in the 6 defined factors of aging related anxiety, namely physical appearance, interpersonal relations, professional life, health, sexual life and psychological issues. Each factor had 7 questions except the Sexual life factor, which had 6 questions. After the items were developed for the proposed tool, it was time to get the expert opinion on them. Data was



collected from 15 experts and the overall ratings have been given in Table 1. Some items obviously received better ratings than the others. The 5 items which had the highest ratings in each factor were kept to be a part of the scale. This led to the final scale having 30 questions instead of 41, as was earlier planned. The ratings are presented in Table 1.

Pilot Study

A sample of 101 responses was collected for the pilot study. The results are shown in the Table 2. Once the final questions were decided and the new scale was formed, the investigator moved to the next step of tool construction. The pilot study was conducted on a sample of 101 respondents, both male and female, between the age group of 30-45. The pilot study was a small scale research project conducted on a limited sample to understand what the investigator wanted to know and what was the best suitable option to take while keeping the feasibility, time, cost, and statistical variability in mind. Factor analysis was done to depict and know the variability among the factors.

Since the variability among the factors was too much, as depicted in the results, the researcher, after confirming it with experts in the field of research, decided to form a consolidated tool and not divide aging related anxiety into several components. The study conducted by Scott M. Lynch (2000), 'Measurement and Prediction of Aging Anxiety' found that aging anxiety can be measured as a single construct. Keeping this research and the factor analysis of the data for the pilot study in mind, the investigator decided to keep her tool a consolidated one and not divide it into the predetermined 6 factors. The data is presented in Table 2.

Reliability

The next phase of the study was to calculate the reliability for the test. The reliability was found out on a total sample size of 503 responses. The investigator calculated three reliabilities for the scale. The reliabilities are shown in the table 3.

Validity

Concurrent Validity and Factor Analysis were conducted on a sample of 311 respondents. Concurrent validity was calculated by finding out the correlation between investigator's tool and STAI State Anxiety Scale. The correlation was found to be 0.77. Since STAI State Anxiety Scale measures the anxiety that people are feeling at the present moment, the scale was chosen for measuring the validity. Factor Analysis was done to see how accurately the tool taps into the various aspects of aging related anxiety. It consisted of a general set of techniques useful for analysing and getting a better understanding data that was collected. The sample size for calculating content analysis was 503. The results have been shown in the Table 4.

Norms

The last step for standardizing the tool was to develop norms. Norms were collected on a sample of 503 respondents. Norms are basically the aggregate responses of a group. The norms were developed in two steps. The first step constituted of converting the responses into Z scores. The Z scores were then converted into sten scores to complete the first step. The second step comprised of relating these sten scores to all the plausible scores



any person could get in the tool. The possible responses range from 30-150; 30 being the minimum one could achieve and 150 being the maximum. The sten scores were then given their standardized interpretations; low, average and high. All the values and scores have been presented in Table 5 and Table 6.

The mean and standard deviation of the tool were calculated for future reference and further studies. They are presented in the Table 7.

Limitations and Suggestions

The tool has some limitations of its own. Firstly, the tool doesn't have any gender related norms. As mentioned in the previous studies, women are more likely to have aging anxiety. Hence their norms should be different as well. Secondly and similarly, the tool doesn't address to a large age group. Since the aim of this tool was to identify aging anxiety in the middle age group, the age bar is comparatively smaller than other aging anxiety measuring scales like Anxiety About Aging (AAS). Lastly, the data was collected from few selected cities. Almost every Indian state has a different culture. The results and norms could be different for other cities.

References

1. Allan, L. J., & Johnson, J. A. (2008). Undergraduate attitudes toward the elderly: The role of knowledge, contact and aging anxiety. *Educational Gerontology*, 35(1), 1-14.
2. Barrett, A. E., & Robbins, C. (2007). The multiple sources of women's aging anxiety and their relationship with psychological distress. *Journal of Aging and Health*.
3. Boswell, S. S. (2012). Predicting trainee ageism using knowledge, anxiety, compassion, and contact with older adults. *Educational Gerontology*, 38(11), 733-741.
4. Bouras, N.; Holt, G. (2007). *Psychiatric and Behavioral Disorders in Intellectual and Developmental Disabilities* (2nd ed.). Cambridge University Press
5. Bugental, D. B., & Hehman, J. A. (2007). Ageism: A review of research and policy implications. *Social Issues and Policy Review*, 1(1), 173-216.
6. Butler, R. N. (1969). Age-ism: Another form of bigotry. *The gerontologist*, 9(4 Part 1), 243-246.
7. Das Gupta, M., Engelman, R., Levy, J., Gretchen, L., Merrick, T., & Rosen, J. E. (2014). *The Power of the 1.8 billion, ADOLESCENTS, YOUTH AND THE TRANSFORMATION OF THE FUTURE*, State of world population, 2014.
8. Gao, Y. J. (2009). Aging anxiety and personality traits among Taiwanese undergraduates. *Social Behavior and Personality: an international journal*, 37(10), 1385-1389.
9. Harris, L. A., & Dollinger, S. M. C. (2003). Individual differences in personality traits and anxiety about aging. *Personality and Individual Differences*, 34(2), 187-194.
10. Kim, S. Y., & Lee, J. I. (2007). A study on aging anxiety, depression, and self-esteem of middle-aged people. *Journal of Korean Academy of Fundamentals of Nursing*, 14(1), 103-109.
11. Lasher, K. P., & Faulkender, P. J. (1993). Measurement of aging anxiety: Development of the anxiety about aging scale. *The International Journal of Aging and Human Development*, 37(4), 247-259.
12. Lynch, S. M. (2000). Measurement and prediction of aging anxiety. *Research on aging*, 22(5), 533-558.
13. Ramírez, L., & Palacios-Espinosa, X. (2016). Stereotypes about old age, social support, aging anxiety and evaluations of one's own health. *Journal of Social Issues*, 72(1), 47-68.
14. Yun, R. J., & Lachman, M. E. (2006). Perceptions of aging in two cultures: Korean and American views on old age. *Journal of cross-cultural gerontology*, 21



TABLES

Table 1: Factor Structure and Item Structure

Physical		Interpersonal		Professional		Sexual		Health		Psychological	
Q1	0.80	Q1	0.80	Q1	0.80	Q1	0.84	Q1	0.87	Q1	0.83
Q2	0.81	Q2	0.81	Q2	0.91	Q2	0.84	Q2	0.84	Q2	0.79
Q3	0.85	Q3	0.85	Q3	0.89	Q3	0.77	Q3	0.80	Q3	0.80
Q4	0.71	Q4	0.87	Q4	0.91	Q4	0.77	Q4	0.71	Q4	0.88
Q5	0.81	Q5	0.82	Q5	0.89	Q5	0.76	Q5	0.81	Q5	0.81
Q6	0.80	Q6	0.87	Q6	0.81	Q6	0.85	Q6	0.85	Q6	0.80
Q7	0.75	Q7	0.85	Q7	0.88			Q7	0.75	Q7	0.82

Table 2: Pilot Study

	Component									
	1	2	3	4	5	6	7	8	9	10
VAR00004	-.241	-.571	.399	.149	.228	-.003	.172	.070	-.057	-.005
VAR00005	-.319	-.299	.569	.077	.196	.029	.253	.165	.094	-.129
VAR00006	.128	.355	.003	.292	.028	.438	.091	.031	-.078	-.159
VAR00007	-.278	-.164	.297	-.228	.031	-.362	.135	.401	-.373	.026
VAR00008	.237	.268	.225	.394	-.197	.106	.093	-.137	-.309	-.003
VAR00009	.346	-.018	.397	-.186	.104	.006	-.493	-.179	-.019	.028
VAR00010	-.077	-.406	-.294	.033	.100	.132	.111	.259	.273	.522
VAR00011	.410	-.151	-.196	-.466	.062	.286	-.011	.083	-.080	-.252
VAR00012	.489	-.077	-.358	-.130	.295	.123	.188	.175	-.185	-.078
VAR00013	.534	-.134	-.261	.093	.366	-.138	-.043	.104	-.107	-.043
VAR00014	-.198	-.586	-.061	-.129	.066	.060	-.056	.308	-.025	-.011
VAR00015	.419	-.224	.106	.121	-.191	.059	-.480	.106	.193	.163
VAR00016	.291	.078	-.040	.482	-.150	.109	.042	.313	.197	-.309
VAR00017	.036	.860	.003	-.109	.021	-.101	.111	.067	.000	.046
VAR00018	.060	.785	-.004	-.177	.150	-.131	.106	.127	.000	.117
VAR00019	.275	.637	.054	-.140	-.073	-.053	-.018	.287	.158	.079
VAR00020	.129	.533	.024	.172	.022	-.343	-.109	.266	-.096	-.131
VAR00021	.217	.233	.158	.204	.408	-.045	.024	.109	.482	-.033
VAR00022	.306	.250	.245	-.170	-.015	.357	.059	.026	-.029	.312
VAR00023	.374	.089	.250	-.345	.221	.172	.192	-.078	.261	-.018
VAR00024	.582	-.165	-.055	.044	.100	.048	.058	.008	-.215	.076
VAR00025	.551	-.156	.072	-.024	-.263	-.195	.431	-.082	.005	.164
VAR00026	.640	-.151	-.017	.161	-.213	-.276	.146	.007	.067	.214
VAR00027	.486	-.200	.079	-.263	-.556	.029	.210	.068	.064	-.083
VAR00028	.507	-.214	.193	.136	-.138	.110	-.215	.349	-.081	.128
VAR00029	.425	.141	.237	.046	.119	.350	.128	-.037	-.204	-.016
VAR00030	.570	-.105	-.039	.138	.278	-.122	-.220	-.031	-.294	.124
VAR00031	.538	-.093	.207	-.303	.014	-.253	-.175	-.066	.139	-.239
VAR00032	.431	-.136	.036	.170	.252	-.231	.197	-.389	.068	.163
VAR00033	.474	-.369	-.131	.049	-.019	-.137	.118	-.045	.159	-.417

Table 3: Reliability

Cronbach's Alpha	0.729657729
Split-Half (odd-even) Correlation	0.610294594
Spearman-Brown Prophecy	0.757991235



Table 4: Factor Analysis

	Component							
	1	2	3	4	5	6	7	8
VAR00004	-.302	.574	.456	.135	.129	.100	.007	-.116
VAR00005	-.245	.229	.669	.266	.206	.116	-.089	.084
VAR00006	.350	-.309	-.022	-.073	-.094	.330	.307	.144
VAR00007	-.238	.186	.477	.236	-.052	-.127	.101	-.179
VAR00008	.377	-.263	.091	.162	.194	.311	.198	.089
VAR00009	.396	.180	.212	-.041	-.261	.061	-.397	-.142
VAR00010	-.238	.358	-.058	-.254	.069	.221	.064	.069
VAR00011	.368	.323	.144	-.332	-.260	-.120	.158	.073
VAR00012	.423	.312	-.025	-.249	.150	-.241	.322	-.075
VAR00013	.490	.314	.023	-.365	.209	-.026	.161	-.069
VAR00014	-.319	.519	.109	-.139	-.207	.141	.165	.094
VAR00015	.306	.250	-.045	-.099	-.088	.480	-.268	.388
VAR00016	.341	-.040	-.056	.377	.384	.054	.221	.277
VAR00017	.403	-.751	.117	.029	.036	-.130	-.068	-.071
VAR00018	.385	-.674	.189	-.084	.053	-.169	-.108	-.088
VAR00019	.542	-.491	.122	-.070	-.047	.029	.004	.097
VAR00020	.380	-.474	.129	.092	.181	.147	-.129	-.187
VAR00021	.383	-.215	.202	-.097	-.012	.025	.011	.176
VAR00022	.427	-.183	.215	.032	-.206	.110	.164	-.026
VAR00023	.384	.002	.319	-.051	-.214	-.177	-.012	.356
VAR00024	.448	.380	-.083	-.053	.086	.043	.049	-.239

VAR00025	.499	.311	-.182	.383	-.050	-.141	.075	-.134
VAR00026	.555	.317	-.276	.229	-.005	.111	-.159	-.111
VAR00027	.460	.265	-.185	.422	-.385	-.186	.127	.027
VAR00028	.534	.294	-.070	.152	-.124	.359	-.079	-.215
VAR00029	.435	.152	.270	-.018	.007	-.038	.334	-.126
VAR00030	.485	.332	.083	-.263	.236	.104	-.162	-.333
VAR00031	.409	.296	.152	-.011	-.228	-.235	-.295	.170
VAR00032	.329	.256	-.061	-.052	.428	-.226	-.338	.177
VAR00033	.297	.502	-.063	.081	.270	-.205	.014	.346

Table 5: Z Scores and Sten Scores

-4.51222 to -2.00146	1
-1.92047 to -1.51551	2
-1.43451 to -1.02955	3
-.94856 to -.5436	4
-.46261 to -.05764	5
0.023348 to 0.428309	6
0.509302 to 0.995255	7
1.076248 to 1.481209	8
1.562202 to 1.967163	9
2.048156 to 5.206856	10

Table 6: Interpretation of Sten Scores

30-61	1	Low
62-67	2	Low
68-73	3	Low
74-79	4	Average
80-85	5	Average
86-91	6	Average
92-98	7	Average
99-104	8	High
105-110	9	High
111-150	10	High

Table 7: Mean and Standard Deviation

Aging Related Anxiety Scale	Mean	S.D.
N=503	85.71172962	12.34684669

ज्योतिषं वास्तुविद्या च

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ग्रहनक्षत्रादीनि ज्योतीषि अधिकृत्य प्रवर्तितं शास्त्रं ज्योतिषशास्त्रम्। वेदस्य षडङ्गेषु इदमङ्गं भवति।^१ षट्सु अङ्गेषु वेदस्य नेत्रस्थानमलङ्करोति इदं शास्त्रम्।^२ वेदाङ्गज्योतिषमिति लगधमुनिप्रणीतः कश्चन ग्रन्थः उपलभ्यते। वेदेषु ज्योतिषविषयाः बहुत्र परामृष्टाः। कालविधान-शास्त्रमित्यपि अस्य शास्त्रस्यापरं नाम।^३ रामायणं, महाभारतं, पुराणानि, काव्यनाटकादीनि, स्मृतयः इत्यादिषु ग्रन्थेषु ज्योतिषपरामर्शः द्रष्टुं शक्यते। धर्मशास्त्रेण अस्य महान् सम्बन्धः विद्यते।

भारतीयज्योतिषं त्रिस्कन्धात्मकं भवति।^४ गणितं, संहिता, होरा इति। गणितस्कन्धे ग्रहनक्षत्रादीनां गतिभेदाः, ग्रहसमागमः, ग्रहणं, ग्रहयोगाः इत्यादि विषयाः प्रतिपादिताः। जन्मकालीनग्रहस्थितिमाधारीकृत्य ग्रहाणां प्रभावः जीवने कथमिति निरूपणं क्रियते होरास्कन्धे। संहितास्कन्धे बहवो वैज्ञानिकविषयाः, मूर्तगणितप्रश्नविषयाश्च निरूपिताः।

वास्तुविद्याऽपि संहितास्कन्धे अन्तर्भवति। वराहमिहिरप्रणीत बृहत्संहितायां द्विपञ्चाशत् तमोऽध्यायः वास्तुविद्याविषयकः। वास्तुविद्यायां वासभूमि निरूपणं, वृक्षारोपणविधिः, कूप-तटाकादीनां निर्माणं, गृहादीनां निर्माणम्, उद्याननिर्माणम् इत्यादीन् विषयान् क्रमेण सुष्ठु निरूपितः।

वास्तुशब्देन वासयोग्यस्थानमिति अस्माभिः अवगन्तव्यम्। वासयोग्या या भूमिः, गृहं तत् परिसरश्च अस्माभिः वास्तुशास्त्रेण निरूपणीयः। भूपवेशमुहूर्तः,^५ दिङ्निर्णयः,^६ गृहनिर्माणार्थं वृक्षछेन्दनमुहूर्तः,^७ स्तम्भस्थापनमुहूर्तः,^८ राशिपरत्वेन आयविचारः,^९ योनिविचारः,^{१०} नाडी-



निरूपणं^{११}, नक्षत्रानयनप्रकारः^{१२}, दिक्साधनप्रकारः^{१३}, कालनिरूपणक्रमः, गृहप्रवेशमुहूर्तः^{१४},
वृक्षारोपणमुहूर्तः^{१५}, प्रासादनिर्माणमुहूर्तः^{१६}, ग्रहयोगेन गृह आयुर्निरूपणं कथं चिन्तनीयमिति^{१७}
वास्तुशास्त्रे विस्तरतः प्रतिपादितः। भूप्रवेशमारभ्य गृहप्रवेशपर्यन्तं सर्वाणि कर्माणि दैवज्ञ-
निर्देशानुसारं करणीयानि।

गृहस्थाश्रमस्थैः आचरणीयकर्माण्यखिलानि स्वगृहे एव करणीयानि। परगृहे कृतकर्माणां
फलानि^{१८} गृहस्वामिनं गच्छन्ति।

^{१९}वासयोग्यभूमेः स्वीकारार्थं बहवो मार्गाः शास्त्रे उपदिष्टाः। भूमेः रूपभेदाः, वर्णः,
भूप्लवत्वं, भूदृढता इत्याद्यंशाः आदौ निरूपणीयाः।

^{२०}समचतुरस्रभूमिः उत्तमा। शूर्पाकारः, वृत्ताकृतिः, त्रिकोणाकृतिः, षट्कोणाकृतियुक्ता
भूमिः न वासयोग्या। वासभूमेः पूर्वादिदिक्षु मेषादिराशयः कल्पनीयाः। इदं स्थिरचक्रं भवति।
वृषभराशिमारभ्य अपसव्यक्रमेण मकरराशिपर्यन्तं स्थितः यः भूभागः निम्नश्चेत् शुभम्। अन्येषां
भागानामौन्नत्येन शुभफलं भवति। अर्थात् मिथुनराशिमारभ्य धनुराशिपर्यन्तमौन्नत्यं शुभमित्यर्थः।

^{२१}श्वेतवर्णयुक्ता भूमिः ब्राह्मणानां शुभप्रदा। रक्तवर्णा भूमिः क्षत्रियाणां शुभप्रदा। पीत-
वर्णा भूमिः वैश्यानां, कृष्णवर्णा भूमिः शूद्राणाञ्च शुभप्रदा। सङ्करजातीयानां मिश्रवर्णाभूमिः
शुभा। ^{२२}घृत, रक्त, अन्न, मद्य, गन्धयुक्ताभूमयः क्रमशः ब्राह्मणादिवर्णानां शुभप्रदा।

भूखननं कृत्वा, भूपरीक्षा कार्या। ^{२३}भूस्वामिनः अथवा पत्न्याः हस्तमानं स्वीकृत्य तेन
मानेन भूमौ समचतुरस्ररूपेण भूमिं खात्वा तस्मिन् गर्ते जलं पूरयित्वा, तदनन्तरं तत् स्थानात्
शतपददूरं गत्वा पुनः पूर्वस्थानमागत्य जलस्थितिः द्रष्टव्या। यदि जलं पादोन भागमात्रम्



अथवा पूर्णतया दृश्यते तर्हि भूमी शुभा इति ज्ञेयम्। अर्धभागेन मध्यमा भूमिः। पादभागेन अधमा भूमि इति निर्णेतव्यम्।

^{२४}भूमेः समीकरणं कृत्वा तत्र द्वादशाङ्गुलशङ्कोः स्थापनं कार्यम्। शङ्कोः अधोभागः वृत्ताकारः। अग्रभागः सूचीवत् च भवति। शङ्कुस्थापनानन्तरं शङ्कुं परितः एकं वृत्तं कार्यम्। दिनत्रयम् उदये सायङ्काले च शङ्कोः छाया वृत्तस्य कस्मिन्स्थाने लगति इति ज्ञात्वा छाया-लग्नस्थानं ज्ञेयम्। एवं प्रातः शङ्कोः पश्चिमभागे, सायं पूर्वभागे च शङ्कोः छाया लग्नबिन्दुः भवति। पूर्वापरबिन्दोः योजनेन एका रेखा कार्या। एवं दिनत्रयं रेखां कृत्वा रेखानां त्रयाणां स्थानं सम्यक् परीक्ष्य तत् मध्यमरेखा पूर्वभागे पश्चिमभागे च यत्र लगति इति ज्ञेयम्। पूर्व-लग्नस्थानं पूर्वदिक्, पश्चिमलग्नस्थानं पश्चिमदिक् च भवति। पूर्वापरबिन्दुगतरेखायाः उत्तरे दक्षिणे च लम्बनरेखाकरणीया। याम्योत्तरगतरेखाया उत्तरदक्षिणदिशोः ज्ञानं भवति।

^{२५}दिक् ज्ञानानन्तरम् अग्निकोणमारभ्य प्रदक्षिणतया अथवा नैऋतिकोणमारभ्य वा गृहारम्भः कार्यः। वासभूमिं चतुरश्ररूपेण कारयित्वा चतुर्था विभागः कार्यः। तदा चत्वारि खण्डानि भवन्ति। ईशखण्डस्य देवखण्डमिति नाम। नैऋतिखण्डस्य मनुष्यखण्डमिति च वदति। अग्निकोणे स्थितस्य नाम यम इति, वायुव्यकोणखण्डस्य नाम असुरखण्डमिति। एषु खण्डेषु चतुर्षु देवखण्डं श्रेष्ठम्। नैऋतिखण्डम् उत्तमं च भवति। वासस्थानं विशालं चेत्, खण्डचतुष्टयस्यापि चतुर्थाविभागं कर्तुं शक्यते। चतुरस्रयुक्तस्य वासस्थानस्य ईशकेणे शिरः, वाय्वग्निकोणयोः भुजौ, नैऋत्यां पादौ च यथा भवति तथा वास्तुपुरुषस्य स्थितिः।

पूर्वोक्तप्रकारेण निर्दिष्टखण्डे चतुष्टयपदैः, एकाशीतिपदैश्च वास्तोः कल्पना कार्या। तस्मिन् खण्डे नैऋत्यां शिलान्यासः कार्यः। मीनराशिः कूपनिर्माणार्थं शुभः।



शास्त्रोपदिष्ट मुहूर्ते शिलान्यासः, द्वारस्थापनं च कार्यम्। भित्तिस्तम्भादीनां निर्दिष्ट-
उच्छ्रायाः शास्त्रे उपदिष्टाः। गृहाच्छादनार्थमपि मुहूर्तः स्वीकर्तव्यः। एवं गृहारम्भादि सर्वेषां
विशिष्टकार्याणां मुहूर्तः स्वीकर्तव्यः।

^{२६} एवं गृहनिर्माणं कृत्वा, वास्तुपूजां विधाय, पञ्चशिरास्थापनमपि कृत्वा, स्तपत्यै
अन्येभ्यः कर्मचारिभ्यश्च च दक्षिणा, वस्त्रं, भोजनञ्च दत्त्वा, वास्तुशान्तिं, नवग्रहहोमञ्च विधाय
उत्तमदैवज्ञेन निर्दिष्टे मुहूर्ते गृहप्रवेशः कार्यः। गृहस्य प्रकोष्ठनिर्णयः कथमित्यपि शास्त्रे निर्दिष्टं
वर्तते। वास्तुशास्त्रं पर्यावरणेन च सम्बद्धमस्ति। ^{२७} ततः गृहं परितः वृक्षाणां रोपनं कथं करणीय-
मित्यपि उपदिष्टम्।

प्रपञ्चे विद्यमानानां सकलचराचराणां केन्द्रं भूमि इति सङ्कल्प्य भूमिं परितः ग्रहकक्ष्याः,
तदुपरि आकाशकक्ष्या च कल्पिता। आकाशकक्ष्यायां द्वादशराशयः, राशिषु सप्तविंशति
नक्षत्राणां, नवग्रहाणाञ्च आधिपत्यं ज्योतिषे निरूपितम्। ज्योतिषशास्त्रे जातकेन प्रश्नेन च भूमेः
गृहस्य च लाभालाभचिन्ता करणीया। द्वितीयचतुर्थभावाभ्यां भूमेः गृहस्य च चिन्ता कार्या।
द्वितीयभावकारकः गुरुः। चतुर्थभावकारकौ बुधचन्द्रौ च। एषां ग्रहाणां सदसत् ग्रहयोग-
दृष्ट्यादिभिः फलनिरूपणं करणीयमिति शास्त्रसम्मतम्। एवं ज्योतिषशास्त्रस्य वास्तुशास्त्रस्य
च महान् सम्बन्धः वर्तते इति अवगन्तुं शक्यते।

End Notes

१. ज्योतिःकल्पो.....
२. वेदस्य चक्षुः (प्र.मा.१.१२)
३. शास्त्रादस्मात्
४. स्कन्धत्रयात्मकम् (प्र.मा.१.५)
५. भूप्रवेशमुहूर्तः.....
६. दिङ्निर्णयः (बृ.वा.मा.४३.६)
७. वृक्षच्छेदनमुहूर्तः (बृ.वा.मा.२८.१४०,१४२)
८. स्तम्भस्थानपनमुहूर्तः (बृ.वा.मा.२५.१२५)
९. आयविचारः, १०. योनिविचारः, ११.



नाडीविचारः, १२. नक्षत्रानयनम्, १३. दिक्साधनप्रकारः (५०.१६२)	
१४. गृहप्रवेशमुहूर्तः (१०३.३-२५)	१५. वृक्षारोपणमुहूर्तः (११९.४२,४३)
१६. प्रासादनिर्माणम् (१६५.१७-२८)	१७. गृहायुः (७७.८४-८६)
१८. परेगृहे निवासः (२.७)	१९. वासयोग्याभूमिः (१६.७८)
२०. रूपेण भूनिर्णयः (मनुष्यालयचन्द्रिका)	२१. वर्णपरत्वेच (७.२७)
२२. गन्धपरत्वेन (७.३०)	२३. भूखननम् (२०.१०२,१०३)
२४. ग्रहप्रवेशमुहूर्तः (१०३.३-२५)	२५. शिलान्यासः (२५.१२४)
२६. गृहप्रवेशक्रमः (१०९.२१)	२७. वृक्षारोपणम् (११४.२१-२५)

Books Referred

1. Bruhat Samhita - M.R.Bhat, Motilal Banarasidas, New Delhi, 1982.
2. Manushyalachandrika - K.Nilkantanachari, STR, Kollam, Kerala, 1987.
3. Bruhat Vastumala - Dr. T. Brahmananda Tripathi, Chukhamba Surabharati, Varanasi, 2001.
4. Bruhat Samhita - P. Pururshothaman Nambudiri, Devi Book Stall, Kodumgaloor, Trichur, Kerala, 1998.
5. Hora Sastram - Ramratna, Tejkumar Book Depot, Lucknow, 1972.
6. Bruhajatakam - B. Surya Narayan Rao, Motilal Banarasidas, New Delhi, 1986.
7. Prasna Marga - K. Nilakantanachari, STR, Kollam, Kerala, 1993.
8. Muhurta Chintamani - Ramchandra Pandey, Chaukhamba Krishna-Das Academy, Varanasi, 2001.
9. Muhurta Padavi- K. Sankaran Namboodrigal, Panchangam Pustakasala,, Trichur, Kerala, M.E.113.
10. Dasadhyayi - K.H.Namboodiri, Matrubhumi Printing and Publishing House, Calicut, Kerala, 1994.



TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME KNOWLEDGE AND PRACTICE OF POSTNATAL MOTHERS REGARDING ESSENTIAL NEWBORN CARE

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Abstract

The present study was conducted to assess the effectiveness of structured teaching programme knowledge and practice of postnatal mothers regarding essential newborn care. A quasi experimental design one group pre- test, post- test was adopted. Two hundred postnatal mothers were selected by using purposive sampling technique was adapted at Gnanapuram Vishakhapatnam. The study revealed that that there will be a difference in level of knowledge and practice between pretest post test post natal mothers, independent t-value 21.475** and 14.98** statistically significant at 0.01 level..The effectiveness of structured teaching programme on essential new born care was significant at $P < 0.01$ level .The data proved that the structured teaching programme was primary measured which markedly improve the knowledge and practice on essential newborn care. Irrespective of demographic variables postnatal mothers improved their knowledge and practice on essential newborn care.

Introduction

“A newborn baby is like the beginning of all things – Wonder, hope, a dream of possibilities.”

The birth of a baby is one of life’s most wondrous moments, babies have amazing abilities. Yet they are completely depended on others for feeding, warmth and comfort. Newborn is a continuum of the fetal life and very important transient time to adopt extra uterine life. The physical and mental wellbeing of every individual depends on the correct management of events in perinatal period¹.

The newborn’s body is the most super sensitive, delicate and susceptible from which can easily harmed if not taken care of. To ensure that the body has the best possible start in life there are critical aspects of newborn care, which all birth attendants and families should be aware of.

Environmental temperature should be maintained according to baby weight and age to avoid hypothermia. It is necessary to dry up the baby and wrap the baby with clothes make sure the baby head is covered².

Newborn or neonatal period include the time from birth to 28 days of life. This is the crucial period in laying the foundation of good health. At this time



specific biological and psychological needs must be met to ensure the survival and health development of the child into a future adult³.

The principles of essential newborn care is simple, requiring no expensive high technology equipment resuscitation, warmth to avoid hypothermia, early breast feeding, hygiene, support for the mother infant relationship and early treatment for low

Background

Newborn or neonatal period include the time from birth to 28 days of life. This is the crucial period in laying the foundation of good health. At this time specific biological and psychological needs must be met to ensure the survival and health development of the child into a future adult³.

The major causes of neonatal deaths globally were estimated to be due to complications of pre-maturity, (28%) sepsis, pneumonia (26%), birth asphyxia, injuries (23%), tetanus (7%), congenital anomalies (7%) and diarrhoea (3%). A study done by Baqui, et.al., (2006) in rural Uttar Pradesh showed that out of 618 neonatal deaths, 32% deaths were on the day of birth, 50% occurred during the first 3 days of life and 71% were during the first week of life⁷.

Care practices immediately after delivery play a major role in causing neonatal morbidities and mortalities. Essential newborn care practices were outlined to decrease the neonatal morbidity and mortalities. These practices include clean cord care, thermal care, and initiating breast feeding immediately after birth. The traditional practices like applying cow dung on the umbilical stump, oil instillation into nose, eyes also contribute to newborns risk of morbidity and mortality⁸.

India's current neonatal mortality is higher in rural areas at 49/1000 live births than in urban area at 27/1000 live births. Orissa have the highest neonatal mortality rate of 61/1000 live births. Karnataka, Uttar Pradesh, Madhya Pradesh, West Bengal, Punjab have the neonatal mortality rate of 54/1000, 53/1000, 51/1000, 31/1000, 29/1000 live births respectively. Kerala have the lowest neonatal mortality of 10/1000 live births respectively. It is necessary together to meet both national and the millennium development goal to reduce Neonatal Mortality rate by two thirds between 1990 and 2015. In India, Andhra Pradesh stands 6 place in neonatal mortality rate of 30/1000 live births⁹.

Still traditional practices of newborn care are seen among the mothers which are harmful to the newborn. Such as practice of pre-lacteal feeds like feeding sugar water or honey, castor oil, application of oil and powder to the umbilical cord,



application of Kajal, instillation of oil in babies eye, ear and nose, baby being exposed and not covered well, lack of hygienic practices these are all contributes to the increased rate of neonatal morbidity and mortality.

Best practices of newborn care that includes maintenance of temperature, exclusive breastfeeding, skin care, eye care, cord care, prevention of infection, immunization (Mathur, N. B, 2010). Hence as a first step, the researcher felt the need for assessing the knowledge and practices of postnatal mothers with regard to essential newborn care at Bheemunipatnam, Vishakhapatnam.

Methodology

The researcher has developed a structure questionnaire after reviewing the literature and considering the opinion of midwifery obstetrical nursing and pediatric nursing experts, to assess the knowledge regarding selected aspects on essential new born care.

The tools used for the study were categorized into 3 sections.

Section-1 Description of Demographic variables

- It includes age of the mothers, educational status, occupation, income, religion, type of delivery, parity.

Section-2: knowledge questionnaire

- It consists of 25 multiple choice questions to assess the knowledge regarding essential new born care. Each question has 4 options in which one option correct and other 3 options are wrong. Each correct answer carries one mark, wrong answer carries zero mark.

Section -3; Practice questionnaire

- It consists of 15 questions to assess the practice of essential new born care among postnatal mothers. Both positive and negative questions are formed based on observational check list

The scores were interpreted in the following manner.

< 50% - Inadequate knowledge.

50-75% - Moderately adequate knowledge

> 75% - Adequate knowledge

The pilot study was conducted and the findings of the study revealed that tool was reliable, feasible to conduct the main study. The reliability score 'r'=0.82.

The data was analyzed by using descriptive statistics such as frequency and percentage distribution and inferential statistics such as Chi-square test for the strength of the association between two categorical variables and T –test for difference between two variables.

Content validity

The tool was given to five aspects in the field of obstetric, paediatric nursing and medicine for content validity. All comments and suggestions given by the



experts were duly considered and corrections were made after discussion with the research guide.

Reliability

The reliability of knowledge questionnaire was $r = 0.86$ and knowledge questionnaire on practices was $r = 0.82$.

Reliability of the tool was established by using spearman's brown prophecy formula.

$$R = \frac{2r}{1+r}$$

Where R = Reliability co-efficient of the whole test

r = correlation co-efficient

Experiments and Results

- Among 200 postnatal mothers, majority 176(88%), 164(82%) had inadequate knowledge, 20 (10%), 32 (16%) had moderate knowledge and 4 (2%), 4 (2%) had adequate knowledge the pre assessment of level of knowledge and practice on essential new born care.
- After the administration of structured teaching programme. majority 16(8%),20(10%) had inadequate knowledge, 104(52%),100,(50%) had moderate knowledge and 80 (40%),80 (40%) had adequate knowledge in the post assessment of level of knowledge and practice on essential new born care It represents that structured teaching programme was effective to improved knowledge and practice on essential newborn care among postnatal mothers.
- The present study also revealed that there was no statistically significant association between post assessment of level of knowledge and practice and the demographic variables such as age of postnatal mothers, religion, education, parity, type of delivery . There was statistically significant association between post assessment of essential level of knowledge on essential new born care and the demographic variables such as education and parity at $p < 0.01$ level of significance.

Inadequate (<50%)		Moderate (50%-75%)		Adequate (>50%)	
F	%	F	%	F	%
176	88%	20	10%	4	2%
164	82%	32	16%	4	2%



The data presented in the Table –1 shows the level knowledge and practice among elderly postnatal mothers 176(88%), 164(82%) had inadequate knowledge, 20 (10%), 32 (16%) had moderate knowledge and 4 (2%),4 (2%) had adequate knowledge the pre assessment of level of knowledge on essential new born care.

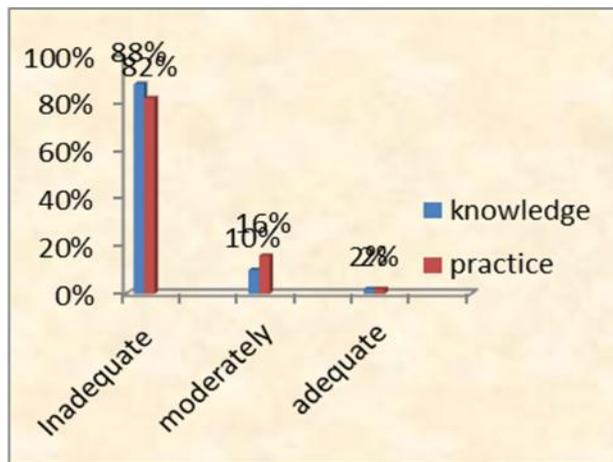
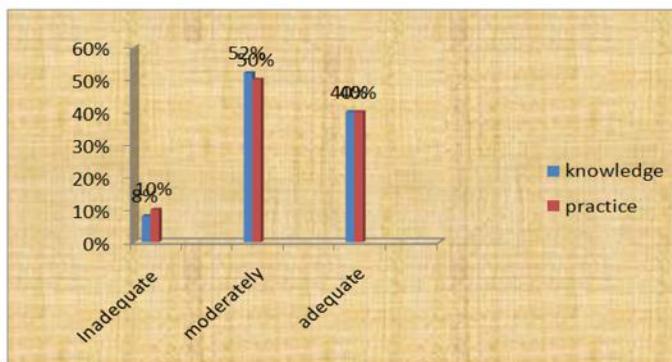


Table – 2 Level of knowledge and practice in Post-Test

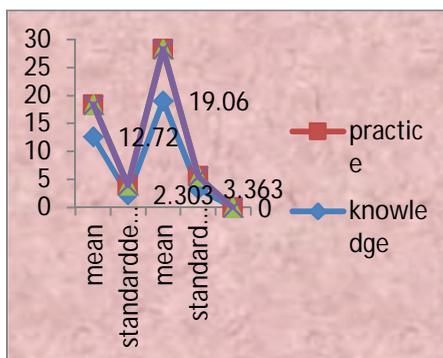
Inadequate (<50%)		Moderate (50%-75%)		Adequate (>50%)	
F	%	F	%	F	%
16	8%	104	52%	80	40%
20	10%	100	50%	80	40%

- The data presented in the Table 2 shows that the stress levels among elderly are majority 16(8%), 20(10%) had inadequate knowledge, 104(52%) 100,(50%) had moderate knowledge and 80 (40%), 80 (40%) had adequate knowledge in the post assessment of level of knowledge and practice on essential new born care. It represents that structured teaching programme was effective to improved knowledge and practice on essential newborn care among postnatal mothers.



The mean score 12.72 ,5.62and standard deviation 2.303,1.723 obtained in the pre- test and a mean score 19.06, 9.18and standard deviation 3.363,2.19 were obtained in the post test for the level of knowledge and practice among postnatal mothers showed that there was a increases in mean and standard deviation after the administration of structured teaching programme for postnatal mothers

	Mean	Standard deviation	T value
Pre-test scores of level knowledge and practice	12.72,5.62	2.303,1.723	21.475,
Post-test scores of level knowledge and practice	19.06,9.16	3.363,2.19	



V. Conclusion

The research study was done to assess the effectiveness of structured teaching programme of knowledge and practice postnatal mothers regarding essential newborn care at Gnanapuram, Visakhapatnam.



About two hundred postnatal mothers were selected by purposive sampling technique. A structured questionnaire and observation checklist was used to assess the level of knowledge and level of knowledge on practice regarding essential new born care among postnatal mothers, before and after the structured teaching programme.

The first objective of the study was to assess the knowledge and knowledge on practices regarding essential new born care among postnatal mothers.

The pre-test was conducted by using the structured questionnaire, Table 3 revealed that out of 200 postnatal mother, 88% (176) had in adequate knowledge, 20% (10) had moderately adequate knowledge, 4% (2) had adequate knowledge. Regarding the knowledge on practices related to essential newborn care, 88% (164) had inadequate knowledge, 32% (16) had moderately adequate knowledge and 4% (2) had adequate knowledge.

Post-test was conducted by using the same pre-test questionnaire; 7 days after the Health education to the postnatal mothers Table 4 revealed that out of 200 postnatal mothers 16% (8) had inadequate knowledge, 52% (104) had moderately adequate knowledge and 40% (80) had adequate knowledge on essential newborn care. Regarding knowledge on practices, 20% (10) had inadequate knowledge, 100% (50) had moderately adequate knowledge and 40% (80) had adequate knowledge on prevention of Burns and Scalds complications.

This study was supported by Vidhya. K (2011) conducted a pre-experimental study to assess the effectiveness of innovative teaching programme on new born care among postnatal mothers in Raja Muthaiah Hospital in North India. They had selected 30 postnatal mothers by convenient sampling technique. Data were collected by using a structured questionnaire. The pre-test results showed that 97% of the post natal mothers had inadequate knowledge on new born care and post test results showed that 70% of the postnatal mothers gained adequate knowledge on new born care and 30% of postnatal mothers gained moderately adequate knowledge on new born care. This study demonstrated that video teaching programme was effective in imparting knowledge to the postnatal mothers.

The second objective of the study was to evaluate the effectiveness of the Health education on essential new born care among post natal mothers. Table 5 revealed the effectiveness of the Health education. The paired 't' test values showed that there was a significant improvement in the level of knowledge and level of knowledge on practices related to essential new born care at $P < 0.0001$ level.

The present study revealed improvement in the level of knowledge and level of knowledge on practices related to essential new born care after administering



the health education programme. It was proved that direct education can lead to increase in the level of knowledge and level of knowledge on practices related to essential new born care.

The third objective was to associate the relationship between selected demographic variables and the level of knowledge and knowledge on practices among postnatal mothers related to essential new born care.

Table 6 represents in the post test, the association between demographic variables with level of knowledge on essential new born care. The association between the level of knowledge education and parity was significant at $p < 0.05$. Table 7 represents in the post test, the association between level of knowledge on practice age, education and parity was significant at $p < 0.05$

Still some of the demographic variables are not significant with the mother's knowledge. Irrespective of demographic variables, the post natal mothers improved their knowledge after receiving structured teaching programme. Hence, direct education has a bearing and can bring about improvement of their knowledge and change in a desirable behaviour.

References

1. Stephon W.Elizabeth R.Research priorities to improve global forum for health research. Mexico 2004.
2. Parul Dutta . Paediatric Nursing. (8th edition). New delhi: Jaypee brothers publishers 2008;110-113.
3. Hocken berry and Willson ,Wong's Nursing Care of Infants and Children. (8th edition.). New Delhi: Elsevier publishers 2005: 200-204.
4. Belsey, M.(2000), global overview of Newborn health, summary of oral report to Director General of WHO Executive board.
5. World health organization. Essential Newborn Care (2011). A Report of technical working Group. Geneva.
6. Park .k preventive and social medicine ,22nd edition,Jabalpur,Bhannot,2007 451-455.
7. Indian Institute of population sciences. (2010). National Health survey,
8. Kesterten A J, Checked J (2010). Neonatal care in Karnataka health and careful practice, Indian J pediater.
9. World health organization. Essential Newborn Care (2011). A Report of technical working Group.



LANDMARK ACHIEVEMENTS OF WOMEN IAS OFFICERS IN INDIA

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Abstract

The present research paper is a study of women administrators of All India Services, the Indian Administrative Service (IAS), who have significantly contributed and have made a meaningful impact on the Indian Administrative System. Though the services were in existence from the British Period, the entry of women into these services was very late and in two of these services, women got in only after few decades of independence. In spite of this, women administrators have shown remarkable achievements in the field of administration and instituted a number of reforms towards betterment of the lives of the people. Women administrators have done it all and proved their mettle in launching massive drive against corruption, illegal sand mining, fighting nepotism, chauvinism and lackadaisical set ups. The present research paper is the study of some of the women IAS officers in India who are inspirational and are contributing a great deal to change the face of our country and are working towards the betterment of the underprivileged sections of our society.

Key words - Indian Administrative Service, Women administrators, Corruption, Governance and Society

Introduction

Administration is the performance of the executive functions of the state and it differs from legislature and judiciary. It is one of the most important instruments available to the Government to achieve the goals of the nation. In the present study, the term administration refers to public administration that includes the management of affairs of Government at all levels- national, state and local. In India, Government services are divided into All India Services, Central Services and State Services.

In the present research study, administration refers to Managerial view of administration and here the study is on women administrators of All India Services - Indian Administrative Service (IAS). All India Services are divided into different cadres based on the states. Some states have a separate cadre where as the union territories and few states have common cadres. (George, 2001). The job profile of an IAS officer is very challenging and dynamic; it requires a lot of dedication and commitment towards this job. The statistics regarding the women



IAS officers reflect a solid gender gap. A large majority of IAS officers are male (85%). The share of female recruits is increasing from 10 % in 1990 to 16 % in 2010. (Bertrand, 2015). But more and more women are extensively contributing towards the progress of the country in spite of several hurdles, frequent transfers and rampant corruption. In a country where corruption is rampant at every stage of governance and society patriarchal; women have to battle doubly hard. One because of being a woman, and secondly as part of the system that requires one to go against the flow and actually do something good for the people. The research paper discusses the work of some of the women IAS officers who have made exemplary contributions in the field of administration since independence. Anna Rajam George Malhotra fought gender bias, stood her ground and went on to become India's first female IAS officer of the country. Similarly, Aruna SundaraRajan for her work at Akshaya-an e-literacy programme that brought her into Forbes limelight for her extraordinary business acumen and its application; Rajni Sekhri Sibal nicknamed as 'Four Meter Cloth' who brought down former Haryana CM Omprakash Chautala; and many more. Unwilling to be stifled by red-tapism, these dynamic and dedicated IAS officers are infusing fresh ideas, efficiency and inclusivity into governance.

Most Indians have heard about India's female IPS officer Kiran Bedi, but few know about the first woman IAS officer of India. In an age, when most Indian women didn't even try getting into civil service she cracked the tough civil services exam and became the first woman IAS officer. She was also the first woman to hold a secretarial post in the central government. Back in 1951, when Anna Rajam Malhotra appeared for an interview after clearing the civil services examination, the panellists discouraged her from joining the Indian Administrative Services and suggested that she join either Foreign Services or Central Services as they were 'suitable for a woman'. Not one to back off, Malhotra stood her ground and became India's 1st IAS officer. Interestingly, her appointment letter had these lines: "In the event of marriage your service will be terminated". However, thankfully, after few years, the rules were changed. She fought the patriarchal outlook which questioned a woman's ability to manage law. She worked closely with Rajiv Gandhi and played an important role in building India's first computerised port, Nhavasheva, in Mumbai.

Sharing her experience in a later interview, Anna recalls how back then men used to be apprehensive of a woman's capability in taking decisions regarding public administration, using discretionary acumen in handling magisterial powers, of handling a lathi charge or police firing. So, Anna had to prove herself time and again to stand up against gender prejudices. However, she does not hold this against men but says it was the conservative mindset that prevailed at that time



that made them react that way. Even the then-UPSC Chairman commended her performance and said that it was a reason for him to recruit more women into the service. However, Anna says that her performance should not be a criterion for recruiting women candidates. Her reasoning behind this is that suppose she had failed, then this criterion would have prevented another woman from getting her chance. So, she strongly believes that women should be enrolled on merit and given a fair chance to prove their capability. (Parek, 2018)

An administrator par excellence **Shantha Sheela Nair** has had a distinguished career in the prestigious Indian Administrative Service, which she joined in 1973 as a 23-year old. She is known as the administrator who saved Chennai from water crisis of the early 2000s by making rainwater harvesting compulsory with specialised drainage tank and dedicated pipes to be built. And if the guidelines were not followed, licences were to be revoked. Santha Sheela Nair's most significant achievements have been in the sanitation sector, which she feels should be given priority because good sanitation leads to water being saved. She tried to promote eco-friendly sanitation which reduces the use of water. A village in South India has set an example for small towns by building 'Ecosan' toilets that use ash in flushing to turn faeces into manure. (De, 2010) These toilets have helped in maintaining ecological sanitation and prevented a nearby river from polluting. In the villages she served, people named their daughters after her to honour her and in hopes that their daughters will live up to the name of the legendary Shantha Sheela Nair.

Aruna Sundararajan, an IAS officer of the 1982 batch, played an instrumental role in the development of e-governance in Kerala and setting up the IT department in Kerala in 1998. She also played a pivotal role in initiating Akshaya, the largest e-literacy project under which over 1 million people were trained in basic digital skills. She is best described by the Forbes magazine as 'an IAS officer who thinks like a businesswoman'. As of now, we all know Kerala state is par excellence when it comes to e-governance, but now it is evident how hard the officer worked to achieve it. She also headed the Kudumbashree Project, which is a female-oriented, community-based, poverty reduction project of the Government of Kerala and now it is a shining example of women's empowerment for working class women. (Parek, 2018)

Often one hears about stories of bureaucrats passively becoming a party to politicians' loot for next election. On the contrary, Rajni Sekhri Sibal, a 1986 batch IAS officer of the Haryana cadre, said a firm "no" to any bribery lure for changing the results of 3,200 Junior Basic Training (JBT) teachers in 1999-2000. When her transfer order came, she wrapped the steel almirah with the actual list



of results lying inside, with” four-metre-long cloth’ and bandages, making it impossible for anyone to open the almirah and temper with the list. Her small act of wrapping the almirah was in fact a big step towards spotting a huge scandal. Now, former Haryana chief minister Om Prakash Chautala, his son Ajay Chautala and 51 others are in Tihar jail facing serious charges of corruption in what is now known as JBT Recruitment Scam.

Rupan Deol Bajaj, is a feisty woman who stood up against sexual harassment at a time when it was deemed to be just a myth and the ‘me too’ movement did not hold grounds.

Way back in 1988, KPS Gill, then Director General of Police, Punjab, outraged her modesty at a party. This erstwhile IAS Officer filed a case against him, leading into a high profile long drawn law criminal proceeding. While KPS Gill was found guilty of all charges, Rupan Deol Bajaj’s case became one of the landmark cases of sexual harassment in the nation, paving way for more women to come out into the open about their experiences of sexual harassment. (Dogra ,2018)

Poonam Malakondaiah is a 1988 batch IAS officer who is widely known as an honest and dedicated officer. She has worked in education, social welfare, transport and civil supplies. She is also known for efficiency in every department and was honoured as India’s third honest IAS officer in the India Today survey. Her most talked about the Monsanto Seeds Project where the corporation was banned from supplying BT cotton seeds to farmers. The reason was the failure of the company’s seeds in previous crops and its refusal to pay compensation to farmers as decided by the agricultural commissioner of the state. (Pal, 2017)

Mugdha Sinha, a 1999 batch Rajasthan cadre IAS officer and the first woman collector of Jhunjhunu was transferred for taking on the local mafia. She clamped down on illegal encroachments, faulty mining leases, road construction tenders and liquor mafia with an iron hand. Before she was transferred, she seized truckloads of explosives from their way to illegal mining in the Araville range, struck down heavily on the sand and liquor mafia, halted illegal road construction and shut down the Black marketing of gas cylinders, all while fighting political pressures from local leaders. When she was transferred for taking out on local mafia, organizations of farmers, traders and students came out in support of Sinha. She was honoured as India’s fourth honest IAS officer in the recent India Today survey. Perhaps this must be the reason that she has been transferred 13 times in a career span of 15 years. (Pal, 2017)



Smita Sabharwal, the fiery IAS officer from the 2001 batch cleared the exam at a young age of 22 securing the 4th rank in the country. She's the youngest officer in India to be appointed to the Chief Minister's Office and is popularly called 'The People's Officer'. When Sabharwal was serving as the Municipal Commissioner of Warangal, she launched a 'Fund Your City' in Warangal where a large number of public utilities such as traffic junctions, foot-over bridges, bus stops, parks were created by the Public-Private partnership (PPP) and encouraged residents to take part in building infrastructure in Maoist- affected areas. This initiative was also nominated as one of the best initiatives for the Prime Minister's award for excellence in public administration. Karimnagar Town also underwent a complete facelift and was awarded the best district in PM's 20 Point Programme for 2012-2013. She also changed the healthcare and education scenario of Karimnagar in Telangana when she was the District Collector there. Her brain child programme in the health care sector, 'Ammalalana' that sought to improve institutional deliveries in the public sector was started and successfully implemented in Karimnagar during her regime and serves as a role model for many health initiatives of 'high risk pregnancy management targeting. (Sharma, 2019)

Durga Shakti Nagpal obtained an all India rank of 20 in the UPSC civil services exam in 2009, after which she joined the Indian Administrative Service (IAS), in the Punjab cadre of the IAS and joined the Mohali administration in June 2011. She is known for her sticking work against the sand and land mafias in Uttar Pradesh by forming special investigation teams to stop the illegal sand-mining in the Yamuna and Hindon river banks. As a trainee IAS officer in Punjab, she exposed a land scam in Mohali. (Aranha ,2019).Ritu Maheshwari, in 2011, when she was in charge of Kanpur Electricity Supply Co., Maheshwari installed new electricity meters across almost one-third of their customer base which exposed real-time leaks in the distribution system. This significantly brought down the city's distribution losses. Following this, she was transferred. The bold and honest officer has been fighting against the power and misogyny in bureaucracy ever since.

Conclusion

It is rightly said, 'Women hold up half the sky'. However, this is not true for the Indian Administrative Services, where insignificant number of women administrators represent almost half the women population. For every 20 male IAS officers, there are only three female officers. Since 1974, India's steel frame has incorporated only 687 women compared to more than 3,000 men. The discriminatory laws against entry of women administrators in the services even after achieving Independence, patriarchal set up of the Indian society and the



cultural gender bias and were responsible for insignificant participation of women administrators. Though the number of women IAS officers is increasing the number is still not in proportion to the women population. This research paper has highlighted some of the landmark achievements of the hard working women IAS officers who are working day and night to move our country towards a brighter future. These women IAS officers have done exemplary work in diverse fields without compromising in front of the politicians and contributing towards a better India. We need to salute the spirit and courage of these IAS officers as they are the real steel frame of Indian Bureaucracy. (Pal, 2017)

References

1. Aranha, Jyoti.,15 Yrs,13 Transfers ; Meet the firebrand IAS officer battling illegal mines, sand mafias,February ,19,2019.Retrieved <https://www.thebetterindia.com/172885/ias-hero-rajasthan-illegal-mines-sand-mafia-indi>
2. Bertrand, Marianne.,Burgess .,Robin.Chawla, Arunish. Xu ,Quo.October ,2015.Determinants and consequences of bureaucrat effectiveness :Evidence from the Indian Administrative service.
3. Chander Suta Dogra.15 Oct 2018.A Retired IAS Officer on How the #MeToo Movement Can Use Her Case Against K.P.S. Gill. <https://thewire.in/women/rupan-deol-bajaj-kps-gill-case-me-too>
4. George, Jayasheela. (2011) . Women in Administration in India. Journal of International Women's Studies , Volume 12, Issue 1 (January/February) Article 12 Jan-2011 .
5. Krishna, Sumi. Arpita , De.Ed.(2010).Women Managing Water: Inspiring Stories from South Asia. South Asia Consortium for Interdisciplinary Water Resources Studies, Copyright © , Hyderabad, India, October 2010.
6. Pal,Sanchari.(2017) .10 IAS officers who made 2017 better with their brilliant initiatives.December 21,2017.Retrieved, <https://www.thebetterindia.com/125102/inspiring-ias-officers-india-brilliant-initiatives>.
7. Pal,Sanchari.(2017).The untold and inspiring story of Anna Rajam Malhotra ,India 's First Female IAS officer.January 17,2017
8. Parek, Shabdita .(2018).10 Dynamic Women IAS & IPS Officers who inspire us with their dedication & commitment 8.March,2018.Retrieved from- <https://www.scoopwhoop.com/dynamic-women-ias-ips-officers/#.oxrix4t9>
9. Retrieved -<http://www.babusofindia.com/2013/01/jbt-scam-four-metres-of-cloth-almirah.html>
10. Sharma,Jyoti.(2019).Top Women IAS Officers in India.8.March 2019. <https://www.jagranjosh.com/articles/top-women-ias-officers-in-india-1488805547-1>
11. Retrieved - <https://kractivist.org/telangana-ias-officer-sues-outlook-for-sexist-piece>
12. Retrieved - <https://www.scoopwhoop.com/inothernews/women-who-shaped-the-feminist-movement-in-india/#.2fw0jk637>



कालिदासमेघे प्रकृतिवर्णनम्

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संस्कृतसाहित्ये कालिदासस्य स्थानं सर्वातिशयित्वेन विलसति। महाकविकालिदासस्य अद्भुतया विलक्षणया प्रतिभया सम्पूर्णमपि विश्वमाश्चर्यचकितं विहितम्। महाकविकालिदासस्य काव्येषु काव्यस्य वर्णनाशैलीं नाटकेषु नाट्यकलां गीतिकाव्येषु च सरसं हृदयोद्गारं च वीक्ष्य सहृदयस्य चेतो प्रमुदितं जायते।

स्वकीयकाव्यचमत्कृत्या महाकविकालिदासो निखिलेऽपि संसारे ख्यातिमवाप। कालिदासस्य काव्येषु विचारगाम्भीर्यं, संसारस्यानुभवः, बहुमूल्याः सिद्धान्ताः च विद्यन्ते। तत्काव्येषु प्रसादगुणस्य अगाधता, माधुर्यगुणस्य मधुरः सन्निवेशः, कोमलकान्तपदानां प्राचुर्यम्, उपमालङ्कारस्याऽपूर्वत्वम्, अलङ्काराणां रमणीयत्वम् छन्दसां मनोहरत्वम् भावसौष्टवञ्च पर्याप्तरूपेण विद्यते। यया दृश्या दृश्यते कालिदासकाव्यानि तथैव दृश्या कालिदासकाव्यकलायाः कमनीयत्वमवलोक्यते। तत्काव्येषु विद्यमाना सरससरलसुबोधशब्दाः भावसाम्राज्यञ्चैतेगुणा न केवलं सहृदयानामपितु सामान्यजनानामपि मनांसि मुग्धोकुर्वन्ति। व्यङ्ग्यार्थप्रतिपादनस्य विलक्षणशैली, रसप्रकर्षस्योत्तमं प्रकाशनम्, विस्तृतविषयस्य संक्षेपेण वर्णनम्, वर्ण्यविषयस्य मनोहरक्रमेण स्थापनं तद्रोचकत्वनिष्पादनं स्वाभाविकभावेन लोकोत्तरानन्दप्रदानपद्धतिप्रभृतयोऽनेके विशिष्टाः गुणाः कालिदासकाव्येषु राजन्ते।

कालिदासस्य काव्येषु पदलालित्य-रचनाचातुर्य-कल्पनाशक्ति-प्रकृतिवर्णन-चरित्रचित्रणादी-न्यधीत्य विश्वस्यैकैकः पाठकः प्रफुल्लितो जायते। विश्वविख्यातस्य गीतिकाव्यस्य प्रणेत्रा पीयूषवर्षिणा कविना जयदेवेन कालिदासः कविताकामिन्या विलासत्वेन मन्यमानेन सः **कविकुलगुरुः** इत्युपाधिना विभूषितः। महाकविना बाणभट्टेन स्वकीये हर्षचरिते कालिदासप्रणीतकाव्यविषये स्वीयसद्भवं प्रकटयतोक्तम्

निर्गतासु न वा कस्य कालिदासस्य सूक्तिषु। प्रीतिर्मधुसान्द्रासु मञ्जरीष्विव जायते।¹

दृश्यश्रव्यभेदेन काव्यानां द्वैविध्यम् अलङ्कारशास्त्रे प्रसिद्धम्। महाकवेः कालिदासस्य अमरकृतिषु दृश्यकाव्यम् अभिज्ञानशाकुन्तलं श्रव्यं च मेघदूतं देशेऽस्मिन् विदेशेषु च महतीं प्रथाम् अलभेताम्। मेघदूतं नाम काव्यं संस्कृतसाहित्यस्य प्रस्फुरत्प्रभारत्नमस्ति। वस्तुतः संस्कृतसाहित्यनभसि उज्वलप्रभावसहितं विराजमानेन भानुकल्पेन कालिदासेन सङ्ग्रहितः **मेघदूतम्** सन्देशकाव्येषु प्रथमोद्भूतः प्रथमस्थानीयश्च भवतीति निर्विवादोऽयं विषयः। काव्यमर्मज्ञस्य सहृदयपाठकस्य दृष्टौ मेघदूतकाव्यं परमाह्लादजनकं लोकोत्तरसन्तुष्टिप्रदायकं च भवति। कविकलाधारस्य कालिदासस्य सर्वेषां काव्यगाम् अध्वयनं कृत्वा आधुनिकसमीक्षकशिरोमणिः आचार्यरामचन्द्रशुक्लो भणति यत् **कविकुलगुरोः यादृशी एव कीर्तिः तस्य सप्तकाव्यरचनाकारणाद् विद्यते, तादृशी एव कीर्तिः तदापि स्यात् यदि तेन अन्यान्यकाव्यरचनां विहाय केवलं मेघदूतस्यैव रचना कृता भवेत्**। एतेन मेघदूतस्य सर्वातिशायि महत्त्वमभिव्यज्यते। दूतकाव्यमिदं काव्यकलायाः चूडान्तनिदर्शनम्। अस्मिन् हि जगद्भूते भारतस्य सुभव्या सभ्यता संस्कृतिः, विशाला सुखसमृद्धिः, विश्वमङ्गलविधायकं भारतीयजीवनदर्शनम्, देशस्य भौगोलिकम्, ऐतिहासिकं सामाजिकं राजनैतिकं च वैशिष्ट्यं विशदरूपेणचित्रितमास्ते। देशस्य एकतायाः अखण्डतायाश्चापि आकलनम् अवलोकनं च कर्तुं शक्यते अत्र।

मेघदूतं नाम प्रकृतिप्रधानं खण्डकाव्यम्। काव्यस्यास्य सौन्दर्यमस्ति प्रकृतिसुषमायाश्चास्तया चित्रणम्। आदितोऽन्तं यावत् काव्यमिदं प्रियया प्रकृतेरनवद्यानि अवदातानि च विविधानि बहुलानि दृश्यानि प्रस्तवीति कविः। वस्तुतः काव्यमेतत् प्रकृतेरेव काव्यमस्ति। तत्राभ्यन्तरीया बाह्या च प्रकृतिरन्योन्यं गाढमालिङ्गन्ती वीक्ष्यते। चेतनाचेतनयोर्मधुरं संयोगं कारयित्वा तयोरैक्यश्रियञ्च जगतः पुरो वितत्य कविर्यमुपकारं मनोज्ञं जगत्शुकार तदर्थं तत् सर्वथैव कविमप्रति कृतज्ञतां वहति। यस्मिन् काव्ये प्रकृति-पुरुषो मेघः स्वयं सन्देशरः स्यात् मार्गश्च यस्य मेघस्य रहस्यावहज्योतिःपुञ्जपावनं गगनं स्यात् अलकां गन्तुं मेघस्य तरणीया नानासानुमत्सरित्-कान्तारादिपदार्थाः स्युस्तस्मिन् काव्ये क्वाप्येतादृशं कथं द्रष्टुं शक्यं भवेत् यन् स्यात् प्रकृतिपेशलम्।

मेघदूते क्वचित् स्निग्धच्छायातरुलसितः पुण्योदकपूतो रामगिर्याश्रमः, क्वचित् कुटजकुसुमानां सौरभम्, क्वचित् बलाकानां पङ्क्तिः, क्वचिच्चातकानां निवहः, क्वचिद्बुच्छलीन्ध्याया वसुधायाः सुन्दरता, क्वचित् स्रोतसां हृदयहारिणी तरलता, क्वचिच्छक्रशरासनस्यच्छटा, क्वचित् सद्यः सीरोल्कषणसुरभिक्षेपाणां हसन्ती श्रीः, क्वचिच्च मधुकरगुञ्जितकुञ्जानाञ्च लक्ष्मीः दिव्यानेव विभ्रमान् प्रवर्षन्ती लक्ष्यते। वस्तुतः काव्यमिदं प्रकृतेरनुपमा रङ्गशालेव भाति। यथा प्रेक्षागृहे उपविष्टो दर्शको रङ्गमञ्चे विविधानि विचित्र-विचित्राणि दृश्यानि पश्यति तथैवास्य काव्यस्य पाठकोऽपि स्वसम्मुखे मनोहराणि प्रकृतेर्बहूनि रूपाणि नवनवानि प्रेक्षते। विन्ध्यादिकानां महीधराणां कमनीयता कदाप्युपस्थिता भूत्वास्मान् नन्दयति, कदापि स्फुटकमलामोदमैत्रीकषायः क्षिप्रावातोऽस्मान् संस्पृश्य प्रसादयति, कदापि पण्यस्त्रीरतिपरिमलोद्गारीणि शिलावेशमान्यस्मदीयां कामवासनां जागरयन्ति, कदापि कनकनिकषस्निग्धा सौदामिनी अस्मान् रञ्जयति, कदापि सगरतनयस्वर्गसोपानपङ्क्तिर्मन्दाकिनी नः पुनाति। ज्ञायते अस्मिन् काव्ये हि वेधसः सकला अपि प्रकृतिः कविना शब्दब्रह्मरूपे परिवर्त्य सम्प्रतिष्ठापितास्ति।

मेघकुलं वर्णयन् यक्षः वदति - हे मेघ! अहं त्वां जगत्प्रसिद्धेपुष्करावर्तकानां कुले प्रसूतं कामरूपिणमिन्द्रस्य प्रधानपुरुषत्वेन वेदि। अतो अभाग्यवशाद्विभक्तपत्नीकोऽहं त्वयि याचकत्वेनोपस्थितः। सः कथयति यत् अधिकगुणे पुंसि याचना निष्फलाऽपि ईषत्प्रिया, एतद्वैपरीत्येन अधमे सा सफला सत्यपि ईषदि न प्रिया-

**जातं क्वो भुवनविदिते पुष्करावर्तकानां जानामि त्वं प्रकृतिपुरुषं कामरूपं मघोनः।
तेनार्थित्वं त्वयि विधिवशाद् दूर्लभ्युर्जातोऽहं याच्ना मोघा वरमधि गुणे नाधमे लब्धकामा॥²**

कदाचिद् इन्द्रधनुषखण्डमणिप्रभासमन्वितो मेघः उज्ज्वलकान्तिसम्पन्नेन चित्रविचित्रेण बहूँण गोपवेषो भगवान् विष्णुरिव प्रतीयते। इन्द्राग्रयुधस्य शोभा दर्शनीया भवति। मेघं सम्बोधयन् यक्षः कथयति हे मेघ! पद्मरागाऽऽदिमणीनां समिश्रणमिव मनोहरमेतदिन्द्रायुधं परतो वाल्मीकविवराद् दृष्टिग्राह्यं भवति, येनोज्ज्वलकान्तिसम्पन्नेन पिच्छेन गोपवेषस्य कृष्णस्येव त्वदीयं श्यामं शरीरं शोभाऽतिशयसम्पन्नं भविष्यति

**रत्नछायाऽऽत्यतिक्रम इव प्रेक्ष्यमेतत्पुस्ताद्दल्मीकाप्राप्तमभवति धनुषखण्डमाखण्डलस्य।
येन श्यामं वपुःतितरां कान्तिमापत्स्यते तेबहूँणैव स्फुरिरुचिना गोपवेषस्य विष्णोः॥³**

दशार्णदेशस्य प्राकृतिकशोभा अतीव दर्शनीया वर्तते। मेघं सम्बोधयन् यक्षः वदति - हे मेघ! त्वयि निकटवर्तिनि सति दशार्णदेशोपवनानि केतकीपुष्पैर्हीरितवर्णप्राचीरयुक्तानि गामररथ्यावृक्षाश्च काकाऽऽदिग्रामपक्षिणां कुलायनिर्माणैः सङ्कीर्णा जम्बूवनानि च परिपक्वफलैः श्यामानि भविष्यन्ति। एषं च तत्र हंसा वर्षाऽऽरम्भकालं वीक्ष्य कतिपयदिनान्यावत् स्थास्यन्ति-

**पाण्डुच्छायायोपवनवृतयः केतकैः सूचिभिर्नैर्नीडारम्भैर्गृहबलिभुजामाकुलग्रामचैत्याः।
त्वय्यसन्ने परिणतफलश्यामजम्बूवनान्ताः सम्पत्स्यन्ते कतिपयदिनस्थायिहंसा दशार्णाः॥⁴**

महाकविना कालिदासेन मेघदूते उदीपनऽऽलम्बनेति द्विविधायाः प्रकृतेर्वर्णनं विहितम्। तत्र वन-वर्षत-नद्यादयः सन्त्याधारा आलम्बनात्मिकायाः प्रकृतेः। एकतस्तु कालिदासो धूमज्योतिः सलिलमरुतां सन्निपातः क्व मेघः इत्युक्त्वा मेघं धूमाम्निजलवायूनां समुदायरूपं मनुते, अन्यतश्च सः मेघं वियोगोद्दीपकत्वेन वर्णयति। तथा हि-

**तस्य स्थित्वा कथमपि पुः कौतिकान्धानहेतोः अन्तर्वाष्पश्चिरमनुचरो राजराजस्य दध्यौ।
मेघालोके भवति सुखिनोऽप्यन्यथावृत्ति चेतः कण्ठाम्भेषप्रणयिनि जने किं पुनश्चूंसंस्थे॥⁵**

अत्र कथितमस्ति यत् यक्षो वाष्पवृत्तिं निरुध्याऽभिलाषोत्पत्तिकारणस्य मेघस्याग्रे कण्ठऽतिशयेन स्थित्वा चिरं चिन्तयामास। मेघदर्शने कान्तासहितस्यापि जनस्य चित्तमन्यप्रकारं वर्तते, कण्ठालिङ्गानप्रणयिन्यां प्रियतमायां पुनः किं कथनीयम्।

यद्यपि स यक्षोऽष्टौ मासान् रामगिर्याश्रमेषु यापितवान् किन्तु आषाढस्य प्रथमदिवसे यदा सः आश्रितृष्टसानुं मेघं ददर्श तदा तद्विषयवियोगजन्तं दुःखमत्यधिकमुद्दीर्घं जातम्। तथा चाभिलाषोत्पत्तिकारणस्य तस्य पुः कथमपि किञ्चित्कालं स्थित्वाऽन्तर्वाष्पं दधान। यक्षस्य हृद्येवमासीत् यत् मेघो यथा मामुद्दीपयति तथैव यदि मम प्रियामप्युद्दीपयेतदाऽवश्यमेव सा न भविष्यतीति वनिता जीवितालम्बनार्थी सः स्वपत्नीं प्रति स्वकुशलवृत्तं तदाश्वासनवचनं वा प्रेषयितुमतीवोत्सुकः सञ्जातः। सः कामार्तः सन् चेतनाचेतनविवेकशून्यो जातः, अत एव सन्देशप्रेषणार्थं मेघमुक्तवान्- **सन्देशं मे हर धनपतिक्रोधविभ्रेषितस्य** इति। मेघो न स्याच्चेत् यक्षवियोगोद्दीपनम्, सन्देशार्थं प्रार्थना मेघस्य दौत्यं किमपि न स्यात्, अतः मेघस्योद्दीपनविलास इति वक्तुं युज्यते।

उत्तरमेघे उद्दीपनात्मिकायाः प्रकृतेः प्रभूतरा सामग्री दृश्यते। चन्द्रिकाकल्पप्रसून-कमल-कुन्द-लोध्र-कुरबक-शरीष-नीपादीनि पुष्पाणि उद्दीपनात्मिकायाः प्रकृतेः प्रातिनिध्यं कुर्वन्ति। अलकापुरी सततं शङ्करशिरःस्थितचन्द्रचन्द्रिकाचमत्कृता अस्ति। चन्द्रिका विषागर एव भवतीति सर्वथा प्रसिद्धमस्ति।

अलकापुर्याः प्राकृतिकसुषमायाः वर्णनं कृत्वा यक्षः कथयति-

**हस्ते लीलाकमलमलके बालकुन्दानिविद्धं नीता लोघ्रप्रसवरजसा पाण्डुतामानने श्रीः।
चूडापाशे नवकुरबकं चारु कर्णे शरीषं सीमन्ते च त्वदुगमजं यत्र नीपं वधूनाम्॥⁶**

अत्र वर्णितमस्ति यत् अलकायां कामिनीनां करे कमलं चूर्णकुन्तलेषु माध्यपुष्पगुम्फनम्, मुखशोभा लोघ्रपुष्परणेण पाण्डुः, केशपाशे वासन्तं नवकुरबकपुष्पं, श्रोत्रे सुन्दरं शरीषपुष्पं, केशसीमिन् च त्वदाभिर्भावजनितं कदम्बपुष्पं वर्तते।

अलकापुर्याः प्राकृतिकसुषमायाः वर्णनं कृत्वा मेघः कथयति- अलकापुर्यां पादपाः सर्वदा कुसुमयुक्ताः मदोन्मत्तभ्रमैः शब्दायमानाः दृश्यन्ते। कमलिन्योऽनवरतकमलाः हंसश्रेणिपरिवेष्टिताः, गृहमयूराः सततोज्ज्वलबर्हा, रजन्यश्च नित्यचन्द्रकोज्ज्वला अवलोकयन्ते। अलकापुर्यां सूर्योदये सति गतिवशाद् चूर्णकुन्तलस्रस्तैः मन्दारपुष्पैः स्वर्णलताखण्डैः, श्रोत्रपतितैः स्वर्णपच्चैः, शिरःस्थितैर्मौक्तिकस्रैः, स्तनवृत्तितन्तुभिः हरैश्चाभिसारिकाणां रात्रिमार्गः सङ्केतितो भवति।

यक्षपत्यास्तु गुहाङ्गणे एव मरकतबद्धसोपानमार्गा वापी वर्तते, तत्तीरं च वर्षामेघप्रियो मयूरो नृत्यति। तत्र कुरबकवृक्षावरणस्य माधवीलतामण्डपस्य समीपे वर्तमानो रत्नाशोकः कान्तः केसरश्चापि किमपि अधिकमेवोद्दीपकतां सम्पादयतः।

मेघदूते वर्णिताः रेवा-वेत्रवती-निर्विन्ध्या-शिप्रा-गम्भीरा-चर्मण्वती-गाङ्गादिनद्यः सन्ति आलम्बनात्मिकायाः प्रकृतेः प्रतिनिधिभूताः। मेघदूते एतासु नदीषु निर्विन्ध्या-गम्भीरादिभिर्नदीभिः सह मेघस्य सम्बन्धस्तथैव वर्णितोऽस्ति यथा नायिकाभिः सह नायकस्य जायते। मेघो



वेत्रवत्याः नद्याः जलं तथैव पिबति यथा कश्चिन्नायकः कस्याश्चिन्नायिकायाः सभ्रूभङ्गं मुखं पिबति, कामुकस्त्वस्याऽविकलं फलं च लभते तथाहि-

**तेषां दिक्षुप्रथितविदिशालक्षणां राजधानीगत्वा सद्यः फलमविकलं कामुकत्वस्य लब्ध्वा ।
तीरोपान्तस्तनितसुभगं पास्यसि स्वादुयस्मात् सभ्रूभङ्गं मुखमिव पयोवेत्रवत्याञ्चलोर्मि ॥⁷**

यक्षः पुनः कथयति- हे मेघ! तरङ्गचलनेन शब्दायमानाः पक्षिणो रसनागुणा इव वर्तन्ते । उपलस्यलनेन मनोहरं यथा तथा प्रवहन्त्या नाभिसदृशं जलभ्रमं दर्शयन्त्याः कामिनीसदृश्यास्तस्या निर्विन्ध्यायास्त्वं पथि रसमनुभवः । यतः कामिनीनां कान्तेषु विलसप्रदर्शनमेव प्राथमिकं प्रार्थनावाक्यं भवति । तथा हि-

**वीचिक्षोभस्तनितविहगश्रेणिकाञ्चीगुणायाः संसर्पन्त्याः स्वलितसुभगं दर्शितावर्तनाभेः ।
निर्विन्ध्यायाः पथि भव रसाभ्यन्तरः सन्निपत्य स्त्रीणामाह्वं प्रणयवचनं विभ्रमो हि प्रियेषु ॥⁸**

परिणतफलशोभाभिः वनाम्रैश्छन्नोपान्तः आम्रकूटपर्वतः कृष्णवर्णं मेघे आरूढे सति पृथिवीरूपिण्याः नायिकायाः स्तन इव शोभते यो मध्ये श्यामः शेषविस्तारे च पाण्डुवर्णो भवति-

**छन्नोपान्तः परिणतफलशोभाभिः काननाम्रैस्त्वय्यारूढे शिखरमचलः स्निग्धवेणीसवर्णे ।
नूनं यास्यत्यमरमिथुनप्रेक्षणीयामवस्थायां मध्ये श्यामः स्तन इव भुवः शेषविस्तारपाण्डुः ॥⁹**

गम्भीरायाः नद्याः जलं तथैव निर्मलमस्ति यथा उदात्तनायिकायाश्चेतः प्रसन्नं स्यात् । तथा च तत्र चञ्चलमीनोल्लुण्ठनावलोकनानि कुमुदधवलानि सन्ति । तथा हि-

**गम्भीरायाः पयसि सरितश्चेतसीव प्रसन्ने छायात्मापि प्रकृतिसुभगो लप्स्यते ते प्रवेशम् ।
तस्मादस्याः कुमुदविशदान्यर्हसि त्वं न धैर्यान्मोघीकर्तुं चटुलशफरोद्धर्तनप्रेक्षितानि ॥¹⁰**

निष्कर्षतः कथितं शक्यते यत् मेघदूतं कव्यं अस्माकं समक्षे प्रकृतिदेव्याः नयनाभिरामां छविं प्रस्तौति

- 1) हर्षचरिते - 1-16
- 2) पूर्वमेघे - 6
- 3) पूर्वमेघे - 15
- 4) पूर्वमेघे - 23
- 5) पूर्वमेघे - 3
- 6) उत्तरमेघे - 2
- 7) पूर्वमेघे - 24
- 8) पूर्वमेघे - 28
- 9) पूर्वमेघे - 18
- 10) पूर्वमेघे - 40



ACCESSIBLE AND INCLUSIVE 2019 ELECTIONS FOR PERSONS WITH DISABILITIES IN INDIA: SOME OBSERVATIONS

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Abstract

Perhaps, India is the highest disabled populated democratic Country. But Persons with Disabilities in India are marginalized and disadvantaged group for Centuries together in all aspects of their lives. Predominantly political environment is pathetic, apathetic and inaccessible to them even 7 decades after attaining independence. They remain largely disenfranchised and unable to participate in the political life of the country due to attitudinal and physical barriers and similar factors. In this frustrating scenario, the current paper addresses the conceptual understanding of disability and accessible elections, legal framework for accessible elections, initiatives of ECI for accessible elections, Barriers for accessible voting of PWDs and recommendations for effective participation and inclusion of PWDs in the electoral process during 2019 Lok sabha and subsequent State assembly elections.

Keywords : Accessible elections, Accessibility, PWDs, PWD voters, disabled voters.

“The disability is not the problem. The accessibility is the problem“
Mohamed Jemni

Introduction

The union and state governments are striving for political development of socially and economically disabled sections of the society. But Persons with Disabilities (hear afterwards read as PWDs) totally neglected particularly in political affairs. As per the 2011 Census only 26,810,557 (2.21 per cent) of Indian population is suffering from 8 categories of severe disabilities (Census of India, 2019). In fact, other sources have estimated the numbers to be as high as 6 to 8 Crore PWDs residing in Indian sub-continent (Centre for Law and Policy Research, 2019).

However, PWDs in India are marginalized and disadvantaged group for Centuries together in all aspects of their lives. Predominantly political environment is pathetic, apathetic and inaccessible to them even 7 decades after attaining independence. They remain largely disenfranchised and unable to participate in the political life of the country. They cannot vote independently. (Alan Roulstone, 2012). There was no attempt to ensure that PWDs have access



to election related information and processes such as voter registration process, information relating to contesting candidates and their campaign materials, manifestos of political parties, obtaining electoral cards, alternate means of casting votes, transportation to polling stations, access to voting booths, electronic voting machines to cast their votes (Centre for Law and Policy Research, 2019).

Despite orders from the Supreme Court of India during 2004 to make elections accessible to PWDs (Pandey, 2005) the Election Commission of India disclosed numerous barriers hindering the access of persons with disabilities to the electoral process. The general elections for Lok-sabha scheduled recently, there is an urgent need to address this issue to ensure that all categories of persons with Disabilities are able to vote and that elections are conducted in a participatory and inclusive manner.

In the light of upcoming 2019 Lok-sabha and 4 State Assembly elections the current paper addresses the conceptual understanding of disability and accessible elections, legal framework for accessible elections, initiatives of ECI for accessible elections, Barriers for accessible voting of PWDs, and recommendations for effective participation and inclusion of PWDs in the electoral process.

Methodology

The current paper is prepared using secondary sources such as policy documents, magazines, journals, books, online resources and other encyclopedic works.

Conceptual Understanding of Disability

Persons with deformities in the Indian subcontinent have been variously defined and categorized in different periods in the history. But the official understanding of disability entered Indian circles only as late as the second part of 1990s with the introduction of landmark legislation of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (Naidu, 2012). The Rights of Persons with Disabilities Act, 2016 was notified on December 28 2016 to make it compliant with the UNCRPD and has replaced the Persons with Disabilities Act, 1995 (Naidu, 2018). The Act defined disability based on an evolving and dynamic concept. Disability as a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others. A person with not less than forty per cent of a specified disability certified by the certifying authority is defined as a person with benchmark disability and only persons so defined will be eligible to the benefits/services made available by the state. The Act recognized 21 categories of disabilities namely Blindness, Low vision, Leprosy-cured, Hearing impairment, Loco motor disability, Mental



retardation, Mental illness, cerebral palsy, dwarfism, muscular dystrophy, acid attack victims, hard of hearing, speech and language disability, specific learning disabilities, autism spectrum disorders, chronic neurological disorders such as multiple sclerosis and Parkinson's disease, blood disorders such as haemophilia, thalassemia, and sickle cell anemia, and multiple disabilities. The Act lays stress on non-discrimination, full and effective participation and inclusion of PWDs in society, equality of opportunity, accessibility, equality between men and women. The principle reflects a paradigm shift in thinking about disability from a social welfare concern to a human rights issue (Ministry for Law and Social Justice, 2016).

Accessible Elections and Persons with Disabilities

Voters having any one among the 21 disabilities mentioned above are termed as voters with disabilities. Every Indian citizen with disability who has attained the age of 18 years on the qualifying date i.e. first day of January of the year of revision of electoral roll is eligible to be registered as a voter in the roll of the polling area of the constituency of which he/she is a resident. An eligible person with disability can get enrolled in electoral roll on par with their non-disabled counterparts. access to elections and voting for PWDs is a matter of right and the State is constitutionally mandated to provide and enhance full political participation for them (Election Commission of India, 2019).

Legal Protections for Right to Vote of PWDS

There are several legal provisions for removal of attitudinal and physical barriers for PWD voters. In fact, The Disability Rights Group (DRG), an apolitical association of individuals and organisations of PWDs, sent a letter to the Chief Justice of India praying for his intervention to make polling booths and stations accessible, with Braille signages on the electronic voting machines (EVMs), interpreters for the deaf and ramps for wheel-chair users.

The Supreme Court of India converted the letter in to PIL and Harish N. Salve was appointed as Amicus Curiae to assist the Court in the proceedings. Interim orders of the Court directed that efforts be made to ensure accessibility, across the country. Strategically combining the constitutional right to political participation of every citizen to vote with dignity and in secrecy, with the non-discrimination clause of the act. Further, The Court was pleased to direct the Chief Secretaries of respective States to ensure that wooden ramps were made available for elections in April 2004 in all polling stations - at least in the cities and urban areas - to enable PWD voters to reach the polling stations and cast their votes. A similar order was obtained by the same group in the Bombay High Court for their state assembly elections also (Pandey, 2005).



According to the Bombay and other high court orders every polling booth should have ramps, Braille for visually impaired to cast their votes. PWD voters need not required to stand in queues, disabled voters will be allowed facility of a companion of their choice to assist them in entering the booth and in casting their vote and assistance should be provided by the staff on duty to escort the voter on a wheel chair inside the booth. Subsequently, the Election Commissioner had given an assurance to the Supreme Court during 2007 that all the necessary arrangements will be made as per the directions of the Court (Centre for the Law and Society, 2019). In addition to above legal protections, section 11 of Rights of Persons with Disabilities Act 2016 mandates the Election Commission of India to ensure that all polling stations and all materials related to the electoral process are easily understandable and accessible to them (Ministry for Law and Social justice, 2016).

Initiatives of ECI for Political Participation and Inclusion of PWDS in Elections:

The Election Commission has identified that the greater participation of PWDs in the electoral process is as one of the core objectives under the EC's Strategic Plan 2016-2025 and initiated several measures for effective inclusion of PWDs in political participation and Nation building process.

1. The ECI had conducted district, State and National level consultations across the country to identify the barriers, challenges and to find out possible solutions for effective participation of PWD voters.
2. The ECI has resolved to booth-wise mapping of PwDs, accessibility enhancements at polling stations, PwD friendly websites and awareness programmes, registration and sensitisation camps, partnering with PwDs as icons, collaboration with NGOs and sensitisation of the election machinery during the National consultations (the Hindu, 2018).
3. The ECI has also organised International conference on 'inclusion of Persons with disabilities in electoral processes' during 24-01-2018 in New Delhi (International Conference reader, 2019).
4. The ECI has realized the special needs of PWDs and designed and developed its website with accessibility features comply with the international standards. The website is particularly made screen reader accessible to enable the visually impaired to access the content with JAWS, NVDA and other similar screen readers.
5. The EC had declared "Accessible Elections" as the theme for the National Voters Day for this year and observed on January 25 and conducted various competitions to create awareness among the students issues relating to inclusion of PWDs in polling process.



6. The EC has released the paper “Breaking the Barriers: Making Elections Accessible”, no voter is left behind and noted that data of persons with disabilities should not be displayed on website, nor shared, to maintain their privacy.
7. The Election Commission HAS launched a systematic voter education and electoral participation portal on July 3 2018 with a section dedicated to the PWDs (The Hindu, 2018), (SVEEP., 2019).
8. The programme on “Inclusion of Persons with Disabilities in the Electoral Process” is being organized with a view to come up with a national policy on the issue.
9. The Commission plans to employ technology to overcome the challenges in effective communication with PWDs. Apart from preparing publicity material in sign language and Braille script in regional languages, it is stressing on developing audio applications like voice SMS (web or mobile) for their registration.

Strategic Framework on Accessible Elections:

ECI has announced to provide Printing of EPIC (Electors Photo Identity Card) with Braille for visually impaired, Accessible Communication Awareness Materials, A Mobile Application to motivate and educate PWD voters, Appointment of Disability Coordinators at AC, District and State Level, Cascaded training on Accessibility to Poll officials, arrangement of Auxiliary Polling Stations, Accessible Photo Voter Slips, Sign Language window in all the audio visual training and advertisement content material, Free Transport Facility for PwDs and their Assistants and other series of strategic measures for facilitation of PWD voters (India International Institute of Democracy and Electoral Management, 2019).

Directions and Guide Lines of Eci for Conduct of Accessible Elections:

The ECI has recently issued Directions and Guidelines in Election Management and Planning for conducting accessible elections such as Identification of polling station wise PWDs, provision for filling up voter registration forms, Assured Minimum Facilities at Polling Stations, Involvement of NGOs, CSOs/DPOs, RWAs, System Sensitization and Training, Use of technology to provide help to PWDs, Cooperation of Political Parties, Building a comprehensive Statistical Data Base, Utilising the services of volunteers, Training and Sensitization of Officials handing the work relating to PwDs and other broad areas (Election Commission of India, 2019).



Basic Voting Facilities for PWD Voters at Polling Stations:

The ECI has been providing several basic facilities to encourage voters with disabilities to franchise their votes without any discrimination on par with their non-disabled counterparts. Further, the ECI has been extending various services to overcome the limitations of their disabilities while voting. Voters with high support needs may request the ECI for a volunteer or for a wheel chair or any other facility with the support of PWD android mobile application prior to the voting day. Prior booking of parking facility and free transport facilities are also available in some constituencies.

Assured Minimum Facilities such as signage, help desk, polling booth at ground floor, obstacle free wide leveled pathway from entrance to voting compartment, Ramp as per GOI standards, Accessible Toilets, Drinking Water, separate Entry and Exit, Lighting, accessible furniture, Braille ballot guide, adjustable Braille embossed EVMs, wheel chairs, booth volunteers and display of accessible posters on information pertaining to voting are also available in the polling stations (Election commission of India, 2019).

Free transport facility is also be made available to all PWDs and their companions in local public transport system. The ECI provides dedicated parking system for vehicles of voters with disabilities. Priority entry is provided to voters with disabilities without having to wait in queue at polling booths. Voters with visual disabilities can bring their companion to assist them in casting their votes. Alternatively, a voter with disability may take the assistance of booth volunteer / presiding officer as well. Trained & sensitised Polling personnel on special needs of PWDs are available in polling stations (Conference Reader of the International Conference on Inclusion of Persons with Disabilities in Electoral Processes, 2019).

The Election Commission had conducted 14th, 15th and 16th Lok-sabha elections and two to three State assembly elections in every State soon after the pronouncement of the judgment of the Supreme court. A series of PwD-friendly measures were taken in recent elections held in States such as Assam, Delhi, Goa, Kerala, Karnataka, Bihar, Assam, Mizoram, Himachal Pradesh, Bihar, Chhattisgarh, Maharashtra, Rajasthan, Uttarakhand, Madhya Pradesh and Telangana. The ECI has made inclusive elections a key priority of the upcoming national election. All efforts are being made to ensure people with disabilities who are eligible to vote, do so in a free and fair manner (Punarbhava, 2019). The Commission has completed a thorough mapping of PwD voters up to Assembly constituency level in various states. The commission has recently developed PWD android application to enable to reach the PWD voters directly. They can register for pick up and drop facilities to polling booths and to provide other necessary services (Play store, 2019). Further, the ECI ensures to provide dummy ballot papers in Braille to create awareness about elections amongst visually



impaired people also. There is no doubt that the ECI is moving in the right direction but lots more needs to be done.

But there is a huge gap for formulation of guide lines and programmes and their implementation with regard to PWD voters. The initiatives of the ECI are not reaching to the common disabled voters. The ECI revealed to an RTI query that the EC has not acted upon any of the recommendations specific to persons with intellectual and psycho-social disabilities across the country (Mithun MK., 2019).

Barriers for Electoral Participation of PWDS:

Even though there are existing legal provisions voters with disabilities are still facing both attitudinal and physical barriers. The political parties have attitudinal barriers like skepticism about the decision-making ability of PWDs. Moreover, poorly trained polling personnel not sensitized to the diverse needs of voters with disabilities can create a hostile environment.

Registration for right to vote through offline or online mode is not accessible to all categories of PWDs. Electoral awareness programs and campaigns, campaign materials and speeches are not accessible to all categories of PWDs. participation of voters with disabilities in the political campaigns is not possible. The websites of ECI, Parliament and various political parties are still inaccessible to screen reader users. Consequently, Centre for Internet & Society conducted a test during 2014 to determine the accessibility of websites of the Election Commission of India, Parliament and some key political parties in India and observed that almost 39 out of the 41 websites failed the test of accessibility and were not in compliance with the Web Content Accessibility Guidelines (“WCAG”) (Center for Internet and Society, 2019). . Accordingly the educated visually impaired voters are excluded from availing information. News, announcements, voter education information, campaign communication and election updates made over television are not accompanied by sign language/ subtitling/ captioning, so deaf persons are completely excluded from getting this information. The infrastructure, voting booths and voting machines are inaccessible. The infrastructure of voting sites is often a physical barrier, such as buildings without ramps, or polling booth counters that are too high to vote from wheel chair and pressing buttons on the Electronic voting missions are some of the barriers for the voters with locomotor disabled persons.

Communication is perhaps the most important aspect to be addressed while reaching out to PWDs. Persons with blindness or low vision would require an audio/ tactile output, large print and electronic texts. So that their technology can read it out to them. People with hearing impairment would require textual or picture based forms of communication. Whereas, Persons with physical, motor, cognitive and other kinds of disabilities would require a combination or multiple



formats to suit their choice of communication. Since communication takes place over different forms of media and for a variety of purposes at different stages of the election process, between multiple stakeholders such as the Government, political parties, media houses etc., it is critical that attention is given to standardizing accessible communication across the board to ensure easy and effective communication for all PWDs (GauravVivekBhatnagar, 2013).

The Association for Democratic Reforms case²⁰ and the PUCL case²¹ reiterate that the right to know the background of a candidate is a fundamental right of a voter (PUCLv., 2013). Thus voters with disabilities have a fundamental right in getting information about the backgrounds of candidates and parties in a accessible format. Unless such materials are available, a person with not be able to exercise his right to vote in proper direction.

Voting is a personal act often done in secrecy. It is an autonomous act of choice, which is political in nature. The Constitutional bench of the Supreme Court in KuidipNayar case held that “In a general election, the electors have to vote in a secret manner without fear that their votes would be disclosed to anyone or would result in victimization. The right to secrecy in voting has been upheld and strengthened by the Supreme Court in the 2009 case of PUCL v. Union of India (PUCL v. 2013). But in the context of voters with disabilities, this right is often diluted and directions are given to voting officials to allow disabled voters to take in family members or others to assist them. While this is seen as a measure to enable access, it is in fact a deprivation of the right of electors with disabilities to vote independently.

The ECI still refers to the Conduct of Elections Rules, 1961 which provides for “permitting a companion to accompany a blind/infirm elector to assist him/her to cast the vote.” This outdated provision infringes upon the autonomy and right to secrecy of the voter with disability (Pandey, 2005).

Often polling can be so intimidating that a voter with disability will bring a friend or family member to assist them. The presence of another person in the voting booth leads to the question of who is actually deciding the ballot selections. Whenever assisted voting occurs, coercion is a concern. Depending on poll officers to cast votes violates the dignity of the persons. Coercion and cheating are also concerns (Centre for Internet and Society 2019). There is a complete lack of alternative voting mechanisms, devices or even mobile polling booths. The list is only illustrative but in effect it means discouraging PwDs from exercise of their right to franchise. Despite that there are several barriers preventing participation of voters with disabilities in the electoral process. Barriers do dissuade PWDs from voting (Vikaspedia, 2019).

Conclusions and Recommendations

Despite having the Supreme Court directions and ECI guide lines, the disabled voter is left over even after conducting 16 Lok sabha and several State assembly



elections in this so called grate democratic country. In this frustrating scenario, the ECI need to implement the following recommendations for effective political participation of PWD voters 2019 general and subsequent assembly elections and inclusion of PWDs in the main stream of Indian democracy.

- All election officials should necessarily undergo a sensitization training to meet the diverse needs of PWDs.
- The ECI should ensure that officials involving in elections are sensitized to communicate with PWDs and address their special needs.
- Disabled Persons Organisations should be involved in the committee on accessibility, as well as at various stages of the election process.
- The ECI should Conduct voter education and information awareness programs for young voters with disabilities.
- PWD voters with high support needs can be register at their residence and voter IDs also be handed over to them.
- PWDs can be permitted to register their vote all over the year and ECI should conduct special voter registration drives in the premises of disability organizations.
- Voter registration centers should be accessible to all categories of PWDs particularly wheel-chair users.
- The ECI can Disseminate public information over radio and television in the final weeks of the elections encouraging PWDs to participate voter registration and voting.
- Registered PWD voters information should be provided in a website in an accessible format.
- The ECI should Ensure that there is a record of all registered voters with disabilities in each constituency along with their specific needs.
- ECI should use text messaging, e-mails, phone calls and letters to communicate locations of polling station and facilities available to them and other all election related communication to PWD voters directly.
- Communication must be made available in multiple formats and over different media such as print, television and websites to ensure that persons with different disabilities are able to access information in one way or another.
- The mobile phone must be recognized and used as a key tool for communicating election related information- both through voice calls, as well as through messaging.
- The PWD android mobile app should be redesigned as per the specific needs of all categories of voters with disabilities and similar apps can be developed in IOS, windows and other operating systems.
- A toll free help line may be made available throughout the country to assist voters with disabilities.



- All election material, manifestoes and contesting candidates information must be made available in large print, Braille, audio and other accessible formats upon request to a disabled voter.
- The ECI must direct All political parties and media houses to follow accessible communication guidelines and all websites relating to elections follow Web Content Accessibility Guidelines.
- No election related advertisement or communication should adversely depict PWD voters.
- Voters with high support needs who cannot travel to polling booths may be permitted to cast their votes through postal ballots.
- Mobile polling booths can be provided in hospitals, care-homes, institutions etc. in case of patients and persons with severe disabilities and elderly persons with prior intimation.
- Reception centers of polling stations provide live assistance on the poll day to PWD voters.
- The ECI should provide free transportation to polling stations and to return to their homes after casting their votes.
- ECI may consider providing volunteers at each polling station to assist PWD and elderly voters.
- Sign language interpreters should be appointed to help the hearing impaired voters where ever their population is high.
- A demonstration voting machine for voters with disabilities to practice on before they enter a voting station would also be beneficial.
- All polling sites and buildings should be made accessible with ramps, lifts and necessary infrastructural modifications.
- Disabled voters should be given priority for voting and not made to wait in queues.
- Disability organisations should be involved in testing and training in the use of EVMs and mobile applications.
- EVMs can be accessible and there should be audio/tactile outputs.
- Poling personnel should permit voters with disabilities to use access technology or human assistance for voting as per their choice.
- New technologies may be used for monitoring and gathering data on accessible polling stations and data on disabled voter access.
- The election personnel should necessarily conduct Pre and Post-election reviews with voters with disabilities.
- There should be a complaint redressal mechanism to address grievances and special needs of voters with disabilities.
- ECI must review all its electoral policies, model code of conduct, administrative rules and practices in order to comply with Rights of Persons with Disabilities Act 2016.



Implementing these recommendations will significantly improve the participation of electors with disabilities in the elections. But the Indrajit Gupta Report, the Dinesh Goswami Report, the 170th Report of the Law Commission of India on Electoral Reforms and the bulky recommendations of the National Commission to Review the Working of the Constitution (NCRWC) 2002 did not touch the issue of need for disabled friendly electoral system. The election commission should implement subsequent judgments of supreme courts and high courts and create disabled friendly atmosphere in the electoral process. It is the responsibility of the Government to recognize the political rights of the disabled persons, honor their self respect and encourage their political participation for the successful implementation of parliamentary democracy in India.

References

1. Alan Roulstone, Carol Thomas and Nick Watson. (2012). Hand book of Disability Studies. The Changing Terrain of Disability Studies. Routledge.
2. Census of India. (2017 June 10). 2011 Census. Retrieved from Census of India website: www.censusofindia.gov.in
3. Centre for Internet and Society. (2019 March 14). Report on accessibility of websites. Retrieved from centre for internet and society's website: <http://cis-india.org/>
4. Centre for Law and Policy Research. (2019 March 10). Enabling Elections "Making the 2014 General Elections in India Participatory and Accessible for Voters with Disabilities". Retrieved from Internet and society website: <http://cis-india.org/>
5. Election Commission of India. (2019 March 5). Accessible Elections. Retrieved from Election Commission of India Website: www.eci.gov.in
6. GauravVivekBhatnagar. (2013). Not a Disabled Friendly Electoral System. The Hindu, 5th December, 201 3.
7. Janardhana Naidu G. (2012). Empowerment of Visually Challenged: a Study of Andhra Pradesh. Dis. Hyderabad: Osmania University, Hyderabad.
8. Janardhana Naidu G. (2018). Specific Legislations for Empowering Persons with Disabilities in India. International Journal of Multidisciplinary Educational Research. Volume 7 issue 2 (4) February 2018. P. 1-17.
9. Minister for Law and Justice, Government of India. (1996). The persons with disabilities act, 1995. New Delhi: Extraordinary gazette of India part 2.
10. Ministry for Law, Justice and Company Affairs., Government of India. (2016). Rights of Persons with Disabilities Act 2016. New Delhi: Ministry for Law, Justice and Company Affairs, Extraordinary gazette of India part 2.
11. Mithun MK. (2019 March 14). Elections in India still not accessible to persons with disabilities. Retrieved from the news minute website: <https://www.thenewsminute.com> > Telangana



12. Nina A. Kohn. (2007). Preserving Voting Rights in Long-Term Care Institutions: Facilitating Resident Voting while Maintaining Election Integrity in *McGeorge Law Review* (38).
13. Pandey, Shruti ,Priyanka Chirimar, &Deepika D'souza. (2005). *Disability and the Law*. New Delhi: Human Rights Law Network.
14. PUCL v. (201 3). Union of India WP(Civil) No. 1 61 of 2004 decided on 27th September, 201 3
15. Punarbhava. (2019 March 10). Disability statistics. Retrieved from punarbhava website: www.punarbhava.in
16. Systematic Voters' Education and Electoral Participation. (2019 March 15). Persons With Disabilities - Systematic Voters' Education and Electoral Participation. Retrieved from SVEEP website: www.ecisveep.nic.in/pwd/
17. The Hindu. (2018 July 1). Election Commission portal to aid disabled voters. Retrieved from the Hindu website: <https://www.thehindu.com> > News > National
18. Vikaspedia. (2019 March 15). Accessible Elections retrieved from vikaspedia website: www.vikaspedia.in.
19. Voice net. 2019 March 18. Inclusion of Persons with Disabilities in Electoral Processes. Retrieved from International Conference reader website: www.voicenet.in/data/ConferenceReader-PwDs.pdf



PROFESSIONAL COMMITMENT OF TEACHER EDUCATORS OF SELF FINANCED B.ED. COLLEGES OF PUNJAB

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Abstract

This is a factual study that makes an effort to measure the professional commitment of the teacher educators of self-financed B.Ed. Colleges of Punjab in relation to certain categorical variables. Systematic random sampling technique is used to draw the samples of about 150 and the selected sample is categorized gender wise, age wise, teaching experience wise and according to the subject of teaching wise. Professional commitment scale for teacher educators of Vishal Sood (2011) is used to collect data from teacher educators. Descriptive statistics, i.e., mean, median, t-test and ANOVA are used to peruse the data. The findings of the study designates that educators' commitment diverge significantly in relation to gender, age, teaching experience but the difference is significant in relation to subject of teaching.

Key Words: Professional Commitment, Teacher Educators

Introduction

Professional commitment refers to single mindedness of a person towards a profession. Webster's New World Dictionary (1979) said, "Commitment is referred to as pledging or binding of one self, in continuing a course of action." Commitment is a broad concept. It straight away to all professional areas of life. It is possible for a professional to get dissatisfied with some aspect of his profession. But the dissatisfaction can be gradually removed by adopting more rational orientations towards the totality of the professional load. This reality needs to be kept in mind by all teachers that they should be engaged in the noblest profession of life. Cohen (2003) mentioned commitment as person's attitude, belief system and intension to work. Teaching profession is the Nobel profession and associates with lot of activities such as scholastic activities, non-scholastic activities, co-operative performance, and often administrative performance. Skidmore (2007) defined professionally committed teachers as those teachers who are: a) dedicated to developing themselves professionally by seeking advanced degrees and standards- based professional growth opportunities; b) critically reflective in their practice by seeking meaningful feedback and discourse, and engagement in action research; c)



advancing the training profession through the creation of professional learning communities and teachers' contributions to leadership positions. Teacher educators are the most important element in teacher education because they construct creative and skillful teachers so a high commitment level of teacher educators. So a high commitment level of teacher educators is crucial so that they are able to implement teacher education curriculum effectively. NCTE (1998) also prominences upon the competency based and commitment oriented teacher education programme. Educators with higher professional commitment always execute positive behavior to his profession. Professional commitment increases punctuality and accountability of the teacher educators and help them to perform their function smoothly.

In a nut shell, being committed to the profession includes pride in one's profession, passion for teaching, drive for excellence, professional attitudes, faithful to the organization, integrity, ethics, being a good role model, positive regard for the students colleagues, self awareness, humility, dynamism, well-rounded personality, optimism, patience for learning and motivation for self improvement and desire for professional development. Professionalism demands that teacher should be innovative in their attitudes, flexible in their approach, inquisitive and reflective in their mind, always refreshing themselves with new knowledge, recognizing the value and potential of the learner and providing an enriched learning environment.

Review of related Literature

Ravinder Kaur et al. (2011) used for data collection. The results of the study highlighted that maximum number of teachers have acquired average and low level of professional commitment. Professional commitment did not vary significantly in relation to gender. The male and female teachers have same level of professional commitment but varied significantly in relation to locality of school and type of management.

Gujjar (2014) studied the professional commitment of teacher trainees of B.Ed College. It was found that professional commitment level of teacher educators did not differ significantly in relation to gender, habitat and educational backgrounds. Additionally, professional work commitment level of teacher educators varied significantly in relation to academic qualification.

Arjunan and Balamurugan (2015) conducted a study on Professional commitment of teachers working in Tribal area schools. The sample consisted of school teachers working at secondary and higher secondary levels in Holli hills and Sitheri Hills. Professional commitment scale by

Singh and kumar (2015) examined professional commitment with higher and less experienced teachers and it was found that the difference of professional commitment of secondary school teachers was not significant in relation to their



gender and teaching experience. Consequently most of the studies on professional commitment were engaged to explore the external determinants only. The present study also addressed the similar issues.

Significance of the Study

The progress of a country depends upon the standard of its teachers are called the national builders. But, a teacher cannot perform his or her multifarious tasks and responsibilities until he or she is not updated professionally and personally. So like, various other professions, teacher education has assumed special significance. Teacher is the midway in educational system holding various important responsibilities. Education is a constructive process which drags a person from darkness, poverty and misery and leads him to the pool of prosperity and happiness by developing his/her in the entire aspects i.e. physical, mental, social, emotional, organizational and spiritual. It is a lifelong process that starts from the birth of an individual and continues till death. A school is a miniature of the society. Both professional commitment and organizational plans are often evaluated by measure of student's achievements the study might help to understand the professional commitment of teacher educators of Punjab. This intern may help to take necessary measures so that the level of professional commitment may be enhanced.

Objectives of the Study

- To find out the difference, if any, in the professional commitment of teacher educators due to the variation of gender.
- To find out the difference, if any, in the professional commitment of teacher educators due to the variation of age of teacher educators.
- To find out the difference, if any, in the professional commitment of teacher educators due to the variation of teaching experience.
- To find out the difference, if any, in the professional commitment of teacher educators due to the variation of subject of teaching.

Hypotheses of the study

Ho1 - There is no significant difference in professional commitment of teacher educators in relation to their gender.

Ho2 - There is no significant difference in professional commitment of teacher educators in relation to their age.

Ho3 - There is no significant difference in professional commitment of teacher educators in relation to their teaching experience.

Ho4 - There is no significant difference in professional commitment of teacher educators in relation to the subject of teaching.



Methodology: In the present study, descriptive survey method was employed to examine the professional commitment of teacher educators of self financed B.Ed. colleges of Punjab.

Population: Teacher educators of self financed B. Ed. Colleges of Punjab were the population of this study.

Sample: The sample of 150 teacher educators was taken from the population through systematic random sampling technique. The selected sample was categorized gender wise (Male and Female), age wise (Below and above 30 year), teaching experience wise (below 2 years, 2-5 years and above 5 years), and subject of teaching wise.

Design of the Research

In the present investigation, Professional Commitment was taken as the dependent variable where as Gender, age, teaching experience and subject of teaching wise was the categorical variables. The main purpose of the study was to see that how far the dependent variable influenced categorical variables. In the present study, descriptive survey method was used to study the professional commitment of teacher educators of self financed B.Ed. colleges of Punjab.

Sampling Frame: The table 1 shows the detail description about the sample:-

Major Variable	Categorical Variables		Number of teachers	Total
Professional Commitment	Gender	Male	85(57%)	150
		Female	65(43%)	
	Age	Below 30	78(52%)	150
		Above 30	72(48%)	
	Teaching Experience	Below two years	65(43%)	150
		Two to five years	48(32%)	
		Above five years	37(25%)	
	Subject of teaching	Language Method	42 (28%)	150
		Science Method	37(25)	
		Mathematics Method	37(25%)	
Social Science Method		34(22%)		

Variables of the present study:

Dependent Variable: Professional Commitment

Categorical Variables:

- Gender (Male/ Female)
- Age (Below 30 years / Above 30 years).
- Teaching experience (Below two years/Two to five years/above five years).
- Subject of teaching (Language method / Science method / Mathematics method / Social science method).



Tool for Data Collection: Professional Commitment scale for teacher educators (PCSTE) was developed by Dr. Vishal Sood (2011) for teacher educators. The main intend of the present scale is to measure and assess commitment level of teacher educators towards their profession of teacher training. The present scale has been specifically developed for teacher educators working at B.Ed./JBT level. This scale measures Professional Commitment through 70 statements. It is a five point's likert scale ranging from strongly agrees to strongly disagree. There are 65 positive items scoring 5 to 1 and 5 negative items scoring 1 to 5 in reverse order. The reliability of the scale was established by administering the scale on a conveniently selected sample of 30 teacher educators of B.Ed colleges. The Professional Commitment scale was regulated on a sample of 30 teacher educators drawn from B.Ed. Colleges Reliability of the Questionnaire has been established by using Spearman Browns Formula; the 'r' value is computed as 0.9708 for the questionnaire and is found that the tool is highly reliable. The square root of reliability was also computed and in the present study it was worked out to be 0.9852 indicating that the tool is highly valid. The dimension wise items distributions are given table 2 below:

Table 2: Items distributions of the scale

Sr. No.	Dimensions	Items	Total	Grand Total	
1.	Commitment to the learns	Positive	1, 2, 3, 5, 15, 16, 29, 38, 47, 50, 60, 63, 69	13	15
		Negative	6, 68	2	
2.	Commitment to the society	Positive	10, 17, 18, 19, 33, 35, 43, 46, 51, 52, 54, 61, 62, 64	14	14
		Negative	-----	----	
3.	Commitment to the profession	Positive	8, 14, 23, 24, 27, 28, 31, 37, 42, 44, 56, 58	12	14
		Negative	36, 40	2	
4.	Commitment to achieve excellence for professional actions	Positive	7, 13, 20, 22, 25, 26, 30, 39, 41, 53, 57, 59, 67, 70	14	15
		Negative	9	1	
5.	Commitment to basic values	Positive	4, 11, 12, 21, 32, 34, 45, 48, 49, 55, 65, 66	12	12
		Negative	-----		
			Total	70	

[PCSTE- Vishal Sood]

Data Analysis and Interpretation:

H01: There is no significant difference in professional commitment of teacher educators in relation to their gender.



Table 3: Test of significant in relation to gender (Male and Female)

Major variable	Categorical variable		Mean	Df	t-value	P(T<t) two-tail	Significant status
Professional commitment	Gender	Male	253.84	148	3.58	0.00	S (0.05 level)
		Female	268.42				

The table=3 be in view that the calculated value of $t=3.58$ and $p=0.00$ ($p<0.05$). The t-value is significant at 0.05 levels. Hence the null hypothesis H_{o1} is rejected. It is safely terminated that difference in professional commitment of teacher educators is significant in relation to their gender where female teachers have higher professional commitment.

H_{o2} - There is no significant difference in professional commitment of teacher educators in relation to their age.

Table 4: Test of significant in relation to age (Below 30 years and above 30 years)

Major variable	Categorical variable		Mean	df	t-value	P(T<t) two-tail	Significant status
Professional commitment	Age	Below 30 years	265.62	148	2.11	0.03	S (0.05 level)
		Above 30 years	256.56				

The table=4 shows that the calculated value of $t=2.11$ and $p=0.03$ ($p<0.05$). The t-value is significant at 0.05 levels. Hence the null hypothesis H_{o2} is rejected. It is safely concluded that difference in professional commitment of teacher educators is significant in relation to their age. It appears that relatively younger teachers are more committed than those who are relating older.

H_{o3} - There is no significant difference in professional commitment of teacher educators in relation to their teaching experience.

Table 5 and 6: Test of significant of professional commitment among different groups of teaching experience (Below two years / Two to five years / above five years)

ANOVA SUMMERY				
Groups	Count	Sum	Mean Average	Variance
Below two years	65	17281	265.8615	944.5274
Two to five years	48	12524	260.9167	733.5674
Above five years	37	9239	249.7027	296.8258



ANOVA SUMMERY							
Source of variation	SS	df	MS	F	P-value	F crit	
Between Groups	6183.943	2	3091.972	4.303629	0.015263	4.7525	
Within Groups	105613.2	147	718.4568				
Total	111797.1	149					

The table=6 shows that the F value of ANOVA test is 4.303629 and $p=0.01$ ($p<0.05$). The F value is significant at 0.05 levels. Hence the H_03 is rejected. It is safely concluded that difference in professional commitment of teacher educators is significant in relation to their teaching experience. It is interesting to note that professional commitment decreases significant with experience.

Table 7: Test of significance between two groups of teaching experience (Below two years and Two to five years)

Major variable	Categorical variable		Mean	df	t-value	P(T<t) two-tail	Significant status
Professional commitment	Teaching Experience	Below two years	265.87	111	0.88	0.37	NS (0.05 level)
		Two to five years	260.91				

The table=7 shows that the calculated value of $t=0.88$ and $p=0.37$ ($p>0.05$). The t-value of between these two groups is not significant at 0.05 levels. Thus, it is concluded that the difference in professional commitment is insignificant between these two groups below two years and Two to five years of teaching experience.

Table 8: Test of significance between two groups of teaching experience (Two to five years and above five years)

Major variable	Categorical variable		Mean	df	t-value	P(T<t) two-tail	Significant status
Professional commitment	Teaching Experience	Two to five years	260.91	83	2.19	0.03	S (0.05 level)
		Above five years	249.70				

The table=8 shows that the calculated value of $t=2.19$ and $p=0.03$ ($p>0.05$). The t-value of between these two groups is significant at 0.05 levels. Thus, it is concluded that the difference in professional commitment is significant between these two groups Two to five years and above five years of teaching experience.



Table 9: Test of significance between two groups of teaching experience (Below two years and above five years)

Major variable	Categorical variable		Mean	df	t-value	P(T<t) two-tail	Significant status
Professional commitment	Teaching Experience	Below two years	265.86	100	2.94	0.00	S (0.05 level)
		Above five years	249.70				

The table=9 shows that the calculated value of $t=2.94$ and $p=0.00$ ($p<0.05$). The t-value of between these two groups is significant at 0.05 levels. Thus, it is concluded that the difference in professional commitment is significant between these two groups Below two years and Above five years of teaching experience. Ho4 - There is no significant difference in professional commitment of teacher educators in relation to the subject of teaching.

Table 10 & 11: Test of significance of professional commitment among different subject groups teaching (Language method / Science method / Mathematics method / Social science method)

ANOVA SUMMARY				
Groups	Count	Sum	Average	Variance
Language method	42	11165	265.8333	1095.167
Science method	37	9278	257.7222	734.778
Mathematics method	37	9265	257.3611	898.9802
Social Science method	34	8826	259.5882	955.1586

ANOVA							
Source of variation	SS	df	MS	F	P-value	F crit	
Between Groups	1852.701	3	617.567	0.665623	0.574483	3.920555	
Within Groups	133603.6	146	927.8028				
Total	135456.3	149					

The table=11 states that the F value of ANOVA test is 0.665623 and $p=0.57$ ($p>0.05$). The F value is not significant at 0.05 level. Hence the Ho4 is retained. It is safely concluded that difference in professional commitment of teacher educators is insignificant in relation to their subject of teaching.

Discussion of Results:

The study showed that the professional commitment of teacher educators varies significantly in relation to gender. Female educators have better commitment (mean value 268.41) than their male counterparts (mean value 253.83). This finding contradicts with the finding of Borman and Dowling (2008) where they concluded that male teachers were more professionally committed than their



female counterparts. The finding of the present study coincides with the finding of Park (2005) who highlighted that female teachers had better commitment than male teachers. In regarding to the age of educators the study showed that below 30 year educators were more committed than their above 30 years counterparts. Below 30 years educators mean value (265.61) was much better than above 30 years educators (256.55). This finding coincides with the finding of Hung and Liu (2013) who concluded that professional commitment was significantly related with the age of teachers. Professional commitment varies significantly in relation to teaching experience. The study showed that low experience educators were more committed than higher experience educators. In this study three experience levels were taken: below two years, two to five years and above five years. The study showed that the educators with below two years of teaching experience and two to five years of teaching experience have no significant difference in their professional commitment. Whereas the commitment of these two levels differs significantly with the above five years of teaching experience. This finding contradicts with the finding of Arjunan and Balamurugan (2013) who tried to measure the professional commitment in relation to teaching experience (below 5 years, 5-10 years and 10-15 years) and reported that more experience teachers had better professional commitment and the teacher with low experience teachers had low professional commitment. In regarding to the subject of teaching the study showed that the difference of professional commitment was not significant. This finding coincides with the finding of Gajjar (2014) who also highlighted that the difference of professional commitment was insignificant between the science educational background teacher trainees and non science educational background teacher's trainees.

Conclusion: The study showed that the female educators were more committed than male educators. It might be due to the better adjustment ability, more aggressive to professional outcomes, and activeness of female educators with their profession. Comparatively low aged educators (below 30 years) are more committed with the profession. The educators with the age of below 30 years were more enthusiastic, more energetic, more responsible and active to their profession. The study showed that educators with below five years of experience have more or less equally committed with their profession but higher experience educators (more than 5 years) are less committed than the educators with below 5 years of experience. This was appeared due to the unfavorable experiences were gathered previously by the more experienced educators of self financed colleges. The differences of commitment of different method subject's educators were insignificant. This indicated that the educators irrespective of methods of teaching have more or less equal knowledge about their subject and they aware about their responsibilities, punctualities and values of their profession.



References

1. Arjunan, M. and Balamurugan, M. (2013): Professional commitment of teachers working in tribal area schools. International journal of current research and development. V-2(1), pp-65-74.
2. Borman, G. D, and Dowling, N. M. (2008). Teacher attrition and retention- a meta analytical and narrative review of the research. Review of educational research, American research association. V-78(3), pp-367-404.
3. Gupta, M. & Nain, I. (2016). Professional commitment, role conflict and life satisfaction: A gender based study of teacher educators. International Interdisciplinary Research Journal.4 (3), 25-34, 2347-6915.
4. Hung, A. & Liu, J. (1999). Effect of Stay-Back on teachers professional commitment. International journal of educational management. V-13(5), pp-226-241.
5. Kanter, R. M. (1974). Commitment and social organization. London: Nelson. Park, I. (2005). Teacher commitment and its effects on student achievement in american high schools. Educational research and evaluation. V-11(5), pp-461- 485.
6. Kaur, K. (2013). Professional commitment of secondary school teachers of Punjab in relation to self-efficacy and motivation (Ph.D. thesis) Punjabi University, Patiala.
7. N. B. (2014). A study of professional work commitment of teacher trainee of B. Ed. College. Journal of research in humanities and social sciences. V-2(2), pp-54-57.
8. Singh, B. & Kumar, P. (2015). Professional commitment: study of more and less experienced teachers. Online international interdisciplinary research journal. V-5(1), pp-251-255.
9. Skidmore, S., T. (2007). Professionally committed teachers (PRISE White paper Number 2007-9). Retrieved January 10, 2017 from <http://price.tamu.edu/white.papers.html>.
10. Thapan, M. (1986). Forms of discourse: A typology of teachers and commitment. British journal of sociology and education. V- 7(4), pp-415-431.



AESTHETICS OF SURVIVAL AS NARRATIVE CONSCIENCE IN CORMAC MCCARTHY'S THE ROAD AND LOUISE LAWRENCE'S CHILDREN OF THE DUST

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Cormac McCarthy's *The Road* and **Louise Lawrence's Children of the Dust** are generally considered to be two of the most scrupulously executed fictional explorations of trauma in contemporary literature. A threat of survival, typical of post-apocalyptic fictions, sets the pivotal tone of these novels. *The Road* is the threat of survival more in the physical world while **Children of the Dust** is more that of the spiritual world. Both novels concern the relationship between man and nature, man and man as well as man's spiritual world.

Cormac McCarthy's *The Road* is a story of a man and his son struggling to survive in a post-apocalyptic world. It seems dull and bleak that either of them will survive if they continue and persevere to do so. In these adverse circumstances his mother has given up the will to live and killed herself shortly before the story began. Another thing that is also not disclosed is how the nuclear war came about and who was responsible because the book makes it clear that these things do not matter and what only matters is the survival of our main characters and what they must go through to preserve their character in order to stay alive even with the loss of a loved one. The man believes that God has entrusted him into protecting him from the dangers that surrounds both of them. He is willing to protect his son by killing him rather than having the bad guys kill him. It can be seen that he makes great sacrifices in order to protect him and his son. He wants his son to carry the 'fire' which is the flame of humanity that is left in them and their objective is to spread that idea with the good people that they encounter.

The author makes the narrative conscience universal and the individual traits of the characters are completely brushed aside in the novel. The man and the boy go unnamed throughout the novel. It can be to show that they are the representatives of the situation of every man left. Personal details, visions, dreams, or the past of the characters are not described much. Due to this factor, the reader might find it hard to relate with character or be empathetic. Also through this form, the narrator aims to show that with the apocalypse humans have lost their identity of who they are and what they are. This concern is always fused with the narrative subtlety of the novel.



The boy is the only motivation that the father has and the only reason why he is still alive. He's a child who is very passionate about things like if they encounter someone on the road, he's very passionate about them and wants to help them in whatever way they can but the father does not share the same attitude. The father categorises people into two groups for the son to understand: 'Good Men' and 'bad men'. There are people who have turned cannibalistic in nature in order to survive. The protagonists are trying to escape from encountering with such people.

The thematic density of the novel too is permeated with the amorphous and enigmatic invisibility of the narrative conscience. The two major themes in this novel are morality and good versus evil. In a world that has abandoned all hope and goodness, death seems to always be a constant threat between the father and the son and in order to combat that they have to make decisions that don't always seem so moral. The reader is constantly probed to think whether the actions and decisions of the characters are good or not. As there are a lot of cannibals around them in the novel, resisting the urge to starve or resort to being inhuman takes huge effort which can be also seen as intense humanity as death is tested in front of them on a daily basis. The theme of carrying the fire which is to do the right thing even when it seems pointless or useless at the time because in reality doing the right thing is always doing good is shown throughout the novel. Wrong is wrong even if everyone does it, right is right even if you are the only one doing it. The right thing is difficult of course and the man and the boy are forced to face many obstacles in a goal of keeping justice alive. They endure many other people who threaten their lives and situations like the atomic winter or simply starvation and dehydration. Yet, even though it is difficult they don't give up or commit suicide. They don't give in to their lower urges and instead do the right thing no matter how terrible it makes their lives.

The other theme for the book on the fact that the father and son are not named is the entire idea to make it seem like this could possibly happen to anyone. In this situation it adds a lot more depth and power to the story by making it seem more personal than a simple narrative. The father himself is an old man worn by time and seems to have a persistent call that is slowly killing him. He carries the pistol with only a few shots and uses them very sparingly and carries at least one around so that the Sun can end his life should they be captured and cannibalized by savages so that he does not have to suffer. Although the man is somewhat bitter and does what he has to survive, he still maintains his morality and shows kindness and care to his son. The son, on the other hand, is young rather innocent but not entirely starved and usually said due to the world around him. He cries often at what he sees the acts of savagery like cannibalism, rape and other such terrors that exist in this world which make him sad and suicidal at times but the father reminds him to keep the fire alive. The father reminds the boy that life is



always worth living and good things are always worth fighting for and even in the end the boy never gives up on what he believes nor does the father.

Symbolic overtones of the novel too adds to the aesthetics of survival in the novel. One of the major symbols in the novel is 'ash', a strange symbol but one that is very important. The ash occurs when the bombs falls and all of the ash covers the buildings and ruins that remain in the world. The ash is dull and grey and makes the atmosphere seem hopeless. It represents hopelessness. It covers everything reminding everyone of how this world came to be and what happened to it. As the ash covers everything when they come across inside or outside of buildings, it reminds them that there is hopelessness and despair everywhere and that they could turn to it and give up but they don't. It covers the many dead bodies that they find along the way. The dead are covered in ash to symbolize that they are no more and are silent but the boy and the father will not remain silent and will continue to do the right thing no matter what it takes.

In the aesthetics of survival, the theme of hope is potentially relevant and this theme has been beautifully reiterated with the symbolic portrayal of the boy who turns out to be the biggest symbol in the story. He represents hope which is counted to be a rare treasure in this beruffled world. He maintains something of an innocence trying to see the best in people even when he comes across complete strangers. He tries to offer them food and sometimes medicine in order to help them. The father does not share the same attitude but the boy refuses to be as heartless as his father can be. It is the boy who shows the most humanity and kindness in the desolate world. He is always careful and cautious while going to places and pleads his father to be safe. He is grateful and prays when they come upon blessings like the basement filled with food. He represents hope that the world can be good once again and that you don't always have to give in to savagery or cannibalism and other such terrible acts in order to stay alive. He maintains the ways that his father teaches him and though he feels low at time he maintains his ways of morality and doesn't allow the world to cave in on him.

Human symbols are powerfully maintained in the novel to highlight the human factor of survival and wisdom. The people that they come across are given potential symbolic significance. Though a very select few are not hostile, many of them are simply tribes of Raiders who do whatever they have to stay alive. This includes cannibalism, rape, slavery and many other acts that shall not be named. They do atrocious things in order to survive and represent anarchy in this world. They don't care for morality anymore but only survival. They do not even care when a member in their party dies. For instance, when the boy and the father come across a raiding party and see that one of their members had died, they end up eating his body and leave nothing. They do not give him a proper burial or respect as they have no respect less. They do whatever they have to no



matter how grim their situation is. The father and son see their work all over the world but they trudge on and don't let it get to them.

Both the novels that are problematized in the present study concern themselves around traumatic subjectivity of a couple people who tune their life in the fear and struggle for survival. It is said that fear is the strongest motivator in the world. When people are in fear, they try to move forward as much as they can ignoring the obstruction in their way. Fear makes a person alert and aware. Fear also can consume your mind. How much it defines one is the choice one makes. In the book, fear is what makes the father and the boy survive despite their condition, it's what keeps them moving without taking much breaks. The shiver of any movement scares them. There are only a handful of people existing in the post-apocalyptic world that are willing to survive by any means. The fear of death keeps them going and also shows the human nature to clutch on to their dear lives as much as possible. Some people are willing to survive even by going cannibalistic. It is during these times that show how every human value their morals. The father and son represent the 'good men' who don't eat others. They represent those with humanity and values still left inside them. The 'bad men' are those who had turned barbarian and cannibalistic in nature. There are various examples of utter horror shown in the novel like the roasting of the new born infant by their own parents, humans locked under basement like animals for slaughter, sex etc. The fear in the man and the boy is always if they will run out of food to eat or being eaten by others.

The narrative is inseparably fused with the setting of the novel. The road is a symbol which signifies the meaning for journey. The whole novel is a journey done by the characters to reach the south as they cannot survive in the cold weather of their current place. It's also not mentioned in the book if the apocalypse has affected throughout the world or only in their county. Their only goal is to reach the south and does not mention their plans thereafter. The whole story is centred on the road. High states, interstates and crossroads become the definition of their lives. Also, while travelling they keep a small distance away from the road at the same time.

The narrative conscience is voiced in the third person omniscient point of view. At times, there are also instances where the father becomes the narrator. The novel is not divided into any chapters. This maybe to highlight the fact that the novel itself is a journey without any breaks or pauses. Due to this setup of novel and no action much involved the reader gets tired and exhausted like the characters. They become bleak and dim due to the nothingness that is portrayed in the story.

Cormac McCarthy uses many tools to achieve this sense of foreboding and gloomy atmosphere in the novel like description of burnt bodies as a yelling anguish to the skies seared to the pavement of a cracked road. The in-depth



explanation of the sky, the road or the trees and the amount of soil, ash and soot covering each is phenomenal. It creates a truly dark and depressing atmosphere. Secondly, the author plays on themes of a family very well. The father and son relationship as well as unspoken mother's suicide create much tension and a sense of foreboding.

The reader is constantly reading for the protagonists to survive and wills them to keep moving on toward their goal whenever either of the two is in danger. The reader becomes very engrossed and concerned when something inevitably bad does happen to one of them. It really emotionally affects the reader. Finally, the subject of morality when contrasted between the father and son with the rest of the human race creates a constant conflict between hope and hopelessness. The father constantly reassures the son that he is carrying the fire of goodness in the world and that if he dies so does the goodness of the human spirit. Due to the author's level of detail when describing the setting of the relationship between the father and son and the tension between good and evil, the road creates a dark and unforgiving atmosphere.

The novel also seems to highlight the fact that human's existence is absurd in the world. The characters are trying to find meaning to their existence. The theory of Absurdism can be found to be applied in many scenarios. The characters are exploring and searching for meaning while embracing their absurd condition of their existence. The existence of a human gets meaning with the individual's relationship with things and other humans, the father keeps moving forward with his life due to the existence of his son. The bond and the relationship between the father and son is beautifully portrayed in the novel. It is the only positive aspect in the book which gives the readers hope that humanity is still. The way how the father protects the child and tries to keep him away from all the evils to the child who keeps his father in check and cautious is perfectly described.

It is the boy who shows the most humanity and kindness in the desolate world. He constantly asks his father to help people like the child, the old man, the thief etc. He is always careful and cautious while going to places and pleads his father to be safe. He is grateful and prays when they come upon blessing like the basement filled with food. The man and the boy always reminds themselves that they are the good guys and that they're carrying the fire, The 'fire' can be understood as the morals, values and humanity that we carry inside us.

The aesthetics of survival is ruptured with the anguished ending of the novel, but this is rather to highlight the same theme. The story concludes with a very touching moment of the father passing away but reminding the son of what they fight for and that he will have to do the fighting on his own now. The boy stays with his father's dead corpse for some time until a kind older gentleman who is a father himself comes by and decides to take the boy with him on his



adventures. He decides to keep the boys morality alive to fight for what he fights for and to bring him into his family. We see that hope, morality and goodwill will continue throughout society even when it's torn apart. Even when it's hard the road reminds us that doing the right thing is always the good choice.

The second novel that is problematized in the present study, that is, Louise Lawrence's *Children of the Dust* too presents an eerie world of traumatic survival. My cry against the most monstrous weapon men have made' this is what Louise Lawrence talks about her novel *The Children of Dust*. The dust we can see throughout the novel is spread into both the land and the mind of the people who are trying to survive from the nuclear attack. The psychological void felt by the actual victims of the nuclear attack is what the major concern of the novel, the way innocent people struggled during the nuclear war attacks, through what they went through after the attack, the psychological trauma they went through.

Unlike the former novel, this novel is narrated in an episodic framework where the theme of survival is presented with a temporal significance. In the opening episode we find Sarah envisaging the vague, confusing futureless dust as something predetermined. It is through the portrayal of Sarah that the author launches the aesthetics of survival in the novel. She is the one who realises that there is a vast beautiful land yet to emerge from these ashes and dust. The novel talks about three generations in *Children of dust*. The dust set out in the novel speaks the story of destruction and decay of humanity. Confusion felt by women and children during the attack is what the major concern of the novel. An optimistic answer is arising when we read the first section of the novel.

The survival trauma is doubly charged in the narrative conscience of the novel when we realise that the whole novel centres more on women characters. We can see a girl of fifteen with visionary eyes, Sarah. She is the only one left with a hope in tomorrow. When Veronica, her step mother dies she takes the charge to protect her brother and sister from the nuclear attacks. She is even ready to sacrifice herself. The women characters through out the novel are superior in understanding and adapting to the worst situations through which they are going. As we know society has set out certain roles to different genders. Gender consciousness preserved through out these centuries work here. It is women characters who suffer the most. From Sarah to Simon there is a wide story of struggle of humans to adapt, to survive. But fleeing from the situations doesn't solve anything, it only make things worse.

This narrative space gives a vantage point for the readers to visualise the falling of a nuclear bomb in the first section. Sarah in her survival bend of mind tries to hold things tight together when things fall apart. She helps her step mother to save her siblings. From a big room they get congested into a little space. Due to the continuous bomb fall they cant go outside and they have only limited food. We can see even Sarah trying to steal things from a house where no



one is alive anymore. Different types of difficulties they have to go through is well portrayed by the author. When Sarah realises the catastrophic phase they are going through, she understands she has to cooperate with her step mother whom she once didn't like. She realises this is not the time to stay apart. Sarah even says 'we don't love each other ' to Veronica and Veronica replies 'then we must start. '

They understands that this is not the time for rivalry. This is what the world and circumstance teach Sarah. A woman she disliked becomes her most beloved . Sarah feels the emptiness ,void in her life as a girl and also as a victim of world war. she feels desperate not only because of the nuclear war but also as a girl child who does not have anyone to fill the space lacking love. She feels abandoned ,she feels lonely when Victoria says it is William and Catherine, her children and their future that concerns her the most. Sarah even asks what about her but she gets a unpleasant reply. By the time got worse Victoria finds Sarah lovable she starts caring Sarah and hands over her responsibility to Sarah when she feels her death near. We can see the responsibilities revolving around women. Men are not in even scene . William who is the smallest child even at the crucial time is not at all ready to adjust with the food left. He is conditioned to the way society has normalised gender roles . He represents male chauvinistic society where men are profited.

Both Sarah and Veronica stands as a symbol of love and sacrifices which is the only role asserted to women. Both chose death for the sake of their beloveds but Sarah is the one for whom we feel pity. She lives for nothing and dies for others .She earns nothing for herself at the end. In the case of William even he is a child the adamant attitude in him is a by-product of the formation of his psyche as a boy whereas Catherine tries to adjust she plays with her baby dolls , she is aware of the situation. She is very cautious about the health life and survival. It is in her genes. Sarah understands who is to survive that traumatic situation is Catherine. We can see through out the novel woman characters are suffering alot as mother as sister etc. And also we see the traumatic situation where after the nuclear bomb attack and all same women characters are left with no hope. They are put into a situation where things are getting worse for them. This is where we have to concern when language itself is gendered the traumatic effect on women also differs from men. Discourse has gendered changes. William sneers for his favourite food items, he longs for things which is not accessible at that time. He is revolting against all those happenings, he is ignorant of everything. Only in the last he understands the intensity of the dust that covered all over there. The dust is inside the characters but women are strong enough to face and survive. Where William could only understand things in the last Catherine understands everything too earlier she adapts to a small portion under the table .Sometimes she even warns her brother and mom. Women in the



novel are to manage things. They have to find food ,they have to console others they have to fight against the dust surrounded them. They are genderly isolated. How worse is the situation during nuclear explosion is another concern, Since Louis Lawrence was also a victim of this situation .

The novel is autobiographical as we know it is all about survival. The internal conflict experienced by the author is represented here in novel. The novel was also controversial when it was published in 1981. The Holocaust experience of author made her write it in a way that we can see things in front of us. She was born in Netherlands and their family had to move to a small room for escape from the officers who were trying to draw Jews from there. When Louis began to visit other places she also felt things strange as Ophelia .

Sarah stoles things to ensure her sister alive. She collects food items from the dead people's homes for her sister sine she is the only one expected to live. Their situation in a single room with stinky latrines and other wastes makes a reader feel like vomiting but as we know that is the truth. Reality is to be spoken out. The after effects of the explosion is really dangerous because the radiation and the dusty atmosphere made people sick. At the end of the first section Victoria gathers things from dusty outside where no one is supposed to go. She sacrifices her life for the coming generation. While reading we ask where is the father figure ?who is equally responsible about the children ? In the second part of the novel we see he is safe in a tank and living his own life. Trying to survive without thinking anything else. They burn the bible so that they can survive. Religion gets second place when life is in danger. Believe becomes a danger. Sarah is not ready to leave her believe she thinks everything is an outcome of deeds of human beings. We can see Sarah giving her sister Catherine's hand to Johnson who's house is not affected by attacks. She keeps non contaminated water and food. She marries him later only because she has to survive, she has to live. Sarah who at the beginning of the war felt it is good to die than live in such situation decides to fight. She lives for others. It is only towards the end Sarah understands what is being alive. Now when we look at Catherine she survives. She becomes one of the major affected people since even though she gives birth to many children born as still borns. Only two of them survives. She tries to adapt . As a women too she suffers a lot. She doesn't get a life she needed. She had to cover herself under a man's protection whom she never knew, and she as a mother too suffers a lot. She gave birth to many but couldn't mother them. Johnson loves Catherine very much and they tried their best to order things. They started cultivating, shared everything they had to others also. Even after the explosion and death of many the lives of many especially ladies are fully in a confusion.

They don't know how to survive, how to live. Ophelia who is the half sister of Catherine (Catherin's father survived from the attacks because when he



knew things are worse in his place he moved to a bunker where many were living and he married another lady from there) is also a girl who don't know what is outer world. What is happening out, She like many ladies are not supposed to go outside. She is furious about what is outside happening. Bill Hamden Catherine and Ophelia's father who is a lecturer decided to flee from situations. He finds his own comfort in bunker which is situated in underground. Even though he has many excuses for what he does as a father, who has equal responsibility about children leaves Veronica alone to look after things and he makes another life underground. When a lady offered secured life he accepted it leaving his ladies alone and escaping from realities. There in the bunker which is built to avoid contact with the polluted outer world things are all under control of male patriarchal authorities. Macalister rules everyone. Traumatic situation for a man and lady is different. Macalister rules everything and others who are depressed already by all these catastrophic effects are doubly alienated.

Ophelia who resembles Sarah is totally unaware of things. When Sarah and Catherine fought for life Ophelia was the one ignorant of these things in a sense. She had everything in bunker except freedom. She was not at all supposed to live a life she likes. It is Dwight and Bill who help her to see outer world. Even after such an explosion and traumatic situation Macalister tries to steel other's cows. There is a scene when Ophelia meets Catherine and Lilith. Three women survived literally, still struggling to live. Lilith is Catherine's only alive daughter among seven. Ophelia watches the birth of another baby to this waste land whom Catherine gave birth to. Lilith is portrayed as a strange girl who lacks many humanly qualities but she has many other qualities which normal humans didn't have. She is a symbol of survival and resistance. She is the third generation of Victoria family. With whom a new world is yet to set. She is white, too white her eyes and hair too are white which stands for peace, love compassion.

The dust which disturbed them first starts to mould them in the last. When Dwight escapes from this traumatic world only women characters are left to set everything in order. Lilith stands as a hope. In the end we can see the third generation Simon son of Ophelia and Wayllen brother of Dwight also comes out of bunker and Laura who is the grand child of Catherine teaches others what real world is. She is strong, she is bold enough to address things. Women characters in the novel at first are set in chaotic situation from which they survive. They do not flee from situations how Handmen did. Laura learns to adapt, She teaches others what is it to be a homo superior. Simon in the first feels mutants ugly as women Laura is marginalised because of the beauty concept of society. But in the end Simon feels for her. It can be a new start for a world of acceptance.

Both the novels with their concern for the traumatic subjects and environmental consciousness draw a world of reading experience tuned in an aesthetics of uncertainty and hope. Framed in a post-apocalyptic fictional pattern,



these novels assume much exalted critical acclaim due to their thematic density and narrative profundity.

Bibliography

1. Buelens, Gert, Sam Durrant & Robert Eaglestone, eds. *The Future of Trauma Theory: Contemporary Literature and Cultural Criticism*. New York: Routledge, 2014.
2. Caruth, Cathy. *Unclaimed Experience: Trauma, Narrative, and History*. Baltimore and London: Johns Hopkins University Press, 1996.
3. Caruth, Cathy, ed. *Trauma: Explorations in Memory*. Baltimore and London: Johns Hopkins University Press, 1995.
4. Felman, Shoshana. *The Juridical Unconscious, Trials and Traumas in the Twentieth Century*, Harvard University Press, 2002.
5. Herman, Judith. *Trauma and Recovery: The Aftermath of Violence – from Domestic Abuse to Political Terror*. New York: Basic Books, 1997.
6. LaCapra, Dominick. *Writing History, Writing Trauma*. Baltimore: Johns Hopkins UP, 2001.
7. Luckhurst, Roger. “Mixing Memory and Desire: Psychoanalysis, Psychology, and Trauma Theory”, in Patricia Waugh (ed.), *Literary Theory and Criticism: An Oxford Guide*. Oxford and New York: Oxford UP, 2006. 497–507.
8. Luckhurst, Roger. “Future Shock: Science Fiction and the Trauma Paradigm”, in Gert Buelens, Samuel Durrant and Robert Eaglestone, eds. *The Future of Trauma Theory*. Abingdon, UK: Routledge, 2014.
9. Lawrence, Louise. *The Children of Dust*. London: The Bodley Head, 1985
10. McCarthy, Cormac. *The Road*. London: Picador, 2006.
11. Whitehead, Anne. *Trauma Fiction*. Edinburgh: Edinburgh University Press, 2004.
12. Wicks, Amanda. “No Other Tale To Tell”, in *Critical Trauma Studies: “Understanding Violence, Conflict and Memory in Everyday Life”*. NYU Press, 2016



A STUDY ON KNOWLEDGE MANAGEMENT AS A SOLUTION TO THE PROBLEMS OF THE COMPANIES IN VIDARBHA

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Abstract

Operating in the knowledge-based economy, one of areas that concern companies in Vidarbha, it is the need to pursue effective knowledge transfer within an organization. Effective knowledge transfer will facilitate the conversion process of tacit knowledge to explicit knowledge and vice versa and this will eventually influence the learning process and organizational performance. There are enduring elements in social-life-institutions and that they can have a profound effect on the thoughts, feelings and behavior of individuals and collective actors. An institution is defined as a social order or pattern that has attained certain state or property. The process of attaining above said definition where order and pattern relate to standardized interaction sequences which are supported by specific mechanism of control. Knowledge Management is defined as a phenomenon, which represented a set of practices, which have been adopted by organizations over recent years.

Keywords: Knowledge management, organizational effectiveness, organizational culture and Vidarbha

Introduction

Operating in the knowledge-based economy, one of areas that concern companies in Vidarbha is the need to pursue effective knowledge transfer within an organization. Effective knowledge transfer will facilitate the conversion process of tacit knowledge to explicit knowledge and vice versa and this will eventually influence the learning process and organizational performance.

This research is expected to examine how knowledge is transferred within a company, the impact of organizational factors on effectiveness of knowledge transfer process, the relationship between knowledge transfer and company performance, and to suggest factors from an organizational capabilities perspective to enhance the environment for enabling effective knowledge transfer inside the organization.



Literature review

1. In the research paper authored by Alireza ANVARI, Gholam-Abbas ALIPOURIAN, Rohollah MOGHIMI, Leila BAKTASH, Department of Industrial Management, Gachsaran Branch, I.A.U., Gachsaran, Iran titled “Analysis of Knowledge Management within Five Key Areas” published in Journal of Knowledge Management, Economics and Information Technology, the author has mentioned Knowledge Management as a crucial factor which impacts on organizational performance. It seems to be a lack of empirical studies that measure knowledge in high educational environments, especially in universities. The main purpose of his study was to identify and assess five pointers that contribute towards knowledge management, namely General Management, Strategic vision, Internal process, Human Resources and Leadership style, in a university in Iran.
The analysis showed that all five parameters had an effect on knowledge management. The results imply that the university is following a trend towards knowledge-orientation. Furthermore, there was a significant difference between two groups (lecturer and staff) perception. Its implication can also be beneficial to other universities that plan to highlight knowledge-oriented management.
2. In the research paper authored by Reza SigariTabrizi, YeapPeikFoong and NazliEbrahimi, Multimedia University, Cyberjaya, Malaysia, University of Malaya, KL, Malaysia, in their research paper titled “The Criteria for Measuring Knowledge Management Initiatives: A Rare Glimpse into Malaysian Organizations”, published in IBIMA Publishing, Journal of Organizational Knowledge Management, the author has mentioned the problem of identifying the criteria for measuring KM outcomes among Malaysia companies and seeks to develop widely-accepted criteria based on the systematic review of the literature in order to measure success of knowledge management programs for Malaysian organizations. Hence, attempts were made to discover the most favored criteria among Malaysia organizations and to investigate the relationship between KM criteria and organization’s mission, goals, and objectives. In addition, the relationship between KM criteria and success of KM programs were examined.
According to results achieved by statistical analyses, the most favored criteria among respondents who participated in this survey were enhanced collaboration, improved communication, improved learning/adaptation capability, sharing best practices, better decision-making, enhanced product or service quality, enhanced intellectual capital, and increased empowerment of employees.



3. In the research paper authored by Prof. Ms. Ulka Toro(Gulavani), Associate Professor, BharatiVidyapeeth, Institute of Management, Kolhapur and Dr. Milind J. Joshi. Systems Analyst, Computer Center, Shivaji University Kolhapur in their research paper titled “Review of Literature on Knowledge Management using ICT in Higher Education”, published in Ulka Toro et al ,Int.J.Computer Technology &Applications,Vol 4 (1), 62-67, the author had tried to provide a high level overview of KM using Information and Communication Technology (ICT) in higher education. A critical analysis was done by studying attempts made by professionals to implement KM using ICT in higher education. In this work the author concluded that to face the competition and diminishing supply of students, colleges can only survive by creating core competencies in today’s environment. Along with the technology to succeed in the usage of knowledge management in higher education, it is necessary that, the mind-set of people should change from knowledge to knowledge. We must try to make the institutional information base accessible to all the members of the institution. The author further said that if we can develop collaboration and knowledge sharing, it will be a great boon for institutions. The requirement is proper cooperation, coordination and collaboration among the employees in the higher institution.

Sample Size

Out of the industrial sector of Vidarbha region 6 major sectors according to the report published by Government of India Ministry of MSME, 2014-15 were considered: Textile, Agro and Food processing, Engineering sector, Cement, Steel and Tourism. (Source: MSME-Development Institute, 2014-15)

Out of these six sectors one industry per sector per district was considered total 66 industries out of these 66 industries respondents from three levels senior managers, supervisors and employees were selected. Thus per industry one senior managers, three supervisors and six employees total 10 were selected.



Thus the actual sample size comes to 10 respondents from 66 industries i.e. $66 \times 10 = 660$.

Thus the questionnaire was distributed to these 660 respondents and out of them only 530 was found correctly filled so the actual respondents were 530.

S.No.	Name of the district	Textile	Agro and Food processing	Engineering sector	Cement	Steel	Tourism	Total	
1	Yavatmal	1	1	1	1	1	1	6	
2	Chandrapur	1	1	1	1	1	1	6	
3	Gadchiroli	1	1	1	1	1	1	6	
4	Gondia	1	1	1	1	1	1	6	
5	Bhandara	1	1	1	1	1	1	6	
6	Nagpur	1	1	1	1	1	1	6	
7	Wardha	1	1	1	1	1	1	6	
8	Amaravati	1	1	1	1	1	1	6	
9	Washim	1	1	1	1	1	1	6	
10	Akola	1	1	1	1	1	1	6	
11	Buldhana	1	1	1	1	1	1	6	
	Grand Total	66							

Category of the respondents	Districts										
	Yavatmal	Chandrapur	Gadchiroli	Gondia	Bhandara	Nagpur	Wardha	Amaravati	Washim	Akola	Buldhana
Senior level Manager	1	1	1	1	1	1	1	1	1	1	1
Supervisor	3	3	3	3	3	3	3	3	3	3	3
Employees	6	6	6	6	6	6	6	6	6	6	6
Total	10	10	10	10	10	10	10	10	10	10	10

(Source: Created by Researcher)

Sampling technique: Sampling technique used was convenience sampling.

Test of hypothesis

H01: Practices of knowledge management does not provide solution to various problems of the company.

The dictionary meaning of Theorization is the production or use of theories.

In order to verify the above hypothesis MANOVA test is used. Multivariate analysis of variance (MANOVA) is simply an ANOVA with several dependent variables.



Independent variables: Reasons for KM practices adoptions, KM practices adopted by company,

Dependent variables: Better decision making, improved learning, improved productivity, improved employee skills

Multivariate Tests ^a								
Effect		Value	F	Hypothesis df	Error df	Sig.	Noncent. Parameter	Observed Power ^d
Intercept	Pillai's Trace	.947	2131.032 ^b	4.000	478.000	.000	8524.129	1.000
	Wilks' Lambda	.053	2131.032 ^b	4.000	478.000	.000	8524.129	1.000
	Hotelling's Trace	17.833	2131.032 ^b	4.000	478.000	.000	8524.129	1.000
	Roy's Largest Root	17.833	2131.032 ^b	4.000	478.000	.000	8524.129	1.000
Reasons for knowledge management practices	Pillai's Trace	1.086	14.935	48.000	1924.000	.000	716.894	1.000
	Wilks' Lambda	.228	17.951	48.000	1843.345	.000	823.554	1.000
	Hotelling's Trace	2.125	21.092	48.000	1906.000	.000	1012.437	1.000
	Roy's Largest Root	1.334	53.453 ^c	12.000	481.000	.000	641.436	1.000
Practices adopted by companies	Pillai's Trace	.150	6.318	12.000	1440.000	.000	75.822	1.000
	Wilks' Lambda	.855	6.453	12.000	1264.961	.000	68.055	1.000
	Hotelling's Trace	.165	6.549	12.000	1430.000	.000	78.594	1.000
	Roy's Largest Root	.122	14.599 ^c	4.000	480.000	.000	58.397	1.000
Reasons for knowledge management practices * practices adopted by companies	Pillai's Trace	1.289	6.931	132.000	1924.000	.000	914.937	1.000
	Wilks' Lambda	.203	7.108	132.000	1904.849	.000	932.476	1.000
	Hotelling's Trace	2.014	7.271	132.000	1906.000	.000	959.766	1.000
	Roy's Largest Root	.786	11.454 ^c	33.000	481.000	.000	377.980	1.000
a. Design: Intercept + reasons for knowledge management practices + practices adopted by companies + reasons for knowledge management practices * practices adopted by companies								
b. Exact statistic								
c. The statistic is an upper bound on F that yields a lower bound on the significance level.								
d. Computed using alpha = .05								

As usual for these F-test results, ignore the section labeled “Intercept.” These four numbers give you the p-values for the four different multivariate tests. These results tell us if there is a significant effect of the Independent Variables on all of the Dependent Variables, considered as a group. Remember that there’s no one single multivariate test; there are four different ones. In this case they all are significant ($p < .05$), so we can accept null



hypothesisH01: Practices of knowledge management does not provide solution to various problems of the company and reject alternate hypothesisH11: Practices of knowledge management provide solution to various problems of the company.

This means that the practices of knowledge management practically cannot provide solution for the every incurring problem since no theory is perfect and we cannot get solution for problems always in theory.

Conclusion

Traditionally, complete knowledge and understanding were transmitted through long-term appointment and recurrent contact with the subject matter such as apprenticing, learning on the job, or education that engrossed on general principles and writing knowledge. In current years, this has altered somewhat and many new methods are now available. Building organizational factors to create favorable circumstances for knowledge sharing behavior seems to be an activemeans.

This research proposes that managers can focus on some key organizational factors, namely organizational culture, incentive system, organizational structure and information technology tools.

References

- Brislin RW (1976) Cross-cultural Orientation Programs. Gardner Press, New York.
- Carter FJ, Jambulingam T, Gupta VK and Melone N (2001) Technological innovations: a framework for communicating diffusion effects. Information & Management 38(5), 277–287. | Article
- Chou T (2001) An investigation of association between knowledge management activities and management performance of major corporations in Taiwan. Master's Thesis, National Taiwan University, Taiwan.
- Knowledge Management for Development (KM4Dev), Published By: Routledge, Volume Number: 7, Frequency: 3 issues per year, Print ISSN: 1947-4199, Online ISSN: 1871-6342.
- <http://www.knowledge-management-tools.net/index1.html>
- <http://www.palgrave-journals.com/kmrp/journal/v4/n2/full/8500090a.html>
- Knowledge Management Research & Practice (2006) 4, 83–105.doi:10.1057/palgrave.kmrp.850009



HUMAN RIGHTS ACTIVITIES - A CATALYTIC FACTOR IN HUMAN RIGHTS AWARENESS

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Abstract

The main aim of education is all round development of individual. That is possible only when education must from an essential foundation for the realization and development of human rights. The history of education provides ample evidence that education has not been used as an instrument for developing an appreciation development of each individual as human being. Education is regarded as potential instrument of national development. Education mainly and basically deals with improvement of human resources. It is through education that nation transmits its heritage, recreates its culture strengthen its economy and conserves its values. It is the means of promoting “individual excellence”. It is due to such immense importance that education has been enunciated as one of the fundamental human rights.

Meaning of Human Rights

Human rights are those rights which belong to individual as consequence of being human as a means to human dignity. Human rights are rights which every human being is entitled to enjoy and to have protected “Human rights are those minimum rights which every person must have for no other reason that he is a human person and if these rights are taken away he will be reduced to sub human existence”. Basic purpose of human rights is to maintain/protect the dignity of individual on society. Human rights are being thought off and efforts are afoot to provide these rights to one and all on this earth where human beings are existing. At global level realization is to adorn and glorify the human race. Every human being on this earth is creation of God Almighty and every human being irrespective of this caste, color creed, sex, religion is the delineation of that supreme power. Service to humanity is the sure path to find him and attain peace, prosperity, and above all salvation. Hence need of the times is realization of human rights and making every one aware of its becoming slogan of whole humanity. Broadly speaking human rights may be regarded as those fundamental rights which are essential for life as human begin. Human rights are those rights which are possessed by every individual irrespective of caste, creed, sex, religion etc. Human rights are those rights which are inherent in our nature without which we cannot live as human begins.



Historical Background

The provisions of human rights have been made into the preamble and other articles of the charter of united nations In the preamble faith in human rights has been reaffirmed According to article 1(3) of the charter .to achieve international co-operation for the development of human rights has been declared the objective of united nations. Moreover it has also been made one condition for getting membership of united nations.

The following provisions have been made about human rights in the preamble and charter of the united nations

1. Faith in fundamental human rights-: In the preamble of charter of united nations the faith in human rights has been reaffirmed. According to the preamble of the charter of united nations, “whereas the purposes of united nations law in the charter reaffirmed their faith in fundamental human rights in the dignity and worth of human persons and equal rights of men and women.

2. To achieve international co-operation to promote human rights-: According to article 1(3) of the charter of united nations the purposes of the united nations are to achieve international co-operation in promoting and encouraging respect for human rights and fundamental freedom for all without distinction as to race, sex, religion or language.

3. To promote respect for human rights-: The united nation is committed to develop universal respect for human rights article 55 of the charter states “the united nations shall promote universal respect for and observance of human rights and fundamental freedoms of all without distinctions to race, sex, language or religion”.

4. To promote respect for observance of human rights-: Article 62 of the charter states “economic and social council may make recommendations for the purpose of promoting respect for the purpose of promoting respect for and observance of human rights and fundamental freedoms for all”.

5. To appoint commission for promotion of human rights-: According to article 68 of charter “the economic and social council shall set up commission in economic and social field for the the promotion of human rights”.

6. To encourage respect for the human rights-: Article 76 of the charter observes “the basic objectives of trusteeship system shall be to encourage respect for human rights and for fundamental freedom foe all without distinction on basis of race, sex., language or religion.

Appointment of Commission on Human Rights

Human rights occupied a key position in almost all activities of united nations under article 68 of its charter provision was made for the appointment of commission on human rights. Economic and social council (which is well known



organ of united nations) recommended the appointment of an 18 member commission (at present there are 32 members of the commission) to prepare list of human rights in December 1948 this commission prepared comprehensive declaration of human rights and presented it before the general assembly of the united nations.

Adoption of universal declaration of human rights by general assembly:

On December 10, 1948 the general assembly of united nations adopted and proclaimed the universal declaration of human rights. There are 30 articles in the universal declaration of human rights. These rights have direct bearing in all factors of human life 48 countries voted in its favour and no country voted against. But eight countries did not take part in voting. Now every year throughout the world December 10 is celebrated as human rights day.

Characteristics of Human Rights

1. Human rights are not gift of any state. They belong to human beings.
2. Human rights are absolute. However state can regulate them in case of public interest.
3. Human rights are universal.
4. Human rights are indivisible.
5. Human rights cannot be waived or alienated.

Human rights have direct link with the concept of family and human characteristics like intelligence and national thinking. The concept of family has began in mammals only. The relations of family like father, mother, brother, sister, son and daughter are outcomes of living together. These relations have been some expected behaviour and feeling for such other which are known as human values and human rights.

The exploitation of human freedom and rights by man himself led to protect human rights . In relation to human rights the following terms need clarifications:-

- a) Fundamental Freedom:- In nature every life has freedom to live. This freedom is given biologically to man as well it is his fundamental right to be free.
- b) Human Rights:- Associated with fundamental rights is the existence of human rights man has right to be free, right to live, right to educations and so on.
- c) Human values:- Human society exists on social contract which involves values, rights and duties without respecting human values it is not possible to have a happy society.
- d) Peace:- Harmony and peace are the ideals for which aspires to achieve. This is possible if rights and duties are maintained.



Human Rights Educational Programs and Activities

The following youth for human rights educational programmes and activities - including contest, projects, campaigns and events- are young people and catalyzing groups working for human rights education throughout the world

- **Art/essay/poetry/contests-** Youth participation in local, national, or international competitions to create art essay or poetry depicting human rights.
- **Mural projects-:** School and youth groups collaborate to work on mural projects depicting human rights messages.
- **Youth summits-:** National international and cyberspace meeting to discuss human rights and facilities healthy interactions across borders and cultures.
- **Human Rights awareness campaigns-:**Raising awareness about human rights and tolerance through the use of what are human rights? Booklets as well as the the YHRI public service announcement videos depicting the 30 articles of the united nations universal declaration of human rights. The campaign includes united music video with its strong anti bullying message.
- **Human Rights Curriculum-:** YHRI has developed an educational manual that takes a teacher step by step through teaching their students human rights. There materials have also been used in community center's and after school programmes.
- **Translation-:**To facilitate the diversity of the YHRI international outreach campaign, YHRI materials have been translated into 17 languages.
- **International outreach campaigns-:**1 YHRI world tours reach out to meet with dignitaries, leaders, educators and youth, promoting human rights education initiatives on all countries. 21 International human rights summits bring together youth from around the world to discuss the important role of human rights education.
- **Median campaigning-:**The YHRI videos have been promoted on more than 4,600 T.V channels around the world. The videos have aired on T.V stations, including CNN, Dynasty T.V(which airs from Newyork to China), ABS-CBN in Malaysia, Zenith T.V in Hungary, T.V Mitel in Czech, Europe 7 in Italy and many more, regarding hundreds of thousands of people around the world. In addition to the media carrying our YHRI message of human rights across the air waves. Taxi drivers, Theaters, shopping malls,



sports arenas and electronic billboards have shared YHRI videos with hundreds of thousands more.

- **Human Rights, Global values, Holistic concept-:** Human rights are taken here as global values applicable and cherished world wide as a multiple, fundamental base control to the totality of human existence. The attainment of human rights is thus an ideal goal aspiration of pressing urgency throughout the world. The concept of human rights here is holistic composite and all encompassing it recognizes the innate individuality, inter relatedness and interdependence of human life: rights, duties, values which serve as spring boards for action are fundamentally part of as intrinsic whole.
- **UN Decade-:** HRE the vision: Expected outcomes-: In the view of foregoing the decade should lead to the long term realization as a global ideal an enlightened enrich democratically empowered civil value based global society.
- **Human Rights Education: Role Envisioned Expectations-:** Human rights education is now being considered for every one every where wide highly significant and far reaching expectation from it.
 - ❖ As an agent of change being an integral part of education, serve as a catalyst for the attainment of a better world order.
 - ❖ As a purveyor of culture: National identities and international solicitor cultural, religious, social and spiritual heritage of humanity living together.
 - ❖ As an investment in human resource development maximize the potential of people in life as a whole.
 - ❖ As an instrument of development: overall and sustainable rights, duties, values, social, economic, moral and spiritual.
- **The right to life-:** The right to life like nurturing protective and threatening factors food, health, shelter, protection safeguarding life and dignity, protection against terrorist attacks and bomb blasts streets buses leading to loss of life. Poverty alone has in recent years led to number of suicides of many a person alone with children or entire family.
- **Inclusion of Human Rights Education in Curriculum: Programmes of Education institutions: Achieving devised results-:** Education are primarily concerned with curriculum and instruction, the educational and training components in schooling for human rights education the easiest in all educational institutions at different levels across the educational ladder in both formal settings But in order to do so it is



necessary to examine the prevalent situation determine how it can best be done.

- **The school level-**It is being argued that school today is over loaded with diverse subjects, the young are not able to cope up with the increasing burden of the school bag as a result the parents and children suffer stress and strain. Human rights need entry and exist cannot be of the adhocing
 - a) Systematic curriculum development
 - b) Realistic results oriented approach
 - c) Reinforcement from home, community, media and state agencies

Teachers must be helped in gaining variety techniques showing how they can used a particular process which may help their students to know human rights. The basic concepts of human rights have to be developed in young minds through role play, storytelling, group discussions etc.

- **Pariential method-**A critical understanding in the learner has to be developed and there by showing them how human rights operate.
- **Centered method-**Learners mind must serve as basis for further discussion fir this varied activities are to be provided to share each others knowledge.
- **Problem Solving method-**The learners prior knowledge may be challenged by the teacher by asking questions which encourages the teacher to thinks through their thoughts.
- **Participative method-**The teacher should encourage collective effort in clarifying the concepts.
- **Dialectical method-**Learners must be encouraged to compare their gained knowledge with other resources such as facts, statics etc.
- **Analytical method-**It is important that he themes emerging from the learners responses and underlying principles which link these themes be identified by the teachers and learners themselves by proper analysis.

Conclusion

Human rights born out of people's quest, peace, justice, freedom, equality. It means teachers are facilitators pf creation of knowledge in the learners mind and accordingly it is that acquisition of knowledge which is everyone's concern. All individuals, groups, non-government organizations, the media, the academic institutions and government agencies throughout the world should be involved for achieving the purpose.



References

1. Talesra, Hemlata; Pancholy, Nalini and Nagda, Mangilal (2000). Human Rights Education: A global Prospective. New Delhi: Regency publications.
2. Tripathi, A.N. (2005). Human Values. New Delhi: International PVT. Ltd.
3. UGC (1998). ix plan approach to promotion of Human rights Education (HRE) in universities and colleges. New Delhi: UGC
4. Walia, J.S. (2003). Philosophical and Sociological Bases of Education. Jalandhar: Paul Publications.
5. Mokta, Naveen (2007), Education for Values, Environment and Human Rights. J.M.D Publications, Summer Hill (Shimla-5).
6. <http://www.humanrightseducation.info>

श्रीवैखानसभगवच्छास्त्रे न्यसविशेषाणां प्राधान्यता Importance of Nyasas in Sri Vaikhanasa Bhagavacchastra

गंजाम् रामकृष्णः

शोधच्छात्रः

वैखानसागमविभागः

श्रीवेङ्कटेश्वरवेदविश्वविद्यालयः, तिरुपति:

उपोद्धातः -

भारतदेशोऽयं कर्मभूमिरिति गीयते। देशोऽस्मिन् स्थितास्सर्वाः प्रजाः सत्कर्माचरणेन अपूर्वपुण्यफलं प्राप्यत इति विश्वसन्ति। तानि च सत्कर्माणि वेदविहितान्येवेति च भावयन्ति। एतादृशवेदविहितकर्माचरणेन निश्श्रेयसपदजिगमिषवो भवन्ति। परमात्मनो निश्वासभूतोऽस्मिन् वैदिकवाङ्मये निश्श्रेयसपदसाधनत्वेन प्रधानतया कर्म-भक्ति-ज्ञानमार्गास्त्रयः समानत्वेन प्रतिपादिता वर्तन्ते। अपारवैदिकवाङ्मयविज्ञानसर्वस्वं प्रबोधयुतुमवतरितवन्तः अद्वैत-विशिष्टाद्वैत-द्वैत-लक्ष्मीविशिष्टाद्वैतादिसिद्धान्तप्रवर्तकाः शङ्कराचार्य-रामानुजाचार्य-मध्वाचार्य-श्रीनिवासमखीन्द्रादय अप्यमुमेवविषयं स्वेषु सिद्धान्तेषु उपदिदिशुः। किन्तु एते मताचार्याः क्रमेण स्वेषु स्वेषु सिद्धान्तेषु कर्म-ज्ञान-भक्तिष्वेकैकस्यात्यन्तप्रधान्यत्वं प्रकटितवन्तः। सर्वेषां सिद्धान्तानां सारस्त्वयमेव भवति -

कर्माणां जायते भक्तिर्भक्त्या ज्ञानं प्रजायते।

ज्ञानात्प्रजायते मुक्तिरिति शास्त्रस्य निश्चयः ॥¹ इति।

वेदोक्तकर्माचरणपदेन प्रधानतया यज्ञयागादय एव स्मृतिपथमायान्ति। इदानीन्तनकाले वेदवहित हविर्यज्ञ-सोमयज्ञ-पाकयज्ञादीनामाचरणमत्यन्तक्लिष्टतरमभवत्। यज्ञानुष्ठानारोऽप्यत्यन्तविरलतया एको वा द्वौ वा एव परिदृश्यन्तीत्यत्र नास्ति संशीतिलेशः। अत एव यज्ञपुरुषो भगवान् सर्वसुलभेनार्चावताररूपेण अवततारेति ज्ञायते। बहुत्र श्रुतावपि परमात्मनः नाम-रूप-गुण-स्वभावानि परिकीर्तितानि²। तत्रोक्तपरमात्मस्वरूपादिलक्षणलक्षितदिव्यमङ्गलविग्रहं प्रतिष्ठाप्य, तस्मिन् विग्रहे परमात्मबुध्या भक्त्या नित्यमाराधनं कुर्यात्तदा परमपदपाप्तिरसिद्ध्यतीति वैखानसादिभगवच्छास्त्राणां (आगमशास्त्राणां) सिद्धान्तः। एवं भगवतः नाम-रूपनिरूपकश्रुतयः तासां भाष्याणि च पूर्वपक्षसिद्धान्तैस्सह वैखानसीये उत्तमब्रह्मविद्यासाराख्ये ग्रन्थे सप्रमाणं न्यरूपयत्³।

¹ नारदभक्तिसूत्राणि .पृ.4

² यतो वीरः कर्मण्यस्सुदक्षो युक्तग्रावा जायते देवकामः - कृष्णयजुर्वेदसंहिता।

यदा पश्यः पश्यते रुक्मवर्णं कर्तारमीशं पुरुषं ब्रह्मयोनिम् - मुण्डकोपनिषत्।

कप्यासं पुण्डरीकमेवमक्षीणि - इत्याद्याश्रुतयः परमात्मनस्साकाररूपत्वे प्रमाणानि।

³ उ.ब्र.स. पृ.24



एवञ्च तिरुमलेशानित्यसेवातत्परैः वेदान्तदेशिकाभिधैः श्रीमद्भिः श्रीनिवासदीक्षितेन्द्रैरपि स्वकीये लक्ष्मीविशिष्टाद्वैतभाष्यारव्ये शारीरकमीमांसाभाष्ये – परमात्मनश्श्रीमहाविष्णोर्दिव्यमङ्गल-विग्रहाराधनमेव परमानन्दमयपरमपदपाप्ताव्यवहितोपाय इति आन्वीक्षक्या च युक्त्या सप्रमाणं न्यरूपन्त।

एतादृशं सर्वसुलभं विग्रहाराधनं आगमपदवाच्ये भगवच्छास्त्रे प्रतिपादितमिति ज्ञायते एव। स चागमः उपास्यदेवताभेदेन वैष्णव-शैव-शाक्त-गणापत्यादिरूपेण विभाजितो भूत्वा आसेतुहिमाचलं भारते देशे विदेशेष्वपि सर्वत्र प्रपञ्चे मानवानां सुलभमुक्तिमार्गरूपेण विराजते। एतादृशागमशास्त्रप्रवर्तकेषु प्रथमो भवन्ति भगवतो विष्णोर्मानसपुत्राः। विखनोमुनीन्द्राः। एतैरुपदिष्टे वैखानसभगवच्छास्त्रे परमात्मा विष्णुरेव वेदवेदान्तवेद्य इति तस्य विष्णोर्वरिवस्या प्रपञ्चिता। तदवसरे विष्णोर्दिव्यालयनिर्माण-विम्बप्रतिष्ठा-अर्चन-उत्सव-स्नपन-प्रायश्चित्ताद्यैरंशैस्सह ज्ञान-योगविषयन् अपि स्वशिष्येभ्ये भृगु-मरीचि-अत्रि-कश्यपेभ्यो सार्थकोटिग्रन्थप्रमाणेन विखनोमुनय उपदिदिशुः⁴। ततस्ते मुनय अधिकार-संहिता-तन्त्र-काण्डारव्यैः चातुर्लक्षप्रमाणकमागमशास्त्रं विरच्य, भुक्तिमुक्तिफलप्रदस्य विष्णोर्विग्रहाराधनस्य ख्यातिं दशसुदिक्षु प्रचारं कृतवन्तः। इदानीं तिरुमलाप्रभृतिदिव्यक्षेत्रेषु वैखानसा अर्चकाः परमया भक्त्या नत्वं नियमेन लोकक्षेमार्थं विग्रहरूपिणं विष्णुमाराधयन्ति। एतादृशमर्चनम् अनाग्रिहोत्रिणामग्रिहोत्रफलम्, आहिताग्नीनामग्रिहोत्रफलाप्रतिबन्धरूपं फलम्, एवञ्च सर्वेषां मोक्षरूपं निश्चयसफलञ्च ददातीति वैखानसभगवच्छास्त्रे सुस्पष्टतया विखनप्रभृति भृगवादिमहर्षिभिरपि मुक्तकण्ठेनोपदिष्टम्⁵। श्रुतिस्मृतीतिहासपुराणादिष्वप्ययमेव विषयस्सुस्पष्टतया-प्रतीयत इत्यत्र नास्ति विप्रतिपत्तिः।

एतादृशादिव्यविशिष्टतायुक्ते भगवद्विषयमङ्गलविग्रहाराधने प्रधानभूतस्य निरन्तरभगवद्विग्रह-वरिवस्यानिरतस्यार्चकस्य नियमान्, तस्य वैशिष्ट्यञ्च आगमशास्त्रनिर्देशितक्रमेणास्मिन् शोधपत्रे विचार्य सुस्पष्टतया निर्वक्तुमिच्छामि।

अर्चकस्य वैशिष्ट्यम् –

अर्चावतारधारिणो विष्णोर्दिव्यकैङ्कर्यं विधातुमेव लब्धजन्मानः वैखानसा अर्चकास्साक्षात् परमात्मसदृशा एव भवन्तीति भगवच्छास्त्रे गीयते। लोके कीर्त्यन्ते च। तद्यथा -

अर्चकस्तु हरिस्साक्षात् चररूपी न संशयः⁶ इति।

नाविष्णुर्विष्णुमर्चयेत्⁷ इति च।

⁴ धाता विखनसा नाम मरीच्यादिसुतान्मुनीन्।

अभोदयदिदं शास्त्रं सार्थकोटिप्रमाणतः।। आ.सं.

⁵ • भक्त्याभगवन्तं नारायणमर्चयेत् तद्विष्णोः परमं पदं गच्छतीति विज्ञायते - भगवान् विखनाः। वै.क.सू.

• तं विष्णुं पूजयेन्नित्यं सर्वसाधनसाधनम्।

सर्वमुक्तिप्रदं श्रीशं सर्वकामफलप्रदम्। भृगुमहर्षिः। यज्ञाधिकारः.1.7

• भक्त्या नारायणमुपासत.....भगवन्तं नान्यथा प्राप्नोतीति विज्ञायते - मरीचिमहर्षिः। वि.कल्प. पटलः.94

⁶ क्रियाधिकारः

⁷ भगवदर्चाप्रकरणम्



परमपुरुषस्यांशभूत एव भवत्यर्चक इति उपरितनवाक्यैस्सुस्पष्टं ज्ञायते। एतादृशवैशिष्ट्यपूर्णस्यार्चकस्य लक्षणमेवं प्रतिपादितं भगवच्छास्त्रे –

वैखानसेन सूत्रेण निषेकादिक्रियान्वितान्।

आध्यात्मगुणसम्पन्नो नित्यस्वाध्यायतत्परः।।

वृत्तवान् सत्यवादी च स्नानशीलश्च योगवित्।

गृहस्थो ब्रह्मचारी वा भक्त्यैवार्चनमारभेत्⁸।। इति।

अयमर्थः – श्रीवैखानससूत्रोक्तनिषेकादिसंस्कारैस्संस्कृतः, आत्मतत्त्ववेदी, निरन्तरस्वाध्यायनिरतः, स्वस्वरूपात्मगुणैस्सर्वैर्वरयितुं योग्यः, सत्यवादी, स्नानादिकैर्नित्यशुद्धः, चित्तवृत्तिनिरोधने समर्थः, परमात्मनि अपरिमितप्रीतियुक्तो वैखानसः गृहस्थो वा ब्रह्मचारी वा भवतु स भगवदाराधनाय योग्यो भवतीति।

एष अर्चकः प्रतिदिनं स्वनित्यकर्माणि परिसमाप्य भगवद्विषयमङ्गलविग्रहाराधनं निर्वर्तयितुमुद्युक्त-स्सन्, आदौ भगवच्छास्त्रोक्तदिशा निष्कल-सकलस्वभावपूर्णस्य भगवतस्स्वरूपं भक्त्याऽवधार्य, योगमार्गमनुसृत्य भूतसंहारन्यास-पञ्चोपनिषदन्यासादिभगवदाराधनयोग्यतापादकैः न्यासकर्मभिः स्वात्मानः देहस्य च शुद्धिमवाप्य स्वहृदयकमलान्तराकासस्थं परमात्मानं मनसा समाराध्य, ततस्तमेव विग्रहरूपिणं परमात्मानं समाराधयेदिति वैखानसभगवच्छास्त्रे समुपादिशत्। भगवदर्चाप्रकरणग्रन्थकर्तारः श्रीमन्तः **नृसिंहवाजपेययाजिनोऽपि⁹** स्वकीये ग्रन्थे बहूनि न्यासकर्माणि भगवदाराधनयोग्यतापादकतया यथाप्रयोगसौकर्यं तथा सुस्पष्टतया समुपादिष्टवन्तः।

एतेषां न्यासविशेषकर्मणां वैशिष्ट्यमिदानीं विचार्यते।

न्यासकर्मणां वैशिष्ट्यम् –

मनोबुध्यहङ्कारैः पञ्चभूतैश्चाष्टधा विभिन्ना चेतनाचोतनात्मिकेयं प्रकृतिः भगवतश्श्रीमन्नारायणस्य लीलाविभूतिरिति वेदवेदान्तादिषु निरूपितं वर्तते। तथा प्रकृत्या सदा संश्लिष्टोऽयं जीवः स्वकीये पञ्चभूतात्मके शरीरे आपादशिरं सर्वेष्वङ्गेषु मन्त्रशास्त्रप्रतिपादितदिव्यबीजाक्षरन्यासः करणीय इति न्यासकर्मणां स्वरूपः। अनेन शरीरान्तस्थं मालिन्यं सर्वं व्यपोहयितुं शक्यत इति ज्ञायते। प्रोक्तञ्च भगवदर्चाप्रकरणे शरीरस्थं कल्मषं सर्वं पापपुरुषरूपेण संभाव्य भूतसंहारन्यासेन तं पापपुरुषं सन्दह्य¹⁰, पुण्यपुरुषं प्रकल्प्य, तस्य करचरणान्यवयवानि च सावयवीकरणेन सम्भाव्य, तस्मिन् पृथिव्यादिपाञ्चभौतिकतत्त्वं भूतसृष्टिन्यासेन सन्न्यस्य, ततस्तस्य प्राणप्रतिष्ठां कृत्वा, पञ्चोपनिषदन्यासादिभिः दिव्यन्यासैः भगवत्कैङ्कर्ययोग्यतां सम्प्राप्य, प्रथमं मानसिकार्चनं परमया भक्त्या समाचरित्वा, तदनन्तरमेव दिव्यमङ्गलविग्रहाराधनं नियमेन करणीयमिति सुस्पष्टतया व्यदधुः।

⁸ क्रियाधिकारः

⁹ वैखानसपण्डितेष्वग्रगण्याः औखेयगृह्यसूत्रभाष्यकारेष्वन्यतमा इमे नृसिंहवाजपेययाजिनः सप्तमशतैब्दीया इति ज्ञायते। एते पण्डिताः

भृग्वदिसंहितासु समुपादिष्टं भगवन्नित्याराधनं सर्वमुद्युत्य समग्रतया प्रयोगसौकर्याय भगवदर्चाप्रकरणं, ब्रह्मोत्सवानुक्रमणिका, प्रतिष्ठाविधिदर्पणमित्याद्यनुक्रमणिकारूपन् ग्रन्थरत्नान् समनुजगुः।

¹⁰ "स्वशरीरस्थकल्मषजातं पुरुषाकारेण कुक्षौ विचिन्त्य भूतसंहारं कुर्यात्" - भगवदर्चाप्रकरणम् तृतीयखण्डः - पृ.42



एतादृशोऽस्मिन् भगवत्कैङ्कर्ययोग्यतापादके न्यासकर्मणि न्यासक्रियाक्रम एवं विद्यते –

" एवंगुणविशेषणविशिष्टायाम् अस्यां शुभतिथौ श्री.....स्वामिनः प्रीत्यर्थं लोकक्षेमार्थं प्रातः कालार्चनं करिष्यमाणः भगवदाराधनाधिकारसिद्ध्यर्थं भूतशुद्धिं करिष्यामि - इति सङ्कल्प्य, सात्विकत्यागपूर्वकं भूतसंहारन्यास-पापपुष्पशोषण-दाहन-प्लावन-सुषिरीकरण-सावयवीकरण-पुण्यपुरुषकल्पन-प्राणप्रतिष्ठा,पञ्चोपनिषदन्यास-करन्यास-ब्रह्मन्यास-सुदर्शनन्यास-अङ्गुलिन्यास-नामद्वादशपञ्जरन्यास-षडङ्गन्यास-एकाक्षरन्यास-मातृकाषडङ्गन्यास-मन्त्रषडङ्गन्यास-अन्तर्मातृकान्यास-बहिर्मातृकान्यास-अचोन्तन्यास-अक्षरन्यास-सर्वाङ्गन्यासादीनि कारयेत् "11 इति।

तत्र –

1. भूतशुद्धिः, भूतसंहारन्यासः –

अस्मिन् भूतशुद्धिन्यासे पञ्चभूतात्मकशरीरस्थपृथिव्यादिभूतानां शुद्धिः, तद्वारा भूतसूक्ष्म-समाश्रितस्य जीवात्मनश्च शुद्धिः विधीयते। तत्रादौ - "आत्मागुहायां निहितोस्य जन्तोः" इत्यादिश्रुत्या हृदयकमलनिविष्टेन परमात्मनासह शेषरूपिणं जीवात्मानमेकीकृत्य स्वशरीरस्थैः पूर्वकृतकल्मषैः(कल्मषं नाम दुष्कृतमित्यर्थः "कल्पते गण्यते चित्रगुहादिभिरिति कल्मषम्") जातं पापं सर्वं पुरुषाकाररूपेण संभाव्य तस्य पापपुरुषस्य संहरणं कर्तव्यम्।

अस्य पापपुरुषस्य वर्णनमेवं विद्यते – "पापपुरुषस्यास्य शिरः ब्रह्महृत्कारूपः, भुजद्वयं स्वर्णस्तेयपापसमं, हृत्तावत् सुरापानपातकसमं, कटिद्वयं गुरुतल्पशयनमहापापसमं, एतस्य पापपुरुषस्य पदद्वन्द्वं, रोमाणि, अङ्गप्रत्यङ्गानि सर्वाणि च उपपातकसमानि (.....) भवन्ति¹²।" एतादृशं दुरात्मानं रक्तश्मश्रुयुक्तं विषलोचनम् अचेतनम् अधोवक्रं दग्धवृक्षवर्णयुक्तं खड्गधरं चर्मधरं (खड्गमृगचर्मधरं) पापपुरुषं कुक्षौ वामभागे विचिन्त्य, भूतसंहारन्यासेन तदङ्गशोषणदाहनप्लावनाद्यैः गुरूपदेशमनुसृत्य तं पापपुरुषं सन्दृष्ट्वा, पुनः भगवदनुकम्पया तं भगवदाराधनयोग्यतां संपादयितुं पुण्यपुरुषं कुक्षौ संभावनीयम्। तस्य पुण्यपुरुषस्य लक्षणमेवं विद्यते –

" पुण्यपुरुषस्य शिरोऽश्वमेधपुण्यपल्लवरूपः, भुजद्वयमतिरात्रपुण्यसमं, ऊरुयुग्ममतोर्याम-यागपुण्यफलसमं भवति। एवमेवास्य पुण्यपुरुषस्य वाजपेययागपुण्यफलसमकटिद्वयं, अग्निष्टोमयागसमपदद्वन्द्वञ्च भवतीति, तादृशं पुण्यपुरुषं कुक्षौ विचिन्त्य

11 भगवदर्चाप्रकरणम् – तृतीयखण्डः पृ.41

12 ब्रह्महृत्यासिरस्कञ्च स्वर्णस्तेयभुजद्वयम्।

सुरापानहृदा युक्तं गुरुतल्पकटिद्वयम् ।।

तत्संयोगिपदद्वन्द्वमङ्गप्रत्यङ्गपातकम्।

उपपातकरोमाणं रक्तश्मश्रुविलोचनम्।।

अङ्गुष्ठमात्रं पुरुषं दुरात्मानं दुरासदम्।

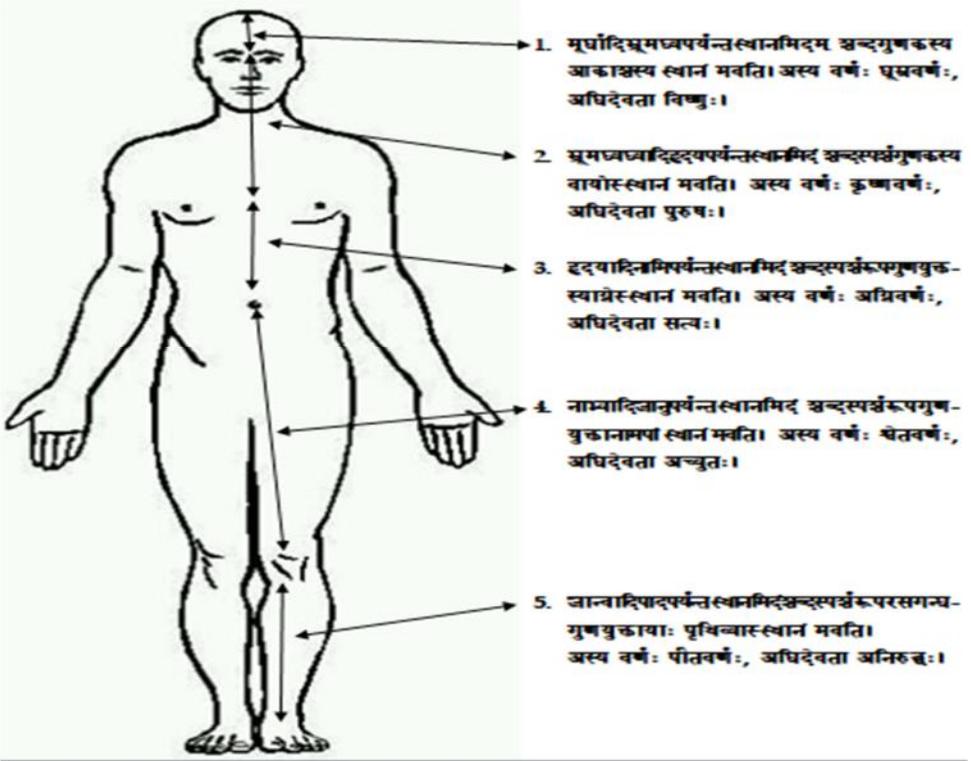
अचेतनमधोवक्रं दग्धपादपसन्निभम्।।

खड्गचर्मधरं कृष्णं कुक्षौ वामे विचिन्तयेत्। भगवदर्चाप्रकरणम् – खण्डः.3, पृ . 42

भूतसृष्टिन्यासं करणीयमिति प्रतिपादितम्¹³।" एवं रूपेण पापपुरुषं शोषण(क्षयीकरणम्)- दाहन(भस्मीकरणम्)- प्लावन(अभिषेचनम्)-पिण्डीकरण(साकारभावनम्)-सुषिरीकरणम्(रन्धीकरणम्-अर्थात् नवरन्ध्रनिर्माणमिति वक्तुं शक्यते)- सावयवीकरणाद्यैः योगमार्गाश्रितैः मानसक्रियाभिः पुण्यपुरुषं सङ्कल्य, तस्मिन् पुरुषे सृष्टिक्रमानुसारेण भूततत्त्वन्यासं करणीयम्।

पञ्चभूतमनोबुध्यहृद्द्वारैरष्टधाभिन्नया प्रकृत्या सदा सम्मिलिते जीवाधिकरणके पाञ्चभौतिकशरीरे तत्तत्पाञ्चभौतिकस्थानेषु आकाशात् वायुः, वायोरग्निः, अग्नेरापः, अन्धः पृथिवी इत्यादि श्रुत्युक्तक्रमेण अपूर्वं पापभाररहितं भूततत्त्वं निवेश्य तस्मिन् पुण्यपुरुषशरीरे प्राणप्रतिष्ठां समाचरणीयम्।

तदिदम् –



¹³ अश्वमेधसिरोपेतमतिरात्रभुजद्वयम्।

असोर्यामोरुयुग्मञ्च वाजपेयकटिद्वयम्।।

अग्निष्टोमपदद्वन्द्वं कुक्षौ पुण्यं विचिन्तयेत्।। भगवद्दर्शप्रकरणम् – खण्डः.3, पृ . 44



एवंरूपेण पाञ्चभौतिकशरीरे निर्णीतेषु स्थानेषु विष्णु-पुरुष-सत्य-अच्युत-अनिरुद्धाख्य-पञ्चव्यूहरूपात्मनं पञ्चभूतात्मेश्वरं परमात्मनं नारायणं ध्यात्वा भूतसृष्टिन्यासं समाचरणीयम्।

ततस्तस्मिन् शरीरे हृदयकमले अणुत्वे सति चेतनात्मकलक्षणलक्षितं शतधाकल्पितवालाग्रभाग-शतभागरूपिणं¹⁴ जीवात्मानं प्रतिष्ठाप्य, सकललोकसृष्टिस्थितिसंहारकारिण्याः श्रीमन्नारायण्याः चेतनात्मकशक्त्या तस्य जीवस्य प्राणप्रतिष्ठाप्य अषडक्षीणात्मकगुरुपदेशमनुसृत्य करणीयम्।

अनन्तरं "मम प्राण इहपाणः, मम जीव इह जीवस्थितः" इत्यादिमन्त्रोक्तदिशा स्वीयप्राणादिसर्वेन्द्रियाणि एव पुण्यपुरुषस्येति अहमेव पुण्यपुरुष इत च संभाव्य भगवदाराधनाधिकारयोग्यतासिद्ध्यर्थं गुरुपदिष्टविधिना पञ्चोपनिषदन्यास-करन्यास-ब्रह्मन्यास-सुदर्शनन्यास-अङ्गुलिन्यास-नामद्वादशपञ्जरन्यास-षडङ्गन्यास-एकाक्षरन्यास-मातृकाषडङ्गन्यास-मन्त्रषडङ्गन्यास-अन्तर्मातृकान्यास-बहिर्मातृकान्यास-अचोन्तन्यास-अक्षरन्यास-सर्वाङ्गन्यासादीनि समाचरित्वाऽथ मानसिकार्चनेन भगवन्तं संसेवनीयमिति सुस्पष्टमुक्तं भागवदर्चाप्रकरणग्रन्थे।

मानसिकार्चनम् -

योऽस्ति भगवदाराधकः स एवमेव भगवन्तमाराधयितुं योग्यतां संपादनीयम्। अत्रोक्ताः न्यासविशेषास्सर्वाः भगवदाराधयोग्यताविरोधिनिरसनपूर्वकभगवद्वरिवस्यभाग्यप्रपकाः भवन्ति। एतैः न्यासकर्मभिस्संस्कृता आराधकाः प्रथमं "आत्मस्थं ह्यर्चयोद्भूतिकाम" इत्याद्युपनिदुक्तप्रकारेण भगवदिव्यमङ्गलविग्रार्चनरूपभूतिमैश्वर्यं कामयमानः स्वात्मस्थं "हृदयं तद्विजानीयाद्विश्वस्यायतनमहत्" "हृत्पुण्डरीके विमले प्रविष्टः" इति हृदयकामलाकाशान्तर्वर्तिनं परमात्मानं समाराधीयम्।

विशेषेण हृदयकमलस्य लक्षणमेवं निरूपितवन्तः -

हृदयकमललतायाः जन्मकारकः शिफाकन्दः यो भवति स वोदोक्तधर्म एव। तस्य नालं ज्ञानं, तत् ज्ञानं भगवतस्सकलनिष्कलप्रकारकं भवति। तस्य दलाणि अणिमाद्यैश्वर्यरूपाणि, कमलदलानां मध्ये या भवति कर्णिका सा वैराग्यरूपिणी भवति। अर्थादयं विशेषोऽत्र प्रतीकात्मकतया एवं ज्ञायते - भगवदाराधकस्यार्चकस्य हृदयकमलं वेदोक्तधर्मयुक्तमनोनिखननात्मकव्यापारेण विखनोमुनिवजातं सत्, मरीच्यादिभिरुक्तभगवतस्सकलनिष्कलज्ञाननालेन, सर्वेन्द्रियजयात् सदाचाराच्च संपाद्यमानाणिमाद्यष्टैश्वर्यैश्च विशोभितं सत्, सकलैश्वर्यभोगभाग्ययुक्तमपि परमात्मभिन्नविषयवस्तुषु वैराग्ययुक्तं भवितव्यमिति। एतादृश मनस्कः अर्चकः प्रथमं मानसिकार्चनं करणीयमिति विधीयते।

ततस्स एवास्मान्तरयितुं दिव्यमङ्गलविग्रहारूपेणावततारेति संभाव्य -

भगवन् ! पुण्डरीकाक्ष ! हृद्यगन्तु मया कृतम्।

आत्मसात्कुरु देवेश ! बाह्यो त्वां सम्यगर्चये।। इति भगवन्तं संप्रार्थ्य, यथा देहे तथा बेरे न्यासकर्मसमाचरेत् इति शास्त्रविधिमनुसृत्य शोषण-दाहन-प्रावन-पिण्डीकरण-सुषिरीकरण-सावयवीकरण-प्राणप्रतिष्ठांश्च विना तदितराणि सर्वाणि

¹⁴ बालाग्रशतभागस्य शतधाकल्पितस्य च।

भागोजीवस्सविज्ञेयः स चानन्त्याय कल्पते।।



न्यासकर्माणि भगवद्विग्रहेऽपि समाचरित्वा आत्मानं नारायणं स्मृत्वा, भगवत्किङ्करोऽयं न्यासकर्मभिः भगवत्वमपि संपाद्य
आसनस्वागतानुमानपाद्याचमनाद्यैरुपचारैः नित्यं भगवदाराधनं करणीयमिति विदधुर्महर्षयः।

एवञ्च श्रीवैखानसभगवच्छास्त्रे भगवदाराधनविधौ न्यासकर्माण्यत्यन्तप्रधानभूतानि भवन्ति। एतैर्न्यासकर्मभिरेवार्चकः
भगवदाराधनयोग्यतां, न विष्णुर्विष्णुमर्चयेत् इत्यादिशास्त्रोक्तलक्षणलक्षितत्व-च्चाप्नोतीत्यवश्यं ज्ञातव्यमुपदेष्टव्यमाचरीयञ्च भवति।



THE ROLE OF BUSINESS RELATIONS ON THE PRODUCTIVITY OF SMALL AND MEDIUM ENTERPRISES IN ETHIOPIA: THE STUDY OF HAWASSA CITY

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Abstracts

Fifty four male and four female owners of metal and wood work enterprises were involved in the study. The study focuses on the role of business relations on the productivity of small businesses in Hawassa City. The quantitative and qualitative data were used in the study to be analyzed and based on the following questions: how the customer relations, competitor's relations, relations with the family members, relations with government and financial institutions affect the productivities of small enterprises in the study area under discussion using questionnaires, interviews, document analysis, field observations and percentage analysis.

The research result revealed that the productivity of small businesses in the study area was affected by shortage of marketing management skills, price instability due to lack of contract agreement between each other and suppliers, absence of legal transfer of the products of MSEs, flourished illegal business in the town and lack of display room.

Finally, it was suggested that problems related with the owners of MSEs, government and financial institutions should be solved to avert the causes for less productivity in the operations of small businesses in the study area.

Introduction

1.1. General Over Views of the Study

The relation between people and productivity goes beyond the relation with people working for you. It goes for all people that are in contact with your business. Good external relations and a good reputation can help business attraction for more customers, investors, good suppliers and not least, good employees. So, keeping good external relations will ultimately result in higher profit (ILO, 2003).

The agencies and group of people, which are very important for the productivity of small businesses are including customer relations, relation with family members, suppliers' relation, competitors' relation, and relation with neighbors and the community, relations with government agencies, business associations, training institutions, trade unions and financial institutions (Zimmerer, T. W., & Scarborough, N. M. 1998).

As information technology becomes more closely intertwined with the very fabric of doing business, information becomes a critical resource enabling a company to complete in the market place and a service in its own right that the company can offer and sell to its customers. Ray Port and Sviokla assert that a company competes in two worlds: a world of physical resources, the market place, and a virtual world of information, the

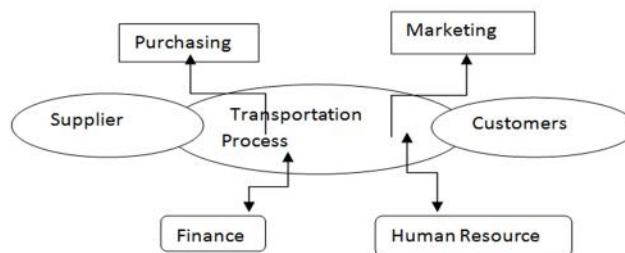


market places. Information changes the way a company creates value and competes with in virtual value chain. As well-known example is Federal Express's System which allows its customers to dial in to the FedEx data base and verify where a letter or parcel is in the system. Whether it is in route, whether it was delivered providing such information allows FedEx to provide an additional service of the customer, differentiating itself from competition and building customer loyalty and increasing repeat business (TERPSTRA: V: SARATHY, 1997).

A value chain is a set of linkages between actors where there are no binding or sought after formal or informal relationships, except when the goods, services financial agreements are actually transacted. A value chain is a specific type of supply chain one where the actors actively seek to support each other's so that can increase their efficiency and competitiveness. They invest time, effort and money, and build relationships with other actors to reach a common goal of satisfying consumer needs. So, they can increase their profits (KIT, Faida Mali, and IIRR, 2006).

The value Chain and its Support Functions

P



The value chain activities in the physical world involves clustering of micro and small enterprises which are producing similar commodities in order to increase productivity of firms operating near one another due to joint action and external economies of scale. The types of the economies of scale derived from clustering of small scale enterprises are access to market, labor market pooling, intermediate input effects, and technological spillovers (ACEG, No. 30, August, 2001).

In this particular study, I will focus on the role of business relations on the productivity of metal and wood work enterprises as one of the small business in Hawassa City. This is because small scale enterprises have greater role and contributions in developing countries including Ethiopia and in study area for the economic and social growth than the medium and small scale industries. According to Ethiopian Central Statistics Authority (ECSA), May, 1997, there were 584,913 informal (micro) sector and 2,731 small-scale manufacturing industry's operators together employing 739,898 workers.

In developing countries, like Ethiopia, micro and small enterprises, by the virtue of their size, location, capital investment, and their capacity to generate greater employment, have demonstrated their powerful propellant effects for rapid economic growth. The MSE's Sectors have also been instrumented in bringing about economic transition by providing goods and services that are of adequate quality and are reasonably priced to



large numbers of people without requiring high level of training, large sums of capital or sophisticated technology.

The micro and small enterprise sector is also described as the natural home of entrepreneurship. This is because it has the potentials to provide the ideal environment for enabling entrepreneurs to optimally exercise their talents and to obtain their personal and professional goals. In all successful economies MSEs are seen as an essential springboard for growth, job creation and social progress. The small business sector is also seen as an important force to generate employment and more equitable income distribution, activate competition, and exploit niche markets, and enhance productivity and technical change and through the combination of these measures, to stimulate economic growth.

While we can not deny the importance of large and medium enterprises for the growth of Ethiopian economy, there are ample evidences to suggest that the absorptive capacity of the small business sector is high; the average capital cost per job created is usually lower than in big business and its role in technical and other innovative activities is vital for many of the challenges facing in Ethiopia. According to the study of ECSA, the whole labor engaged in micro and small Scale Manufacturing industries are more than eight folds (739,898 workers) that of medium and large scale manufacturing industries which employed only 90,213 workers.

1.2. Background to the Study

The study focuses on the role of the business relations for the productivity of small businesses in the cases of Metal and Wood work enterprises in Hawassa City. This is because this sector contributes more in creating jobs for unemployment, transforming existing knowledge in to new technology such as metal and woodwork furniture for home and office consumption, different agricultural tools, construction materials, and other metal engineering technologies. Therefore, through these efforts, this sector can pave the way to industrialization in the country as well as in the study area. According to the survey held by Hawassa Town MSEs Development Desk Office in 2006, the total number owners of Metal and Woodwork Enterprises are 250, from which 231 are males and 19 are females. Additionally, the survey reveals that the employment opportunity created, beyond the owners and their families working in the enterprises are 943 workers were employed. The enterprises are located dispersedly in seven sub city's administration with the 3,791,946 capital investment.

1.3. Statement of the Problem

Things that attract the attention of developing countries including our country, with regard to the small business enterprises are their significance to the development of social and economic growth. According to Andu-AlemTegegne (1993), "the small business enterprises are widespread, vibrant, dynamic and turbulent sector with multitudes of business activities moving in and out". Most importantly, they are strategically significant for the development of developing countries. Understanding the formidable inhibitive factors to the growth and development of small business enterprises and removing their constraints are crucial for the developing countries to pullout the current poverty syndrome and march into the development horizon. The sector also gradually improves the international competitiveness of developing countries and enables them to join the comp of lately developed countries.



Hence, in the view of the current Ethiopian situation, where population is growing at an increasing rate and substantial increase in urban population is taking place, is accompanied by high unemployment rates which is resulting from educational attrition/dropouts, retrenchments, dislocations, unavailability of formal sector employment opportunities, and a host of other factors, the small scale enterprises (SSEs) sector need to be given urgent and due attention to foster development.

Therefore, the study tries to find out the role of Business Relations on the productivity of Small business enterprises by focusing on the cases of Metal and Woodwork activities in Hawassa City. The study also tries to pin out the types of business relations affecting the productivity of small businesses in the study area by focusing on the following relations: relations with customers, suppliers, competitors, neighbors and competitors, government institutions, trade associations, financial institutions and other relevant organizations.

1.4. Objectives of the study

1.4.1. General Objective

The purpose of the study is to find out the role of business relations on the productivity of Small Business engaged in metal woodwork enterprises and to recommend possible solutions.

1.4.2. Specific objective of the study

- Analyze the business the business relations that may foster or hinder the productivity of small businesses of metal and woodwork enterprises.
- Point out the problems related to the business relations
- Recommend possible solutions
- Provide secondary input to researchers

1.5. Significance of the Study

The major benefit of the study is pouring the way between business relations actors to increase the productivity of metal and woodwork enterprises in Hawassa City and mainly:

- ✓ The direct benefit could be grasped by the owners of metal and woodwork enterprises for building appropriate relations with the actors that may increase their productivity.
- ✓ Interested individuals, agencies, associations, trade unions, etc, could use the findings for further study.
- ✓ Could add-up something to the existing volume of knowledge.

1.6. Limitation of the Study

Obviously, small-scale industrial development approach is the new phenomenon that needs more research in developing countries. As a result there were the shortages of secondary data sources. Additionally, there were problems related to internet access, shortage of finance for data collection, to buy materials needed, and timely delivery of data by participants.



2. Review of the Literature

This part is exclusively focus on the review of the related literature on researcher's findings, books, texts, journals, government policy documents and reports. The section is started with brief review of two parts of Micro and Small Enterprises (MSEs) : over views of MSEs in Ethiopian Economy and the Role of Business Relations for the Productivity of Small Business Enterprises in Ethiopia as well as in Ethiopia.

2.1. An overview and size of Micro and Small Enterprises Sector in Ethiopian Economy

2.1.1. Definition of Small and Medium Enterprises

Small and Medium firms have no similar meanings in both developed and developing countries. To show some of the overviews of its meaning and status,

1. The Small-Scale Manufacturing Sector employed, including owners, on average 3 persons per industry and the average employees per industry is 2 persons, while the average operating surplus per industry is Birr 18,934 which shows that income generated by small manufacturing activities is much better than those engaged in the informal activities. As highlighted above, the MSE sector is characterized by highly diversified activities, which can create job opportunities for a segment of the population. This indicates that the sector is a quick remedy for unemployment and facilitates the environment for new job seekers and self-employment. So, the issues of Small-Scale Enterprise and entrepreneurship development have received a great deal of attention as priority areas that are crucial for simulating economic growth in both developing as well as in developed countries.
2. There has been a substantial growth in both public and private interest in the development of SSEs in the last two decades, particularly in the developing countries, and also throughout the world. As a result, in order to channel the support facilities to this diversified sector, categorize the sector according to the size of the sector. For this purpose, the definitions of MSEs vary from country to country based on the level of economic development and their capacity to support the sector. In relation to this, the definition of MSEs is to become dynamic in all over the world. In our country the sector's role and contribution has been neglected for a longer period of time due to bad attitude of people towards MSEs, the cultural influence and lack of awareness to change. But after the reform the meaning of MSEs is basically defined by Ethiopian Central Statistics Authority and Ministry of Trade and Industry in 1997:-
3. According the ECSA, Micro and small business meaning is defined based on number of employees employed in the business organization. Accordingly, Micro enterprises mean the enterprise Handicrafts and informal business organizations those have no license and are in different areas, while small interprets are those business enterprises which are employing below 10 workers.
4. Another meaning of MSEs which is commonly used in Ethiopian context is the meaning given by the Ministry of trade and Industry in 1997:-

Micro Enterprises: - are those small business enterprises with a paid-up capital of not exceeding birr 20,000 and excluding high technology consultancy firms and other high technology to establish.



Small Enterprises:- are those business enterprises with a paid-up capital of above birr 20,000 and not exceeding birr 500,000 and excluding high technology consultancy firms and other high technology establishments (Ministry of Trade and Industry, Nov 1997).

2.1.2. **Size and Diversity of the Sector**

According to the survey of Ethiopian Central Statistics Authority (ECSA), in May, 1997, there are 584, 913 informal sector operators (Micro Enterprise operators) and Small Scale Manufacturing Industries operators, respectively absorbed 739,898 labor forces. The survey also revealed that a Micro Enterprises on average engage, one person and average annual surplus is about birr 1,300. Regarding diversity of the informal sectors (Micro Enterprises), the survey indicated that a large number of informal sector operators are concentrated in a limited area of activities such as 47% in Manufacturing, 42% in Trade, Hotel, and Restaurant activities, about 6% in community and personal services and 5% are involved in agriculture, hunting, forestry, and fishing, mining, and quarry construction and transport activities. On the other hands, the survey on Small Scale Manufacturing Industries showed that they are engaged in the manufacture of food, fabricated metal, furniture, and wearing apparels. These sub sectors constitute more than 85% of the surveyed small scale manufacturing industries.

2.2. **International Vs National Role and Contribution of the Small-Scale Enterprises**

In successful developing countries, MSEs by virtue of their size, location, capital investment, and their capacity to generate great employment, have demonstrate their powerful propellant effect for rapid economic growth. The MSE sector has also been instrumental in bringing about economic transition by providing goods and services, of those are of adequate quality and are reasonably priced, to a large number of people without requiring high-level training, large sums of capital or sophisticated technology (Zewde and associate, SEED-ILO, Addis Ababa, 2002).

Additionally, SSEs are the basic for industrial development. Even the famous industrial Revolution of Great Britain was initially accomplished largely through the SSIs, which employed modes of capital, few workers; and were owned and managed by a single industrial family (World Bank, 1978-59). The small-scale industries have now relatively decreased in these countries and most of the manufacturing value added (MVA) is generated in large-scale manufacturing industries. But the role of SSIs is still significant in the production of goods that are uneconomical for the large firms. Although most of developing countries have been overlooking the role of SSIs in the industrialization process, they still constitute a significant portion of their manufactured value added (see table1). On the average, SSIs account for 37% of contribution of the total manufacturing value added generated in the seven countries. The SSIs play a comparable role in the generation of MVA (41%) and total GDP (2.6% in Ethiopia (AbrihamTekeste, Ministry of Economic Development and Coordination, 2002, Addis Ababa).



Table1: Contribution of Small-Scale Manufacturing Enterprises to GDP

Country (Period)	Small-scale manufacturing as a percentage of	
	Manufacturing (%)	Total GDP (%)
Bangladesh (1977-78)	50	4.6
Burundi (1980)	64	8.2
Ghana (1970)	26	2.9
Pakistan (1970-80)	30	4.6
Sierra Leon (1975)	43	2.9
Indonesia (1974-75)	26	N.A
Jamaica (1978)	22	3.5
Average	37	-
Ethiopia (1987-1994)	41	2.6

N.B Includes Handicrafts

➤ **Source: Lied Holm and Mead (1987) MOFEP 2002**

Small-scale industry is also helping in mobilizing domestic resources and foreign exchange savings. Unlike large-scale industries, which mainly depend on imported spare-parts, and inputs, small-scale industries use local resources. Thus, small-scale industries can save foreign exchange by depending on local resources and may even generate foreign exchange if successfully nurtured to become exporters. SSIs appear to be less import-intensive and have a stronger backward linkage effects than large ones. For the small-scale as a whole, imported inputs accounts for about 18% of total input consumption (MOI, 1987).

Micro and small enterprises also play a vital role in poverty reduction, employment generation as well as economic development in poor countries like Ethiopia. In developing countries, the Ethiopian micro and small enterprise's sector has a wide range of operators:- Petty traders to Shoe Factory owners, a peddlers in the streets to a grocery business operators, etc. Therefore, a vibrant private sector has never dropped from the blue but is a product of a rent less effort of the governments, private sector, promotional institutions and the general public at large. MSEs Take the lion share of private business operations in terms of numbers, specialization, and product diversifications. MSEs Work with relatively smaller capital, is labor intensive, and creates more jobs per unit of investment as compared to larger firms. According to CSA, 1997, MSEs create jobs for 739,898 workers while medium and large enterprises create jobs for 90,129 workers. MSEs can also serve as business incubation centers and can be considered as homemade school of entrepreneurship (FantahunMelese, 2002).

2.3. International and National Role of MSEs

Micro and small enterprises have greater role in developed and underdeveloped countries in solving social and economic problems, mainly for developing countries. According to the paper presented in the national conference by the Federal Micro and Small Enterprises Development Agency (from October 1-2/2003), in India 3.57 million micro and small enterprises are registered, and the amount of production produced by them



accounts for 16.4 Billion American dollar and they absorb 20 million workforce. Likewise from 41,364,531 total enterprises found in Indonesia 41,301,263 (99.84%) are MSEs and they accounts 58% of total share of production. According to the survey made by ECSA, in 1997 E.C. from 1,048,984 registered total MSEs in Ethiopia, 799,358 were non-informal 217,763 were handcraft and 31,863 were small industries. They all together were absorbing 2,402,027 employees.

The survey was also revealed that the MSEs in Ethiopia accounts \$5,587,849,660 from the total of production produced in the country. Moreover, the survey indicated that 965 Medium and large industries were opened the working opportunity for 90,213 employees. Therefore, according to the figure shown above, MSEs have greater role in solving social and economic problems of our country than large and medium industries.

The Role of MSEs in the Southern Nations, Nationalities and Peoples Region

According to the survey of central statistics held in 2004, there were 112,078 non-informal, 54,764 handcrafts and, 3,687 small industries totally 170,527 MSEs found in the region. The ECSA survey also revealed that the above MSEs were employed 250,665 employees and they account birr 641,618,628 from the total production share produced in the region. MSEs in the Southern Nations, Nationalities and Peoples Region are mainly subdivided into different business like industry, service, handcrafts and different petty trade activities. The regional sample survey carried on 1,566 MSEs in 1995, identified that 51% were wholesale and merchandising and Tourism Bureau, MSEs under sample (1,566) were employing 4,217 workforces in the region. And also it revealed that MSEs under the study, 55% of the sample population were using agricultural products and other local products as their main inputs. So, they are the main source of market for local products and services and they provide their products and services at the lower prices (Trade, Industry and Urban Development, June 2006).

2.4. The Role of Business Relation for the Productivity of the Small Businesses

The relation between people and productivity goes beyond the relation with people working directly for you. It goes for all people that are in contact with your business. Good external relations and reputation can help a good attract of more customers, more investors, good suppliers, and not least, good employees. So, keeping good external relations will ultimately result in higher profit (ILO, 2003, Business relation and productivity). The following business relation between agencies and group of people are important to the productivity of small business, and will be further discussed next.

2.4.1. Customer Relations

As all we know customers are the main sources of profit of any business. Without customers there will be no revenue and the business will fail. Customers will most probably come to the same community, as your workers. Their family and friends may even be customers. Therefore, your workers will also be keen to see that the business has good relationships with its customers.

Customers that are satisfied usually come back for and are likely to recommend the business to their family and friends, while dissatisfied customer tell their family and friends about their bad experience and advise them not to use the business. Losing a



customer is not just losing the value of an individual sale, but it is a lost customer sale for ever and other customers may be lost too. When a customer's complaint is treated with respect and the customer is satisfied with the action taken, the customer will usually keep buying from the business and business enterprise can get sustainable profit (ILO, 2003, Business relation and productivity).

Customers purchase a business organization's products or services. They may be individuals (with different age, education, income, and life styles) or customers may also be organization. Customers may differ in their requirements for service, quality, and delivery time. The customers' decision to buy or not to buy the firm's output directly determines the company's sales volume and ultimately its survival. Customers also affect the characteristics of a company's product or service, its quality, features, sales prices, and even point of sale (Bantieworkie, 2001, Addis Ababa commercial college).

2.4.2. Suppliers Relations

Suppliers are your partners in the chain of business that connects the raw materials to the end customer. Establishing and keeping good relation with your suppliers mean steady suppliers, higher productivity, and more profit for both your business and suppliers. Like any business owner, supplier wants to keep good customers. They seek to do this by producing good service and quality goods. Suppliers are a good source of information about business friends. They know about new products, possible material shortage and price rises. Equipment supplier can help with good after sales services, advice and supplies of spare parts. Therefore, maintain good relations with suppliers by placing your order well in time, by making good displays of his goods, by having empties ready and importantly by paying on time (ILO, 2003, Business Relation and productivity).

All organizations require resources-fund, energy, equipment, and services and materials to produce product or services that provide these resources. The problem includes quality, cost and timeliness as related to suppliers (Ban tie workeis, 2001, Addis Ababa Commercial College).

2.4.3. Competitors Relation

Competitors are an organization's opponents, the companies against the business organization competes for customer and needed resources (e.g. employees, raw materials, even other business organization focuses most of their competitive efforts on customers. In this regard, competition can be viewed as dynamic, ongoing processes of moves and counter moves (Ban tie workie, 2001 Addis Ababa).

Often your competitors would live in the same community as you. This is a good reason for keeping good relations. But in addition to your competitors also want their business to succeed. They may find that the only way to fill a large order is to work with other similar businesses. Competitors can get better prices by together to place a bigger order. In other words: - cooperate in order to compete (ILO, 2003, Business relation and productivity).

2.4.4. Relation with Own Family

Your family is perhaps your most important business contact. As a result you can obtain the following advantage from your family relation:-



- ✓ You may obtain guarantees perhaps some of start-up capital from members of your Family.
- ✓ Some of your family members may work for you and more is your customer.
- ✓ Family members may help to get you in contact with important customers and Suppliers.
- ✓ Your family is important in providing the moral support needed to start and improve your business.

If you maintain good and constructive relations with your family, you can be assured of good ambassadors of your business and this will help towards improved productivity and higher profits (ILO, 2003, Business relation and productivity).

2.4.5. Relations with Neighbors and Community

Your business operates with in a community; people living in the community may be customers and may recommend (or discourage) their friends to support your business. The people will form a bad opinion of your business if it is damaging the environment of the local community. It could also lead to formal complaints and expensive legal action. Good relations with community will minimize the risk of theft and damage of your business. And also providing good jobs opportunity increase the amount of money in the community, leads to greater purchasing power, more customer, and satisfied employees. So, being a good neighbor is good for business (ILO, 2003, Business relations and productivity).

2.4.6. Relation with Government Agencies, Association's, Institutions and Bank

The business owners must be aware of the condition agreed with trade unions, associations, and must conform to the country's in which it is operating they need to know the legal standing of their businesses. Business owners need not know all laws and regulation in detail, but they should have a good knowledge of those that directly concern their business.

Good relation should therefore be maintained with government agencies and trade unions in order to know exactly what should be done to comply with the relevant regulations once such relation are established they can become a source valuable information and advice and would help you to save both money and time. The owner of a business may find advantages in being member of business associations. Through these you will be able to voice your concerns and assignments, and possibly to influence government policy decisions. You will meet and learn from owners of similar businesses and this will help you increase your market opportunities and competitiveness and should you ever need a loan or an overdraft, you will obviously find advantage in maintaining very good relations with banks and other financial institutions. Good relations should also be maintained with technical training institutions, as they are an excellent source of skilled workers (ILO, 2003, Business Relations and Productivity).



Chapter Three: Presentations and Discussions of Data

3.1. General Characteristics of Respondents

	Males	Females	Total	%
Total Metal & woodwork Enterprise owners	54	4	58	92
Age group 20-30	28	3	31	53.45
31-40	22	1	23	39.66
41 and above	4	-	4	6.99
Total	54	4	58	=100
Work experience 3-6	18	2	20	34.48
7-10	24	2	26	44.83
Above 11	12	-	12	20.70
Educational background				
1-8 Grade	8	-	8	14
Grade 9-10 & 12	10	-	10	17
TVET	36	4	40	69

Source: Primary data

3.2. Presentation of Data

The following section is used to present and analyze the data gathered through questionnaire, Interviews and observation. Firstly, percentage analysis was used to analyze the gathered data through tables. Out of the total of 63(58 males and 5 females) questionnaires distributed to respondent of Hawassa town metal and woodwork business enterprise owners, 58 (54 males and 4 females) were completed and returned i.e. equal to 92% of the total sample size. Overall 93.10% of the males and 80% of the females' respondents have completed the questionnaires. As shown above 44.83%, 22.70%, 48.34 % were 3-6 years' experience, 7-10 years' experience and 11 and above respectively were the experiences of operators engaged in the sector.

Secondly, the situation forced to start this business by the owner's will be discussed and analyzed in the subsequent part of the paper. The presentation begins with the summary of respondents given by the owners of the business. After they are presented the discussion and implication section will follow:

Table 2: Summary of data given by the owners on how to start their Existing Business

How do you start the business	Number the responder	%	MEs	SEs
Due to the technical Knowledge	26	44.83	11	15
Due to work experience on job	26	44.83	8	18
To create job opportunity due To absence of other job	6	10.34	4	2
Total	58	100	23	35

Source: Primary data



Table 3-2-1 shows technical knowledge and work experiences which are forcing the business to start their metal and woodwork enterprises equally and they all together account about 89.60% and only 10.34% of operators started this business due to lack of other jobs.

Table 3: Summary of data on employment creation by the metal and wood work under the study

Category of the workers	Males	Females	Total	MEs	SEs
Technical workers	430	30	460	100	360
Administrative workers	30	10	40	10	30
Total	460	40	500	110	390

Source: primary data

The above table depicts that 92% of technical and administrative male workers were employed in the 58 metal and woodwork enterprises while female workers account only 8% of the total workers employed in the business enterprise under discussion. This shows that technical and administrative skills for female are much less than the males in such areas. And also the table portrays 78% of the workers were employed in small-scale enterprises and 28% of them were in micro-scale enterprises. This is because most of the micro businesses were operated with owners and their family.

Table 4: Summary of data given by the owners about the capital registered

Number of enterprise participated	Category of Enterprises	Investment by males	Investment by female	Total capital Resisters	%
26	MES	226,500	Birr 40,000	266,500	44
32	SES	1,869,500	Birr 100,000	1,969,500	56
	MSES	2,096,000	Birr 140,000	2,236,000	100

Source: primary data

Table 3.2.3 Depicts that MEs were mostly operated with low capital and mainly labor intensive and they are generally operated by the owners and their family labor intensive and they are generally operated by the owners and their family force while somehow small business enterprises were operated with larger capital as compared to micro businesses in the data depicted above and they absorb larger work forces than MEs.



Table 5: Responses on cause and effect relationship between business productivity and customer relations:

No	Problem identified	Causes	Result	Number of responses	Percentage (%)
1	Product invisibility to the customers	Lack of display room & place	Shortage of income (revenue)	58	100
2	Inability of selling more products	Poor selling strategy	Shortage of income(revenue)	53	91.38
3	Customers loss	Lack of experienced and skilled sales personnel	Absence of revenue and shutdown of an enterprise	50	86.21
4	Lack of customers attraction	Un competitiveness of my products with price, quality and modern design	Absence of revenue and shutdown of an enterprise	48	82.76
5	Low customers buying capacity	Most of people are lower and medium income group	Inability to buy products	40	68.97

Source: Primary data

As the above data portrayed 100% of respondents were faced with lack display room that enables the customers to buy or to visit their products, and 91.38% of them were because of their poor selling strategy MSEs in the town were unable to sell their more products and they can't get more profit from their products. And more than 80% of enterprises were losing their customers due to lack of skilled and experienced personnel and lack of competitiveness of their products.

Table 6: Responses given on the impact of suppliers on the business profitability:

No	Problems identified	Causes to the problem	Outcome	Number of responses	(%)
1	Lack of raw materials in the town	Shortage of suppliers around the enterprises	Low productivity of enterprises and low quality of production	50	86.21
2	Dynamic change of the price of raw materials	Lack of contractual agreement b/n suppliers & producers	High product price that leads to the loss of customer and low profit	55	94.8
3	Lack of buying capacity	Lack of shortage to store raw materials for a longer period of time, lack of capital to buy more raw materials and lack of transportation	Limited production to be produced, low market share, and low economics of scale.	51	98.3

Source: Primary data

From the summary of 3.2.5.table, one can conclude that suppliers relation to the metal and woodwork enterprises in Hawassa is the dominant factor at an average of >93% of the total relation was affected the productivity of business. Accordingly, 98.3%, 94.8, and 86.21 the most affecting factor that limited the suppliers relations are lack of buying



capacity of operators, dramatic change of the price of raw materials, and shortage of the legal suppliers in the town respectively.

Table 7: Summary of data given the influence of competitors on business productivity

No	Problem identified	Causes of problems	Effects of problems	# of resp	(%)
1	Lack of completion b/n enterprises in quality, price and time	Lack of technical knowledge and marketing skill	Losing customers and profit	56	96.6
2	Focusing on profit without considering other components	Lack of marketing knowledge and skill	Producing unwanted products that consumers not to buy	46	79.31
3	Inability of differentiating products by the customers	Lack of specification and design to MSEs products	Lack of sales that leads to loss	58	100
4	Some enterprises sale their products at very low price without producing quality products	Flourishing of some illegal business those were not taxed	Loss of legal business enterprises	57	98.3
5	Unfair competition b/n business enterprises	Some enterprises decrease prices of their products without providing right products to the customers and to monopolize the market.	Loss of loyal customers to the enterprise and economic loss both for MSEs and for the country.	50	86.21

Source: primary data

Table 3.2.6. Portrays that the main problems affecting the business relations between competitors are customers inability to differentiate the product quality produced by various metal and woodwork enterprises due to the absence of specification of products under production, flourishing of illegal products at lower price, and lack of marketing skill and knowledge to handle their customers and do not understand competition should be with quality, quantity, prices and time.

According to the data shown above, the problems of business relation under discussion account all together about 98.3% at average. Unfair competition between different metal and woodwork enterprise and producing products without willingness of customers also account 82.76% at an average. In general the above data depicts that providing specialization and design of products is the major problems of MSEs in Hawassa.

Table 8: Summary of Data Given on Effects of Family Relation an business profitability

No	Item	Number of responses	Percentage (%)
1	Do you think members of your family are committed to your Business development?		
1.1	YES	20	34.48
1.2	NO	38	65.52
2	If your answer is no, what is your reason?		
2.1	They are unpaid and lack of specific job to perform	18	47.37
2.2	Lack of Technical knowledge and marketing skill	20	52.63
	Total	38	100

Source: Primary data



As the data indicate in the table 3.2.7, 65.5% of the total owners of enterprises responded that most of the family members working with them were not committed to their baseness organization. The reason they identified with regarded to their family members commitment is categorized in to 3.52% of the enterprise owners said that their members had shortage of technical knowledge and skill of marketing management. But others said that >47% of their family members working with them were not committed to their organizations development, because they were not paid and they had not given specific job to perform.

Table 9: Summaries of data given on the effects of government and financial institution on the productivity business

No	Item	Numbers of responses	Percentage (%)
1	Government should legally allow movement of products of MSEs		
1.1	YES	58	100
1.2	NO	-	-
2	Government should control illegal business enterprises		
2.1	YES	58	100
2.2	NO	-	-
3	Micro finances and banks should fast their credit facilities	58	100

Source: Primary data

As shown in the above metal and woodwork enterprise in Hawassa had serious problems of transferring their products from their residents to other town legally, the existence of illegal business by selling their products at lower price because they did not pay tax to the government, and financial institutions should not give credit facilities at short time.

Table 10: Summary of Data Collected from Owners of Metal and Woodwork Enterprises on the Solution for the Problems of Business Relations

This part is discussing about the solutions given by the MSEs Operators to improve their poor business relation in the process of development of their Enterprises.

No	Item	Numbers of responses	(%)
1	Enterprise should be organized in association to solve their common problems like: <ul style="list-style-type: none"> ➤ To buy raw material from the source ➤ To deal with government on common issues such as policy implementation & to get experience 	56	96.6
2	To complete with each other by producing products with best quality, price, design (type) and producing on time	58	100
3	Increasing marketing skill of an enterprise from time to time	50	86.21
4	Government should control illegal business organization those may not pay government tax	58	100
5	Government must allow the movement of products which are legally produced by the metal and woodwork enterprise from town to town	58	100
6	Increasing the knowledge of owners and workers through training	45	77.59
7	Development of working culture should be increased in society	35	60.35
8	Creating positive business relation with others	49	84.48

Source: Primary data



Table3.2.9. Depicts that 100% of the mental and woodwork enterprises in Hawassa should take care of customer’s relations in producing quality products with best design, and with fair quantity at fair price, products at lower prices, and government should allow the movement of the products of enterprises from town to town because most of their products were not pass through custom station legally. Another solution given by the enterprise owners according to the above data, in order to solve the supply of raw materials they should be organized in association to get material from the source were accounted about 56 (96.6%) of the total responses to solve business relation with compiler by improving customers handling through training of marketing skill, creating positive business relation with others at an average about 81.1%.

Table 11: Summary of Data given By the Enterprise Owners on the Role of Government to Enhance the Development of Metal and woodwork

No	Item	Number of responses	Percentage (%)
1	Providing working premises	58	100
2	Providing training facilities	56	96.6
3	Providing License for accreditation of their products	58	100
4	Facilitating workshop and discussion panel on their common issues through their association	52	89.66
5	Allow the movement of products of MSES from place to place with legal ground	58	100
6	Creating fast loan support system and allow with minimum for longer period of time	57	98.3

Source: Primary data

As shown above, government role is critically important in solving the problems of display room, manufacturing area, accreditation problems of products MSEs, and problems of passing their products legally through custom stations. This shows that the government should solve these 3 critical problems of the sector urgently.

3.3. Results from Observations & Interviews

The enterprises researcher originally distributes the questionnaires by reaching facedly to the enterprises owners and representatives at hand within one week of period. Additionally the researcher started to collect the questionnaires for two weeks and looking for more additional points to be added through observation and interviews. During the observation and interview period, the researcher selected 15 metal and woodwork enterprises from the total sample of 63. Accordingly, the results are presented below:

3.3.1. Efficiency of manpower Management

Comparatively there was difference between: one enterprise to another in managing manpower in business enterprises. But both of them have no written documents used to guide their organization. This means they did not have short term and long term



planning's, no clear job description to their workers, no assigned quality control workers, no design and standard of products to be produced, no experienced sales personnel who will give every information to the customers, no systematic way of evaluating workers in the organization, no way of getting customers suggestion, some of owners had no technical and administrative knowledge as shown in the table 3.1. Accordingly, only about 69% of owners had technical knowledge and 31% of enterprises were primary and secondary school graduates. As a result there exists 40% of workers turn over or attrition.

3.3.2. Financial Management of Enterprises

At the time of observing enterprise by the research, there were no sufficient accounting record which shows current assets and liabilities, and long term asset and liabilities in the organizations, no financial flow account and no annual demand of capital exactly known throughout the years. This was because of the absence of trained accountants: from 15 enterprises interviewed, there were only 40% of enterprises had an account while 60% of them had no accountant.

3.3.3. Marketing Management Aspects of the Enterprises

Marketing management aspects of the enterprises under discussion, deal with customers handling, linkage between suppliers, selection and focusing of target group, marketing plan, display and sales room, marketing research and about sales personnel. Accordingly, 15 metal and woodwork enterprise were interviewed by the researcher on marketing management aspects: As they were answered 10% of them had no market plan to select the target group to make their market sustainable and to attract loyal customers. While 5 organizations had inexperienced and not skilled sales personnel, and 10 were without sales personnel, which account 67%. 100% of 15 enterprises have no agreement between suppliers and had no display rooms and selling rooms. They also had no market research development throughout their life. In the marketing aspect one critical issue raised by female entrepreneurs was that society's attitudes towards females' technical knowledge and products produced by them had questions of acceptance. This can be seen at the time of starting period that no customers were willing to buy the products produced by females are technically inefficient. Anyhow according to the survey of Micro and Small Enterprises Development Desk of Hawassa in 2006, there were only 19 females started metal and woodwork business enterprises out of the total of 250.

3.4. Summary of Results

Metal and woodwork enterprises in Hawassa are one of the MSEs sector that absorb large number of workforce. They are located dispersedly in seven kifleketemas and found naturally in the same areas within kifleketemas. According to the data in table 3.1, 69% of metal and woodwork enterprises under discussion were committed to start the business because of their technical knowledge while 31% them were started it by their local knowledge of getting from grades of 1-8 and 9-10 and 12.

Metal and woodwork enterprises in Hawassa play important role in solving social and economic problems of the town through employing large number of labor force, and mobilizing large amount of capital. As shown in table 3.2.2 and 3.2.3, 58 metals and woodwork enterprises absorb about 500 work forces of the town and mobilizing birr 2,236,000 in their organization.

Moreover, the owners of metal and woodwork enterprises identified that the role of business in relation with customers, suppliers, competitors, family members, government



and financial institutions are very important in the productivity and profitability of their business enterprises.

Finally further research seems to be necessary to identify factors affecting business relations on the productivity of small businesses.

Conclusion and recommendations

4.1. Conclusions

It is found in this study that development program of MSEs is very important for developing countries like Ethiopia. If we all believe that we are poor, we can increase our commitment to work hard and consuming the products locally produced by our MSEs, even though the quality, the design, and price of the products may not be competitive, we should buy the products and services produced by us, rather buying foreign products in order to encourage the sector. This is because perfections come through time, knowledge, and experience.

As shown in the study, the focus of this paper is on the role of business relations on the productivity of metal and woodwork enterprises. In Hawassa, metal and woodwork enterprises faced with various problems which hinder the productivity of business relations deal with customers, suppliers, competitors, Family members working with owners of enterprises, and implementation of government's policy and financial institution.

In general, metal and woodwork enterprises had the following four major problems which are:-

1. Lack of working premises
 - Four production(workshop)
 - For display room(show room)
2. Lack of marketing and management skill such as:-
 - ✓ Poor selling strategy that is necessary for analysis of the marketing segment could be carried out to identify the target consumer and to know how best to appeal to that customer.
 - ✓ Poor product strategy that refers to the lack of creation of linkage between producers and suppliers, which hinders MSEs to get continuous supply. It also leads to poor design of products that cannot enable to establish brand names in creating more acceptability and command lighter price stability and command higher prices with quality product.
 - ✓ Poor pricing strategy refers to inability to offer reduced price as a valuable tool to attract customers to buy a product. However, this should be only for a given period.
 - ✓ Poor promotion development of products.
3. Shortage of government support to facilitate the movement of products of Metal and Woodwork Enterprises from Hawassa to other places, and also taxation system of revenue and Income Agency is not clear to those tax payers.
4. Price instability of raw materials from time to time that affects the productivity of Enterprises.
5. Poor man power management that decrease the productivity of an enterprise and that increases turnover of workers.



4.2. Recommendations

Therefore, to avoid the above problems, the following remedies should have to be taken by the owners of metal and woodwork enterprises, government, and financial institutions.

4.2.1. The Owners of Metal and Woodwork Enterprises

- They should focus on customer's relations that can be developed through time by increasing customers' loyalty.
- They should prepare short term and long term plans to their enterprise.
- They should improve their manpower management system throughout time in order to decrease workers turnover or attrition.
- They should organize themselves in association in order to avoid common problems by dealing with government, suppliers of raw materials, training institutions and to share experience with each other and abroad.
- They should try to keep any information about their business in written form.

They should try to improve their skill from time to time through training and visiting others organization.

4.2.2. The Government bodies

- Government should control illegal business enterprises those denote pay income tax.
- Government should allow movement of the products of metal and woodwork enterprises legally.
- Government should make fair payment of income tax and improve the system.
- Government should facilitate working premises to the enterprises fairly.
- Government should introduce its policy and regulation to the MSEs from time to time to encourage legal business operation and discourage illegal business operations.
- Facilitating training conditions to help operators in improving their productivity.

4.2.3. Financial Institutions

- They should improve the loan size and unnecessary long bureaucracy from loan process.
- They should give the loan according to the market demand of the business men to expand and operate their business
- They should extend the repayment schedule of the loan according to the type of the business and the business plan of the business operators.
- They should have to improve generally the system of dispersing the loans.
- They should release the loan on time when the market is available.

References

1. AbrihamTekeste, (2002). Ministry of Economic Development and Coordination. Factor Intensity and Efficiency of Small-Scale Industries. Addis Ababa, Ethiopia.
2. ACEG, (2001). A Policy Bulletin of the African Center for Economic Growth. Research For Development. Kenya.
3. Andu-AlemTegege, (1993). Small-scale Enterprise and Entrepreneurship Development in Ethiopia. Addis Ababa.



4. BantieWorkie. (2001). Commercial Collage of Addis Ababa. Introduction to Business. Addis Ababa, Ethiopia.
5. ECSA (May, 1997). A survey of informal (Micro) and small-scale Manufacturing Industries. Addis Ababa.
6. FantahunMelese, GTZ-MSEs Development Program. (2002). Technical, and Vocational Education Training, (TVET) and MSEs Promotion for Private Sector Development.
7. ILO. (2003). Improve Your Business. Harare, Zimbabwe.
8. ILO. (2003). Business Relations and Productivity.
9. KIT FaidaMaLi and IIRR. (2006). Value chain empowerment.
10. Ministry of Trade & Industry. Micro and small Enterprises Development strategy, (Nov, 1997). Addis Ababa, Ethiopia.
11. MOL (Ministry of Industry). (1987). Report on survey of private manufacturing Industries 1986/87. MOL, Addis Ababa.
12. Southern Nation nationalities and peoples Region Trade, Industry, and Urban Development Bureau. (June 1998 E.C). Micro and small enterprises development Program. Hawassa, Ethiopia.
13. TERPSTRA V: SARATHY, R. (1997). International Marketing, (7th Ed). The Dryden press, New York. (No.3, August. 2001).
14. Zimmerer, T. W., & Scarborough, N. M. (1998). Essentials of entrepreneurship and small business management (2nd Ed.). New York: Prentice Hall.
15. Zewde and associates, SEED-ILO. (2002). Jobs, Gender, and Small Enterprises in Africa. Women Enterprises in Ethiopia-Preliminary report, Addis Ababa.



NATURALISTIC ELEMENTS IN STEPHAN CRANE'S MAGGIE: A GIRL OF THE STREETS

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In literature, Naturalism is an approach that proceeds from an analysis of reality in terms of natural forces, e.g., heredity, environment, physical drives. The chief literary theorist on naturalism was Emile Zola. The naturalists tended to concern themselves with the harsh, often sordid, aspects of life.

American naturalism has various key features that distinguish it from French literary naturalism and American realism. American naturalist authors strove to adopt neutral, objective tones in their works. Their characters also were portrayed as victims of their environments and circumstances. Instead of featuring man's free will, naturalists emphasized the deterministic nature of human life. In other words, man's fate is dictated by factors other than his own free will. People may try to do better, but they are small and ineffectual compared with the natural environment. The universe, indifferent to the state of humankind, will go on regardless of what humans do. Characters in naturalist literature are deeply impacted by hereditary and environmental factors.

Stephen Crane is considered to be one of the most prominent literary naturalists in American literature. Naturalism was a movement in American literature during the latter half of the nineteenth century. Stephen Crane's *Great Short Works* clearly demonstrates his skill as a naturalist author, particularly *Maggie: A Girl of the Streets* and *The Open Boat*. In *Maggie: A Girl of the Streets*, the title character certainly falls victim to her environment and to hereditary factors. The destitution in which Maggie is raised deeply impacts her perception of Pete, causing her to believe that he is an upstanding young man who truly cares for her, when in fact he is a good-for-nothing louse. Her mistreatment at the hands of her brother and mother also lead to her demise. Maggie's death occurs anonymously with little detail, another sign of the universe's indifference to her brief life.

In *Maggie: A Girl of the Streets* by Stephen Crane, squalid and devastating conditions prove more resilient and determining than the power of will or character. This is not only one of the most prominent aspects that defines this as a novel of naturalism, but is what makes the rather inconclusive ending more tragic.



Maggie is witnessed as she struggles to overcome her conditions of poverty but in each effort, it seems that the Darwinian struggle between her and her society is an impossible force to tackle. Naturalism in *Maggie: A Girl of the Streets* then proves to be more than simply a social message the author seems to make but also becomes the central element in the classification of this story as a tragedy. While other elements of tragedy that are often found in classical texts are present as well, the most notable of which is the tragic character flaw, these merely contribute to the ultimately tragedy but are not the powerful force that the social conditions are. In short, presented with a struggle that takes place in the modern urban jungle between aspirations to leave and “evolve” into something better and the inevitability of such conditions, Crane is suggesting that for the most part, such conditions are, with rare exceptions, signs of an inevitable impoverished fate, no matter if she was the victim of murder or took her own, tragic life (Salemi 59).

Maggie: A Girl of the Streets has been coined as “Naturalism’s first novel” (Fudge 43) although according to one scholar, “Crane never claimed to be a naturalist, though he did famously inscribe copies of *Maggie* with the declaration that ‘environment is a tremendous thing’” (Hunter 19). It should also be noted that as graphic as the novel is in its depictions of filthy slum life, there was an original edition that Crane had that was more graphic, but was not released initially (Stallman 530). While Crane was aware of the shocking nature of some of the descriptions, particularly in terms of sexual and violent content, the purpose was to reveal in a fictional form, a world that most of Crane’s readers were unable to conceive of, let alone personally experience. Horwitz (609) remarks on the deviation much of the content of this novel had with what was being written for mainstream audiences and suggests that this was a strong form of naturalism, especially when set in contrast to women’s roles of the time and ideas regarding the cult of domesticity that encouraged piety and purity above all else. *Maggie* can be seen as tragic because due to her social and environmental conditions, she is not permitted the opportunity to take part in what was historically defined as “proper femininity” and that herein lies one of the other elements of tragedy. Without an alternative environment or even any exposure to one, *Maggie* and many of the other characters are doomed from the time they children until they are adults to a life that is outside of the context of mainstream America during this time of growing middle-class wealth elsewhere.

The very fact that one of the opening lines of the book begins with a street fight where the “honor of Rum Alley” (Crane 1) is at stake is revealing in itself about some of the themes about the struggle to overcome poverty and one’s conditions. Although in this novel of naturalism the characters that are fighting at the



beginning have few aspirations to rise beyond their current state and instead are engaged in petty, violent struggle, the notion this honor on Rum Alley is important to the text. Honor for the denizens of this part of New York is directly related to wealth and the appearance of wealth. While a character like Maggie desperately seeks this form of honor, when matched against the poverty and struggles of life in such a rough area, she seems doomed to fail from the very beginning. In this first opening few paragraphs, Crane is setting the reader up for two important conditions. First, the meaning of honor in a place that seems almost completely morally bankrupt and how this is an unrealistic goal and secondly, the violent, brutal struggles themselves as men fight in the street like animals in the jungle. These men have the “grins of true assassins” (2) and it is clear that anyone who was to stumble across such a scene, with those who identify themselves as members of “Devil’s Row” would not stand a chance of ever leaving alive. This is all true of Maggie who, despite her striving for some kind of “honor” nonetheless becomes yet another victim of the unending cycle of violence and base behavior.

Crane’s novel as a fictionalized account with the same intent—to comment upon some of the social ills and problems present in tenement districts—Maggie emerges as more than simply a novel with a social message, it becomes naturalism in American literature with a purpose. It is not simply presenting a Darwinian struggle for the purposes of objective analysis or as a plot device; he is having a literary conversation with some of the most pressing social issues Riis uncovers in his text. In the end, this is a realistic portrayal of New York City tenement life that not only reveals the horrors of poverty, but the inevitability of the fates of those who live within it.

Works Cited

1. Crane, Stephen. *Maggie: A Girl of the Streets*. New York: Penguin Classics, 2002.
2. Fudge, K. “Sisterhood from Seduction: ‘Charlotte Temple,’ by Susanna Rowson, and ‘Maggie Johnson,’ by Stephen Crane.” *Journal of American Culture* 19(1996): 43-52.
3. Horwitz, Howard. “‘Maggie and the Sociological Paradigm.’” *American Literary History* 10.4 (1998), 606-638.
4. Hunter, Adrian. *Maggie: A Girl of the Streets* (Preface). New York: Broadview Press, 2006.
5. Salemi, Joseph S. “Down a Steep Place into the Sea: Suicide in Stephen Crane’s *Maggie*.” *ANQ* 1.2 (1988), 58-61
6. Stallman, Robert Wooster. “Stephen Crane’s Revision of *Maggie: A Girl of the Streets*.” *American Literature* 26.4 (1955), 528-536.



PUBLIC HEALTH CARE IN PRE AND POST REFORM CHINA

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Introduction

Globalization has been a hot topic of the decade, rather last two decades. It has been the most debated, discussed and to some extent criticized, yet the most embraced phenomenon throughout the length and breadth of the globe. Open market economy being the most important as well as the most talked -about aspect of globalization has overshadowed all other aspects of it. Perceiving globalization in a broader context, ie, other than economic is important in order to understand its sociological and political aspects and impacts. In recent years, there has been stress on the cultural, environmental and political issues which have occurred along with the changes in market economy. Health and related policies have also been an integral part of the globalization progress, as they have undergone tremendous change, particularly in developing economies.

Good health is the priority for any nation that has embraced the path of rapid industrialization and economic development and China is no exception. Industrialization and urbanization has brought Chinese state in a critical stage, where it has to balance its economic ambitions with that of its people's welfare. For Chinese society, Progress implies overall development, which is balanced and sustainable in long race. The Third Plenary Session of the 16th Chinese Communist Party Central Committee in October 2003 is the milestone in the history of China's commitment towards a healthier and developed Chinese society. Promotion of the Scientific Concept of Development¹, and The Five Balanced developments² were the steps taken towards the creation of successful Xiaokang³ society. Urbanization has led to the rise of the migrant population in the cities and a wide gap between regions, not only in

¹United Nations Health Partner's Group in China (2005), *A Health Situation Assessment of the People's Republic of China*, Beijing

Scientific Concept of Development promoted in the 16th Chinese Communist Party Central Committee on October 2003 is "people-centered, comprehensive, coordinated and sustainable development", is a step forward in the direction of Xiaokang Society.

² United Nations Health Partner's Group in China (2005), *A Health Situation Assessment of the People's Republic of China*, Beijing The principle of Five Balanced Developments was announced in the "Decision of the Chinese Communist Party Central Committee on the Issues About Perfect Socio-marketing Economic Mechanism" adopted at the 16th Members Meeting of the Chinese Communist Party, put forward the following imperatives:

- Balance urban and rural development
- Balance regional development
- Balance socio and economic development
- Balance the needs of human beings and the environment.

³Xiaokang Society represents the CPC's socio-economic development goals for the first 20 years of the new century. Proposed in 2002 it aims at improving the people's living standards along with the country's economic development. Reduction of poverty by strengthening the levels of education, health, technology, science and culture along with strong social safety net is the aim. Because it focuses on the all-round development of the individuals the plan is seen as "people's agenda".



terms of income but also in terms of human capital development. China is facing problems, which are somewhere related to its growing health problems like HIV/AIDS and SARS. Ancient health risks that China had successfully controlled are now re-emerging due to its rapid economic development and imbalanced regional growth. Thus China's ambition of creating a Xiaokang society⁴ seems unsuccessful unless all the citizens, including the vulnerable population of China like women, children and rural migrant workers are brought within the ambit of new health policies which focus on overall development.

1. China's Health System: a Preview

China's health system has gone under considerable change since reforms and opening up of economy in late 1970s. China's acceptance of the United Nations' Millennium Development Goals (MDGs)⁵ which mainly focus on health issues is evident of China's commitment in the public health field. China's commitment of spending 850 billion yuan (\$124 billion)⁶ to restructure its health care system is a step towards achieving overall development of the country and to ensure that 90% of the citizens get basic health insurance by 2011. In 2006, China's expenditure on health was about 984.3 billion yuan, which if compared to 1978 has risen almost 89 times. China's rapid and sustained growth has led to the improvement in the living standards of its citizens. Between 1981 and 2005, economic growth lifted around 640 million people above the World Bank's new international \$ 1.25-a-day poverty line⁷. Reduction in poverty and rise in the living standards of the people has to match the success in health, which has definitely shown some rate of success. China's stride in health during the early days of the People's Republic is remarkable. Its Malaria Control program launched in 1955 brought Malaria Mortality down from 5,528 deaths in 1955 to just 24 deaths in 1998⁸. Similar achievements are also seen in the Maternal Mortality rate and under- Five Mortality rate (Table 1).

Further in 2016, Healthy China 2030 was another indicator of Chinese state to take the public health more seriously. It was an ambitious and comprehensive response to the United Nation's Sustainable Goals (SDGs). Through this program China committed itself to put the health as an important factor in all its national policies of public welfare. In 2016 Premier Li Keqiang said that the medical insurance covered 1.3 billion people. The problem still remains as many of the vulnerable groups like rural migrant

4 Idib

⁵ Six of the United Nations' eight Millennium Goals are health related:

- Eradicate extreme poverty and hunger
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria, and other diseases
- Ensure environmental sustainability
- Develop global partnerships for development

⁶ "China's \$124 Billion Health-Care Plan Aims to Boost Consumption", [Online: Web] accessed on 5th June 2010 URL: <http://www.bloomberg.com/apps/news?pid=20601080&sid=aXFagkr3Dr6s&refer=asia>

⁷ Adam Wagstaff et al. (2009), *Reforming China's rural health system*, Washington, DC: The World Bank, p 2.

⁸ Adam Wagstaff et al. (2009), *Reforming China's rural health system*, Washington, DC: The World Bank, p 2.



people are not covered under urban social security net and thus effectively left out of the health policy benefits.

Table 1: Crude Mortality Rate (1949-2000)

Year	GDP per capita (Chinese Yuan)	Crude Mortality (1/1000 population)	Infant Mortality (1/1000 live birth)
1949		20	265
1950	119*	18	195
1955	150	12.3	179
1960	218	25.4	121
1965	240	9.5	81
1970	275	7.6	61
1975	327	7.32	51
1980	460	6.34	47
1985	853	6.78	42
1990	1634	6.67	38
1995	4854	6.57	36.4
2000	7078	6.43	33.1

Sources: GDP per capita: china Statistic Yearbook, 2000(National Bureau of Statistics 2000) Health indicators: The Achievement and its Prospect of Chinese Public Health System (Ministry of Health 2000; Yin 2000)

*1952 data

Though China has controlled its population through birth control measures and also the infant mortality rate has been lowered after 1949, there has been slow progress in the later years (1980s- 2000). This calls for an investigation in the health care system of China after the reforms. Despite of all these global commitments, there are many gaps which need to be filled.

Because of privatization and the dismantling of state sponsored health care structures in China, access to health services has become difficult for some marginalized sections of the Chinese society. Resurgence of diseases like HIV/AIDS which pose greatest dangers to the high economic ambitions of China, highlights the situation of public health structures in working. Taking HIV/AIDS and its prevalence among the women, we can see how far Chinese government's dream of building up a Xiaokang Society ("Well-rounded society with broad prosperity"), till 2020 is coming up till now.

Because of reforms and increased pressure on government budgets, health systems have been privatized which has led to the decrease of state subsidy for public sector health services. Main focus has been on the decentralization of the budgets and also decision making which has ultimately resulted in fee-for-service. This has given way to private health services and people's reliance on private sources for health care, as



opposed to highly centralized health services in China prior to 1980s. Many reforms have also been introduced by the government which encourages autonomy of the health facilities and their reliance on the user fees rather than expecting state funds to support their operations⁹. This actually affected the efficiency of the provision of health services and their access to the poor people, which ultimately lead to their declined health status. In comparison to the health care system in 1960s and 70s which is symbolized by bare foot doctor, today China's health care system is in better off situation. China's overall performance in health sector has been doing well with increased life expectancy of the people. The Infant Mortality rate has fallen down from 61 to 33, as shown in the figure below. Maternal and Child Mortality rate has also shown marked difference, though regional and urban –rural differences still persist.

2. Health Care in Rural and Urban China: Pre and Post Reform

By looking at the public health indicators in China, one can clearly infer that China has managed to be at par with some developed countries. The steep decline in the Infant Mortality rates (IMR), Maternal Mortality rates (MMR) and Crude Death rates (CDR) in late nineties has set China as an example in the field of primary health care as acknowledged by many international agencies like WHO. Chinese visualization of health was broader than the mere medical indicators. It was enmeshed in the socio-economic development of the state and was thus related to the socio-economic structure of production both at the rural and urban levels¹⁰.

In the rural areas, the communes were responsible for financing and organizing the health care whereas in urban areas it was state- owned industrial enterprises. China's initial emphasis was on preventive care at the primary level and then building institutions for delivery of medical care and building the required medical infrastructure at the primary, secondary and tertiary levels¹¹. It was adopted from the Soviet pattern of 1950s which consisted of three-tier public health system, i.e. provincial, city or prefecture and county levels. Health services were enmeshed in the local structures of governance, economic production and social control¹². Three main institutions involved in the provision of health services were local government, health departments, communes at the rural level and the work units in the urban areas. Apart from this, other sources for the maintenance of health services included part of local government's budgets, funds from the rural collectives and also from urban employers. Most of the preventive health programs and the maintenance of the hospitals including the staff's salary came from the local government's share of the budget. This wide system of health services made it easier for the people at all the levels to access the health services easily without paying any extra cost for it. Emphasis on the wellbeing of the masses rather than an individual formed the basis of the health care in China. In a way, health being considered only medical well- being of an individual was more of the collective responsibility of the society and the government. Large scale involvement of masses was made possible only by engaging the masses incessantly in the "collective"

⁹ Tang Shenglan and Wu Zhuochun : Health and Health care in Transition pg 217

¹⁰ The state and Human development: fifty years of India and China pg 222

¹¹ Ibid pg 223

¹² Duckett



discourse which formed an eternal theme of Mao's political ideology. To be more precise, health care was planned against the backdrop of egalitarianism, class struggle, and mass orientation. Health was seen from a more politicized lens and was an integral part of CPC's wider political agenda. Emphasis on prevention and strategic use of low-cost medical technology guaranteed its people basic health services, thus making "China model" famous throughout the world¹³.

In the period of 1949-78 health was an integral part of CPC's politics, as there were high death rates due to communicable and non-communicable diseases. Preventive medicine, despite its honorable tradition, was non-existent in China, and modern therapeutic medicine was unavailable in rural areas where 85% of the China's population lived¹⁴. The basic guidelines issued for the organization of health care that were suggested at the first National Health Congress in 1950 were¹⁵:

- Medicine should serve the workers, peasants and soldiers;
- Preventive medicine should take precedence over therapeutic medicine;
- Chinese traditional medicine should be integrated with western medicine; and
- Health work should be combined with mass movements.

The last point forms the most important part of the health campaigns during the Maoist period. Health was not separate from the politics rather it was an important link between the masses and the party. Provision of the health services was the part of the commitment towards the building of the socialist country¹⁶. The Great Patriotic Campaign which sought to do away with the "four pests", i.e. flies, mosquitoes, rats and sparrows was to involve people fully at the community level and the mass organizations¹⁷. The first campaign was launched in 1951 and over the next 30 years there were an average of four or five campaigns a year conducted under the leadership of the 'National Patriotic Health Campaigns Committee'¹⁸. Because of the lack of the trained personnel CPC devised its own ways of dealing with the health problems which mainly included mass health and sanitation campaigns¹⁹. Not only mass campaigns but visual culture also played an important part in spreading health awareness. Advertisements, political propaganda, and public-health posters were most famous

¹³Shaoguang Wang, *China's Health System: From Crisis to Opportunity*, The Yale-China Health Journal, Autumn 2004, volume 3, p 15

¹⁴Beaglehole, et al. (1997), *Public Health at the Crossroads: Achievements and Prospects*, Cambridge University Press :United Kingdom, p. 194

¹⁵ Ibid. p.194

¹⁶ TengShenglan and Wu Zhuochunpg 216

¹⁶ Acharya, A. (2000), "*The state and Human development: Health and Education*", in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, pg 226

¹⁷ Ibid. p. 227

¹⁸Beaglehole, Robert and Bonita, Ruth (1997), *Public Health at the Crossroads: Achievements and Prospects*, United Kingdom: Cambridge University Press. p. 195

¹⁹ Acharya, A. (2000), "*The state and Human development: Health and Education*", in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, p. 226

ways of raising the awareness among the masses²⁰. The figure below shows the young barefoot doctors holding high the little red book. This poster is evident of the Chinese integration of health in the broader political agenda.

Figure 1: Public health as Political Agenda



Source: Barefoot Doctors all Over the Mountain Villages
<https://chinese posters.net/posters/e13-659.php>

In order to get the full essence of the health care system in Mao's China one has to go through the structure of health care that made it easy for the people to afford basic health care and live a healthy life. It was an organized and systematic setting under which each department had its own responsibility and ways of work. Characterized by collective initiative on part of the people and government, this system was useful in atleast doing away with diseases that were too prevalent in those times, like, schistosomiasis and Foot and Mouth disease.

3. Organization of Rural Health Services in China

In the countryside, health services were organized in three-tier system of counties, communes and production brigade. It was so organized that:

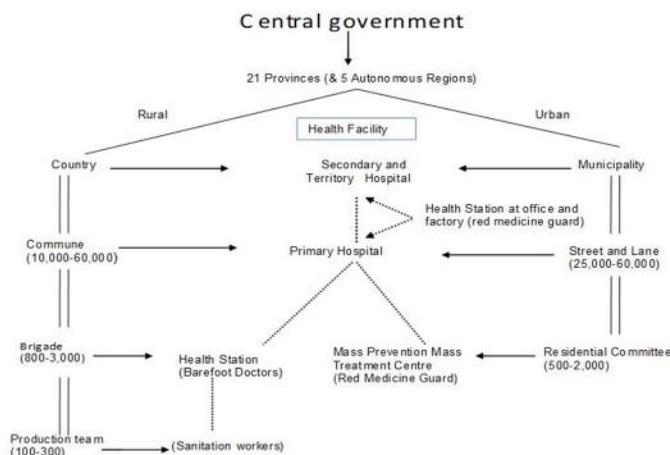
- Hospitals were available at the county level,
- Health centers for referral and basic preventive measures at the commune level and
- "Barefoot doctors" in health stations at the village level (brigade), which were part-time, trained health workers.

²⁰ "The art of medicine : Maoist public health campaigns, Chinese medicine , and SARS"

- Also along with China Center for preventive Medicine many other epidemic prevention, treatment and surveillance centers were also set up at the city, district and county levels. These included venereal diseases, nutritional deficiencies, schistosomiasis, and other infectious diseases²¹.

Each county had one general hospital and two specialized institutions that organized disease prevention and maternal and child health care. These three institutions were administered by the county health bureau. Local commune and party committee were responsible for the financing of the commune health centers while the technological support to them provided by the county-level general hospitals. From 1949-57 CPC concentrated mainly on the primary level health services which concentrated mainly on preventive services. China Centre for Preventive Medicine was primarily set up for epidemic prevention, treatment and surveillance centers at the city, district and county levels²².

Figure 2: Levels of Health Care System in China



Source: Wen, Chi-Pang and Hayes, Charles W. (1976), “Health Care Financing in China”, *Medical Care*, Vol. 14(3), p. 243

As shown in the figure communes came higher in the hierarchy of the rural health care structure. It was further divided into production brigades and production teams. Communes and production brigades were responsible for the maintenance of the large scale projects, which also included the maintenance of large health stations and commune hospitals (mainly in-patient clinics). Production teams were mainly involved

²¹Wen, Chi Pang and Hays, Charles W. (1976), “Health Care Financing in China”, *Medical Care*, 40 (3) :241-254

²² Acharya, A. (2000), “*The state and Human development: Health and Education*”, in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, pg 226



in providing basic and preliminary health care to the villagers. The budget allocation for the production team was as follows: ²³:

- 0-40 % maintenance charges
- 5-7 % state tax
- 10-15 % public accumulation fund which was to be utilized for education, health and welfare.
- Remaining 40-60 %, classified as earnings. It was distributed among the workers of the concerned production team according to their work performance. But the distribution of the extra money used to take place only after when all the individuals are insured of food and basic supplies.

Another important aspect of the rural health care at the production team level was health care workers. These were basically sanitary workers who took care of the very basic health care needs. For the population of 100-300 people there were 1-2 sanitary workers²⁴. These were generally peasants who were trained by the barefoot doctors and had received some periodic refresher coursework. They were mostly involved in the health campaigns at the grassroots level and were prominent in spreading the health awareness at the local level. This approach towards preventive techniques was significant in generating awareness among people and sensitizing them about sanitation that contributed in the disappearance of infectious diseases in China during Mao's period. This method of employing the people from the village community by training them was a big initiative on part of the Chinese government in generating self- help and capacity building.

Apart from this arrangement at the lower levels, another integral part of Cooperative medical scheme was barefoot doctors. In the late 1970s, Cooperative Medical Scheme ("CMS") was also established in most of the villages (brigades). China's rural health expenditure was paid from CMS which was basically a rural health insurance system. CMS was applied through three tiered system at county, township and village level. CMS provided prepaid capitation insurance coverage²⁵. Since the plan was applied at the brigade level and was clearly publicized among the members the enrollment was quite high, almost every member was covered under the plan. The per capita monthly premium of about 20 Fen along with the matching amount of funds from the brigade (or the commune) were added which amounted to as much as one Yuan coverage to the members²⁶. This system had large scale benefits to the members. Medical care was available without any registration fees. This insurance covered whole of expenses related to medical care such as diagnosis, drugs, etc. Apart from this patient's visits to the commune or county level hospitals were reimbursable under this plan. However there were certain exceptions to this insurance cover. The Registration fee (very nominal) and the cost of meals were however not covered under this plan. The money so collected was utilized for the maintenance of the clinic and at the same time

²³Wen, Chi Pang and Hays, Charles W. (1976), "Health Care Financing in China", *Medical Care*, 40 (3) :241-254

²⁴ Ibid. 245

²⁵ Ibid. p5

²⁶ Ibid p5

Twenty Fen is approx. 10 U.S. cents. One Yuan is equal to \$. 50.



also ensured avoidance of overutilization and wastage of the resources²⁷. Despite so many benefits provided by the CMS a gap persisted, that of a “catastrophic coverage”, as in many cooperative medical plans the fixed amount of medical coverage for the hospitalization was set. Expense ceilings as they were generally known, limited the hospitalization reimbursement, thus making it difficult for the village people to handle big ailments which required more money²⁸.

CMS funding came mainly through a combination of subsidies from higher levels, commune welfare funds generated from higher levels, commune welfare funds generated from yearly mandatory contributions by population (0.5-2% of annual income), and small co- payments at the point of service²⁹. The overall view of the health services in the countryside made it clear that rural areas relied mostly on their own resources rather than the state funding for supporting their own health facilities. Even then, Cooperative medical scheme provided a big relief to the villagers to cope with the day- today ailments and thus ensuring them a healthy life.

Barefoot doctors introduced in late fifties and early sixties, formed an integral part of the Co- operative medical scheme. At the brigade level, health stations were operated by the barefoot doctors. Sanitation workers also assisted them. Barefoot doctors usually had elementary education of six to nine years and were trained either at the commune hospital (for two months) or at the health station with the assistance of a mobile medical team³⁰. They charged nominal fee for the services they provided plus the subsidies from his/her agricultural production³¹. The brigade health stations were responsible to the brigade revolutionary committee³² for their financial accountability.

Higher on the rural health care hierarchy was the commune hospital, which provided service to the whole commune. It was staffed by 4-20 doctors, who were in-turn assisted by the nurses, technicians and other aides³³. A larger commune hospital had laboratory basic health equipment like laboratory facility and x-ray unit along with a big active pharmacy that kept basic western and herbal medicines³⁴. Thus we see that health services at the rural level were more focused on the basic, preventive and low costing health services. Different levels were interconnected and provision of basic health care to each individual was the priority. Traditional and western doctors both worked side by side thus emphasizing the unending belief of Chinese people on traditional medicine and methods of cure.

As discussed earlier big hospitals were an urban phenomenon, existing only at the county and upper level. Primary focus of the Chinese government was on providing primary health care. As seen in the table below the expansion of the secondary and

²⁷ Ibid.p7

²⁸ Ibid.p8

²⁹ Kaufman, Joan and Jing, Fang(2002), “Privatization of Health Services and the Reproductive Health of Rural Chinese Women”, *Reproductive Health Matters*,10 (20), pp. 108-116

³⁰Wen, Chi Pang and Hays, Charles W. (1976), “Health Care Financing in China”, *Medical Care*, 40 (3) :241-254

³¹ Ibid.

³² Revolutionary committee consisted of party cadres, professionals and the masses. The administration and selection of personnel, at the lower level health care institutions, i.e., which are not state owned is taken care by it.

³³Wen, Chi Pang and Hays, Charles W. (1976), “Health Care Financing in China”, *Medical Care*, 40 (3) :241-254

³⁴ Ibid. p 247



tertiary health services started only after 1957 which showed the boost in the number of hospitals³⁵.

Table 2: Number of Health Institutions and beds in China, 1949-65

	1949	1957	1965
Institutions			
Hospitals* and health centres	2,600	4,179	42,711
Rehabilitating station	30	835	887
Outpatient department	769	102,262	170,430
Special treatment centre			
Anti- epidemic station	11	626	822
MCH hospital	-	1,626	2,912
MCH centre	-	96	115
Drug test centre	9	4,599	2,795
Medical research facility	1	28	131
Others**	3	38	94
Total	247	8,665	3,782
	3,670	122,954	24,266
Beds			
Hospitals	80,000	294,7337	65,558
Rehabilitating centre	3,900	68,860	93,388
Others	725	98,209	169,359
Total	84,625	461,802	1,033,305

** Others indicate health facilities below county level, mostly in district hospitals and township health centers.

* All hospitals in 1949 and 1957 were located at county or upper levels.

Source³⁶: Health Statistics Information in China (1949-1988), Ministry of Public Health,1989; as cited in Tang Sheng-lan et al.,Financing Health Services in China: Adapting to Economic Reforms, Research Report 26, Institute of Development Studies,Sussex,1994,p.30

As indicated in the table one can infer that there was phenomenal increase in the health services from 1957 to1965 which can be regarded as the shift towards secondary and tertiary level health services. The expansion in the out- patient department and MCH is also a late phenomenon as priority was given to the traditional medicine. Though most of the medicines were also produced domestically but they were still expensive in

³⁵ Acharya, A. (2000), *The state and Human development: Health and Education*, in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, p. 228

³⁶ Acharya, A. (2000), “*The state and Human development: Health and Education*”, in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, p 229



comparison to the traditional medicine. The preference given to the paramedics and midwives over western trained doctors was proof enough for the step by step progress made from primary to tertiary level health services.

Table 3 gives a tabular description of the number of health personnel in China. The growth of western doctors over a period of time shows the gradual shift in the attitude of the Chinese medical system, though traditional doctors remained an inseparable and important part of it.

Table 3: Number of Health Personnel in China, 1949-65 (10,000)

	1949	1957	1965
Traditional doctor	27.6	33.7	32.1
Western doctor	3.8	7.4	18.9
Western pharmacist	0.0	0.2	0.8
Western assistant doctor	4.9	4.9	13.6
Nurse	3.3	12.6	25.3
Midwife	1.4	3.6	4.6
Western assistant pharmacist	0.3	1.8	3.7
Others	9.2	30.8	44.3
Total	50.5	103.9	153.2

Source: Health Statistics Information in China (1949-1988), Ministry of Public Health, 1989; as cited in Tang Sheng-lan et al., Financing Health Services in China: Adapting to Economic Reforms, Research Report 26, Institute of Development Studies, Sussex, 1994 as cited in The State of Human Development by Alka Acharya..p 230

3.1. Health Care in Urban Areas

In urban areas the health care was undertaken by the Ministry of Health directly. In addition to this, other industrial sectors like mining and telecommunication provided health services for their employees. As shown earlier in the diagrammatic representation of the health system, the urban health system was also three-tier system organized at municipal/district hospitals, street and lane hospitals (Chieh Tao) and community health station (li-long-wei-seng-shi). Unlike the rural system the urban health care system was not that organized and people were covered under two schemes, namely government insurance scheme (GIS) or labour insurance scheme (LIS) where either the government or the enterprise paid for the health services of their respective people³⁷. Government employees, retirees and college students all were covered under this scheme. Those who were not covered under any of the two schemes were free to take up any of the health facility. Most of the street hospitals and the community health stations were poorly staffed and under-used. Emphasis was on preventive care which

³⁷ Tang Shenglan and Wu Zhuochun (1998) : *Health and Health care in Transition* pg 217



was evident from the Anti Epidemic Station (AES) that were set up. This worked very efficiently in raising the health status of the people.

4. Market Reforms and Health Care

Health system in China prior to reforms was a successful experiment in providing health services to a population that was enormously large and poor. The system came out to be largely successful in bringing affordable health to a large section of people. However the embracing of reforms had its own drawbacks as it took a toll on the health services in China. After 1978, rural health services were worst affected. Change in the funding and management of the rural health services have sidelined the affordable and effective cooperative health care system of Mao's time³⁸. Privatization and commercialization of the health services has put financial constraints on the health institutions of China in general and rural areas in particular. Transformation from agricultural collectives to household responsibility system resulted in the decrease of the state subsidy in the health sector and weakened the base for CMS³⁹ which has resulted in the breakdown of the primary level services. There was great imbalance between the urban and rural distribution of the health services. Earlier state used the surplus revenues from state enterprises for the funding of welfare programs for the citizens but after the reforms, state enterprises were allowed to keep the profits and thus revenues decreased for central government. After the reforms, CMS was replaced by fee-for-service system. Funding for CMS was withdrawn and people were burdened as they had to pay from their pockets for the health services. Earlier as opposed to the 90 percent villages that were benefiting from CMS only 5 percent of the villages actually benefited now⁴⁰.

Table 4: The Percentage of Villages with CMS, 1958-89

Year	Percentage of villages with CMS
1958	10.0
1960	32.0
1962	46.0
1968	80.0
1976	90.0
1979	90.8
1981	58.2
1985	11.0
1987	5.4
1989	4.8

Source: 1958-1976 figures estimated by Anhui Medical University, 1986. 1986-1989 data provided by the Ministry of Public Health; as cited in Yuan Liu et al., 'Transformation of China's Rural Health Care Financing', in *Social Science and*

³⁸ Mark A. Strand and Alice I. Chen(2002), "Rural Health Care in North China in an Era of Rapid Economic Change", *The Yale-China Health Journal*, Volume 1, pp 11-24

³⁹ Acharya, A. (2000), "The state and Human development: Health and Education", in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, p 217

⁴⁰ Tang Shenglan and Wu Zhuochun(1998) : Health and Health care in Transition pg 217



Medicine, Vol.41, No.8, 1995,p 08, as cited in The State and Human Development....AlkaAcharya, p. 233

Weak CMS system gave way to the private practitioners. Ministry of Public Health issued licenses to encourage private practice. The dismantling of the three-tier referral system and the decline in the numbers of the old commune hospitals not only affected the health systems adversely at the village level but also put pressure on the tertiary level hospitals in the cities⁴¹. Because of the lack of funds there was problem in paying the barefoot doctors and to ensure quality services to the rural masses. Many barefoot doctors turned to private practitioners⁴². There was a shift in the provision of collective health services to an individual prerogative worsened the situation. However even after the reforms there were certain better off regions that continued with the CMS but people in poor counties were unable to bear the out-of-pocket costs.

In 1986 and 1992 there was greater expenditure on the curative services in the rural areas which resulted in the poor treatment of the AES and MCHC due to inadequate resource allocation. Almost 85% of the rural population had to pay from their pockets for health facilities. Township Health Centers (THC) were an important part of the rural three-tier health system in China, providing timely and cheap health services in China. But following the reforms the number of people visiting THC has fallen drastically owing entirely to the user fees⁴³.

Also as highlighted in **JiankangBao**(Health news)⁴⁴ owing to the financial constraints resulting from decreased federal allocations, most of the THCs were unable to pay the staff salaries and as a result there was shortage of trained people willing to work. The following sentence vividly demonstrates the loss of confidence in the THCs:

“Small illness can be seen in the village clinic, more serious illness you need to go to the country hospital; regardless, don’t go to the township clinic.”⁴⁵

The pathetic condition of the THCs was addressed in the December 2000 report⁴⁶ on rural health reform which emphasized on:

- Increased role of Township Health Centers in dealing with rural health.
- More focus on preventive then on curative care.
- Downsizing the staff so that there is increase in the quality of their training.

Because of the decentralization the health managers have gained a lot of autonomy and have been greatly driven towards the profit motives .Shift from centrally controlled supply system to market oriented demand system has led to the swelling up in the numbers of drug companies, factories and retailers⁴⁷. Prescribing too many medicines by the rural doctors in order to earn profit has not only made medical services expensive but has also given rise to serious drug related complications⁴⁸. Thus not only

⁴¹ Acharya, A. (2000), “The state and Human development: Health and Education”, in Deshpande, G.P. and Acharya A. (eds.), *50 Years of Crossing a bridge of Dreams: India China*, New Delhi: Tulika Press, pg 230

⁴² Ibid. p 232

⁴³ Mark A. Strand and Alice I. Chen (2002), “Rural Health Care in North China in an Era of Rapid Economic Chang”, *The Yale-China Health Journal*, Volume 1, p 11-24

⁴⁴ Ibid

⁴⁵ Ibid.

⁴⁶ Ibid

⁴⁷ Ibid.

⁴⁸ Ibid.



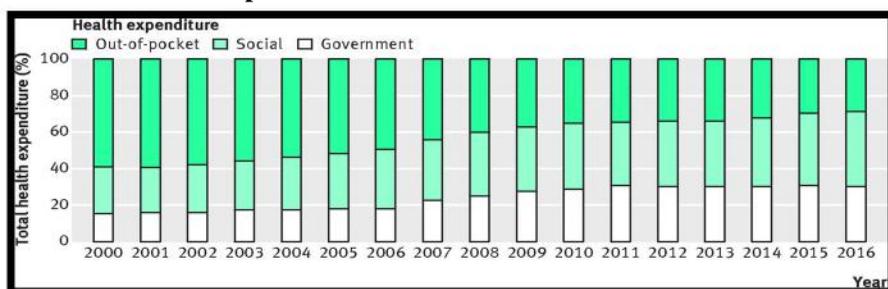
medicines have been out of reach of the poor people but fraudulent methods of earning profits have posed greater health risks. Various mechanisms have been adopted in form of laws and regulations in order to ensure the easy access to the health facilities by the people but the progress doesn't seem anywhere near. Contracts between the health authorities and providers, between hospital directors and heads of the hospital departments, have been taken to provide health providers with a financial incentive⁴⁹. Also home visits by physicians and home beds managed by tertiary hospitals are emerging in some cities⁵⁰. The main emphasis of the government is to develop some sustainable health facilities like GIS and LIS which can ensure basic protection against chronic non- communicable diseases, which are rising on the alarming rate after the dismantling of the government health facilities. Many pilot programs have also been initiated throughout the country but ignorance of local variations and people specific needs have hindered many such initiatives.

4.1 Recent Trends in Chinese Public Health

The unexpected rise of SARS towards the end of 2002 magnified the flaws of the Chinese health system. The helplessness of the government to deal with the hasty rise of the disease brought into light the inefficiency of the medical infrastructure to control the spread of the disease in the relatively poor parts of the country where people lack both money and knowledge to deal with the disease.

Since 1978-2003, there was increase of 9.4% in the GDP (National Bureau of Statistics, Beijing 2003), which was followed by even higher expenditure on health. In 2002, China's total expenditure on reached 5.4 % of the GDP. In 2017, health expenditure in China amounted to about 6.36 percent of the total GDP, as compared to 2016 where it was 6.23 percent.⁵¹ The statistics show the growing demand of the health services which is the obvious outcome of the growing urbanization. Also one can also interpret that market reforms lifted many people above poverty levels and hence they could afford more health care. But the irony is that still if seen against US\$ 1 per day standards, there is almost 12.5 percent of the rural population (162 million) that is poor and cannot afford even basic health care facilities.

Figure 5: Total Health Expenditure in China



⁴⁹Ibid pg 220

⁵⁰Tang Shenglan and Wu Zhuochun(1998) : Health and Health care in Transition pg 217

⁵¹Health expenditure in China as a proportion of gross domestic product (GDP) from 2007 to 2017
<https://www.statista.com/statistics/279402/health-expenditure-in-china-as-a-proportion-of-gdp/>



Source: Fu Wei, Zhao Shuli, Zhang Yuhui, Chai Peipei, GossJohn. Research in health policy making in China: out-of-pocket payments in Healthy China 2030BMJ 2018; 360:k234

In China the health expenditure is a sum total of three components:

- 1) Government health expenditure
- 2) Social health expenditure: it includes social insurances that are not funded by the government, private health plans, NGOs and their donations etc.
- 3) Out-of- pocket payments.

In 2016-2018 the China, the gross expenditure was at or above 10% which shows the preference for private care by well to do middle class. This trend can also be attributed to the use of new medical technology by private hospitals, the costs of which are directly borne by the patients through their high fees.⁵² In addition, growing medical labor costs have resulted in the government increasing consulting fees in public hospitals. Thus there is the public health care system of china which calls for social safety net for the people who are absolutely poor and vulnerable to the high health risks, that is, rural poor, migrant or “floating population” and women. Compared to 1995 there is a considerable increase of 70% in the number of health facilities, including clinics but Shaoguang Wang⁵³ points out that the two major indicators, i.e., life expectancy and child mortality rate that are used for demonstrating the national health status are not doing exceedingly good, except for minor improvements. Because of subordinate position of women within the Chinese society coupled with low educational level, women and her health issues have been left unattained in this highly competitive market economy. Only one quarter of the women living in the poorest areas got access to the ante- and post-natal care and even in rich areas women faced several problems in seeking health care. After the opening up of the Chinese market, women have been drawn back into the four walls of their houses owing to their lack of technical and professional skills. Introduction of user fees has made it difficult for women to have an access to the medical facilities as user fees are regressive and inequitable.

Table 6: Percentage increase in cost of service in county hospitals and township health centers, 1993–1998

	County hospitals	Township health centres
Business Revenue	170%	121%
Total outpatient visits	-14%	-15%
Total inpatient admissions	-6%	-7%
Cost per outpatient visit	232%	141%
Cost per inpatient day	208%	157%

⁵² 2018 Global Medical Trends Survey Report

file:///C:/Users/Ila%20Joshi/Downloads/2018-global-medical-trends-pulse-survey-report-rtw.pdf

⁵³ Wang, Shaoguang (2004), “ China’s Health System : from crisis to opportunity”, *The Yale –China Health Journal*, volume 3, pp. 5-50



Consumer price index	60%
Rural consumer price index	41%

Source: World Bank (2002) as cited in IDS Working Paper 194 China's rural health system in a changing institutional context by Gerald Bloom and Fang Jing, p 9, July 2003, Institute Of Development Studies Brighton, Sussex, BN1 9RE, England

Women have to bear double burden of household responsibilities and also the social and physical barriers to health care services. Also one has to see that after the opening up and the increased pressure on the state exchequers, civil society has been used as the best tool for providing social services especially in health care and education. The government could not ignore the rising social problems and private sector is more inclined towards profit making and is unwilling to invest in social infrastructure. In such scenario, NGOs seem to be a viable option in reaching to the masses and provide services to the grassroots level through its networking and specialized skills. In China also, one can see that social organizations are on rise and government is willingly co-operating with it in order to solve some of its dangers such as HIV/AIDS. Unlike other democratic countries, this is unique because of government's mistrust on the non-governmental organizations.

5. Rural to Urban Migrants and Health Concerns

Economic progress of China owes a lot to its migrant population. Labor migration, specifically rural to urban migration has been the muscle behind the ever growing impressive economic progress that China has made for almost two and a half decades now. After the rural economic reforms, there has been tremendous increase in the productivity of the farmers which lead to the creation of tremendous labour force in China. Consequently the surplus of these people has moved to urban areas constituting "floating population". In 1989 there were almost about 30 million migrant workers which rose to 62 million in 1993⁵⁴. According to the Population and Social Sciences Department, National Statistical Bureau of China; in 2001 the number of internal migrants in China was 121.07 million which rose to 131.8 million by the end of 2006. 85 million of the total migrant population consists of rural-urban migrants⁵⁵. According to the National Bureau of Statistics, almost 80 percent of the construction workers and 68 percent of the manufacturing workers are migrants⁵⁶. Reduction in poverty and unemployment being the short term achievements of the industrialization in China has also raised problems which have been ignored since long time now. One of the major questions confronting the double digit GDP growth of China is the overall well-being of the laborers working in these industries. Being socially, culturally and economically marginalized, this category of people become more prone to the health hazards in the cities. They are not covered under any health insurance programs and have no access to any community health services. Being relatively low skilled workers, migrants are

⁵⁴ "Migrant workers in China", .

<http://www.china-labour.org.hk/en/node/100259>

⁵⁵ Biao, Xiang (Migration and health in China: Problems, Obstacles and solutions : xiang Biao, pp5

⁵⁶ Yale- health China journal, Jennifer holdaway, pp 10



concentrated in jobs that involve high health risks. Mining industry, for example is notorious for accounting only 4 percent of the workforce, but 45 percent of the total workplace fatalities⁵⁷. Among other occupational hazards, lung diseases like pneumoconiosis, exposure to toxic glues and gases in the industries put the migrant workers high up on the health risk charts. Because of their low pays they are not able to pay out – of-pocket medical expenses which take heavy toll on their physical and mental wellbeing. Ultra-exploitation at work and lack of social security measures can turn a healthy migrant labourer into an ill person⁵⁸. Migrants usually take up the jobs that are unfavoured by the city dwellers because of the high health risks involved. They are normally in non- technical jobs like manual labourers and service workers. These jobs are often referred to as the ‘3-Ds’- ‘Dirty, difficult and Dangerous’ jobs.⁵⁹ Unhealthy and harmful work conditions result in their health problems. The 1996 accident of benzene poisoning in the shoe making factory of Putian County, Fujian Province highlights the pathetic condition of the female migrant workers and the damaging health consequences of the informal migration in China. When ill or injured, migrant workers have to spend their own money to get the treatment as they are not covered by any health insurance scheme by their employers.

In the absence of any medical insurance and high out-of-pocket fees these migrant workers turn to illegal private clinics that pose all the more risk to their health service. These are illegal private clinics since they do not have formal licenses. These clinics provide channel to migrants for cheap medical treatment in the cities which they cannot get in public hospitals. However, according to the ‘Regulations Governing the Administration of Medical Institutions’ in China the private clinics are allowed but only with certain specifications like the area of clinic should not be less than 40 square meters, and the clinic should contain at least a consulting room and therapeutic room; clinics of Chinese and Western medicine should have a Chinese pharmacy; and moreover, practitioners should hold the Certificate of Medical Practitioner, and have the experience of working in specialized clinical medicine for no less than five years⁶⁰. But in rarest of rare cases these provisions are fulfilled. Illegal private clinics can be sited in form of one very small dingy private rented room that in no case fulfills the space criteria. These clinics are equipped with poor quality, old instruments that in no way can guarantee a quality service to the visiting patients. Also the people providing these medical services have no certified medical qualification. They rely on the practices they have inherited from their ancestors. Since places like Guangzhou, Shenzhen etc. serve as hot spots of migrant population, illegal private clinics are doing good business. Women migrant workers who suffer from severe financial constraints visit these clinics for problems related to gynecological and other sexually transmitted diseases. Thus while on one hand these services provide an alternative to the migrants for cheap medical treatment, on the other hand migrants are also attracted because of the nice behaviour of the practitioners towards the migrants whereas in public hospitals migrant

⁵⁷ Yale –health China journal, Jennifer Holaway, pp11

⁵⁸ Ibid, pp 5

⁵⁹ Li, Yan and Wu, Shufang (2010), “Migration and Health Constraints in China: a social strata analysis”, *Journal of Contemporary China*, 19(64), pp.335 – 358

⁶⁰ Ibid.



population often faces discrimination from doctors.⁶¹ In these private clinics migrants can also pay their fees in installments which reduce the burden on them. Also important is to see the problems faced by women migrant workers. About one-third of the migrant workers are young and single girls employed in labour intensive industries which are generally light industries. Moving in an urban set up gives them autonomy and independence. They get exposure to new ideas and new lifestyles which further influence their thinking process about marriage and sexuality. They are more open in talking about abortion, contraceptives and other issues which would have not been possible in their earlier rural setup. Women who have migrated are not only more aware of contraception and safe sex but they were also more likely to know about self-administered methods such as the pill and condoms⁶². But the lack of proper formal education and expensive health facilities in the cities, have actually constrained their independence. Risky sexual behaviour is more prevalent among the migrant women than among the non-migrant in urban areas⁶³. Unwanted pregnancy and induced abortion is most prevalent among this group. World Health Organization estimates that two-thirds of maternal deaths in urban areas are of migrant women⁶⁴.

The public health facility in urban areas is difficult for these people to access. In rural areas family planning is available at county and township levels, and family planning workers are available at each level which makes it easy for the rural residents to avail the facilities. However urban health system is different. Urban residents can get family planning information and contraceptives at all drug stores. They can also get the related information from the family planning workers available in all work units⁶⁵. Being unregistered urban population it is impossible for the migrants to access these services. Moreover the discrimination and unfriendly attitude of the service provider, faced by these people when they go to seek for contraceptive services further hinders their dream of healthy life. Finally, partner attitudes posed an additional obstacle to contraceptive use. Although some unmarried workers reported that their boyfriends brought and used condoms, the majority reported that the partner refused to use a condom, even though they were generally aware of how to obtain supplies⁶⁶. The situation is different in case of the married migrant women. Family planning departments are more concerned about keeping a check on the fertility limits and therefore Family planning Offices in many cities provide free contraceptives services to these women. This has helped them to practice safe sex and protect themselves from sexually transmitted diseases like HIV/AIDS. This government initiative has been quite a step ahead to attain a healthy life to these people but it has certain shortcomings as well. Distribution of free contraceptive services however does not fill the knowledge gap caused due to high level of illiteracy among these women. Also the services provided by the government

⁶¹Li, Yan and Wu, Shufang (2010) "Migration and Health Constraints in China: a social strata analysis". *Journal of Contemporary China*, 19: 64, 335 — 358

⁶²Tan, Lin, Zheng, Zhenzhen and Song Yueping, (2006), "Trade Liberalization, Women's Migration and Reproductive Health in China" in Grown et al. (eds.), *Trading Women's Health and Rights? Trade Liberalization and Reproductive Health in Developing Economies*", London, New York : Zed Books p. 149

⁶³ Ibid. p 137

⁶⁴ "Migration and Health in China: An Introduction to Problems, Policy, and Research"

⁶⁵ Ibid. p 152

⁶⁶ Ibid p 154



are only for population control and not for the health risks that follow. Lack of proper reproductive health service to these women can be seen by the high number of reproductive tract infections among them. Most of the women either don't take it seriously or are unaware of infection they are suffering from⁶⁷. The outbreak of epidemics like SARS and HIV/AIDS makes it important to actually engage this category of people in the debates pertaining to the health issues in China. HIV/AIDS has been the biggest peril of the times for China. According to a survey of more than 600 STD (full form may be given) patients conducted by the STD Branch of the Guangdong Province Police Hospital in 2000, about 70 per cent of the patients were migrants (China News Agency, 27 October 2000)⁶⁸. Stressful work conditions, social constraints and long separation from the families make migrants highly susceptible to causal and commercial sex causing HIV/AIDS and other sexually transmitted diseases. Their mobility highly makes them the carriers of the HIV virus thus becoming the potential "bridge population" for transmitting this disease among the general population. Providing health care facilities to this section of people has been the major concern of the government. Especially migrant women and children have been the major concern. In order to look into the dynamics of this population and their chances of being prone to diseases we have to examine the trajectory of migration laws and the attitude of the government towards this category of people. Migration policy has seen a drastic change in the last twenty five years. From 1950s to 1970s, rural to urban migration was centrally controlled through the process of hukou which strictly segregated urban and rural population. This separation extended from the access to the public services and food ration to opportunities of employment. Citizens were strictly registered either as rural or urban residents and this status was hard to change throughout their lifetimes. Whatever migration took place during this time was organized by the state, including the sending of technical personnel to work in industries in the hinterland, the rustication of the urban youth after the Cultural Revolution, and so on.⁶⁹ This separation was also seen in the provision of health services. The rural and urban population was covered under separate but effective health care provisions. Rural residents were extensively covered under the Cooperative Medical System for basic health care facilities. Though basic health services were provided by the Chinese government to all the citizens but still urban population was at privileged position. Because of this bifurcated health care system the rural residents had no access to hospitals and clinics in the cities. Also the dismantling of the communes and the introduction of the House Hold responsibility System undermined the state funded health care in the villages. Illness coupled with out-of-pocket medical fees was one the major reasons of poverty in the villages that drove people toward the

⁶⁷Tan, Lin;Zheng, Zhenzhen and Song Yueping, (2006), "Trade Liberalization, Women's Migration and Reproductive Health in China" in Grown et al. (eds.), *Trading Women's Health and Rights? Trade Liberalization and Reproductive Health in Developing Economies*, London, New York : Zed Books p. 156

⁶⁸ Migration and health in China: Problems, Obstacles and solutions : xiang Biao, pp 9

⁶⁹ Jennifer Holdaway, " Migration and Health in China: An Introduction to Problems, Policy, and Research" *Yale -China Health Journal*



cities⁷⁰. In urban areas also the reform of the work –unit- based system left the migrant workers out of consideration. Less than one third of the migrant population is covered under the health insurance programs as opposed to more than half of the urban population.

Rural to urban migration was primarily the consequence of the China's leap towards economic reforms in the late 1970s which opened tremendous opportunities for the people in rural areas. Another reason was the breaking of the People's Communes and the introduction of the Household Responsibility System which released workers from the agricultural employment by encouraging production for sale in markets. Opening of Chinese markets to the foreign investments, and emphasis on the export driven growth lead to the introduction of the manufacturing industries and other service industries, which eventually created demand for the labourers. This lead to the outburst in the number of the migrants in the cities and thereby pressure on the services such as education, health care and other basic living subsidies. Chinese government's official policy has always discouraged the population mobility in the stricter sense but later as reforms provided opportunities for people to move to the cities government's policy has been describing it no more than in negative terms. Violation of the one child policy by the migrants was the reason which actually drew the State Family Planning Bureau's attention towards the health issues pertaining to migrants. Because of the large number of migrants it has been impossible for the government to link all of them to the employment opportunities and thus pull all of them under the umbrella of urban social welfare schemes. However in the recent years debates regarding poverty alleviation, human rights violation in work places, occupational health and safety etc. have brought the migrant issues in light.

On 1st September 2004, "Interim Procedure of Basic Medical Insurance for Rural-Urban Migrants was issued by the Beijing government. Serious gaps in its implementation lead to its failure. Underreporting by the enterprises about the number of migrants employed and the wages they were drawing, served as an excuse for the enterprises to escape the Interim Procedure. Most of the employers were unwilling to pay the expenses of their employed migrants and migrant workers were unable to pay the high costs of insurance from their meager salaries. State Council's document in January 2006 is a great leap forward to bring the migrant issues under the formal umbrella. "Several Opinions on Resolving the Problem of Migrant Workers" is the State Council's document which aims at achieving equal rights and access to public services for the migrants⁷¹. In compliance to the multi-level government system of China the proposal was brought into effect by coordination of different government agencies. Most importantly the document acknowledges the problems faced by migrants in their work areas, like, low salaries which are often delayed, hazardous working conditions coupled with lack of social security and other social stigmas related to their work. It aims at bringing migrants to the level of the urban residents in terms of pay and living conditions. Apart from these provisions another important leap has been the incorporation of the migrant children and women in the urban immunization

⁷⁰ Ibid, pp13

⁷¹ Jennifer Holdaway, " Migration and Health in China: An Introduction to Problems, Policy, and Research" *Yale –China Health Journal*



programs and reproductive health services. Ministry of Labour and Social Security (MOLSS) has also issued a document which further intensifies the State Council's efforts to expand the insurance cover in order to cover as many migrant workers as possible both at their work places and also if they choose to return back to their place of origin. Target of 20 million migrant workers was set to be enrolled in the insurance schemes by the end of 2006 and then nearly all migrants' workers by the end of 2008⁷². Chinese government in order to speed up its effort in this regard has initiated many pilot programs in collaboration / cooperation with local authorities in counties and provinces. All-China Federation of Trade Union (ACFTU) has also expanded its work sphere to include migrant workers in their operations. It actively campaigns for the health and work safety of the workers. Also there has been active enrollment of the workers in various trade unions, though trade unions have very limited role in China. Different cities and provinces have developed different models in order to deal with the migrant labors' problems.

Still there are many gaps remaining in the policies addressing the health needs of the migrant workers. There is still a lot of debate about the definition of the "eligible" workers who are covered under the health schemes. Also there is generalization about the health needs of the men and women. Women who are often involved in the low skilled jobs like housekeepers face problems as they are not covered by their employers.

In the recent years Chinese state has been focusing on gender equality in terms of education, employment opportunities and health care. Gender equality forms an important part of the Chinese state's initiative of building a harmonious society and also for the all-round development of the women. In the White Paper published by State Council entitled Gender Equality and Women's Development in China, Chinese government has laid special emphasis on the health of women in promoting equality and development of the women. Apart from promulgating laws for women health, China has also increased the monetary input to improve the health status of the women. By the end of 2004, there were 2,997 health care institutes for women and children throughout China, with 243,000 beds for women⁷³. It also emphasized on the better treatment of the gynecological diseases among women and also ensuring safety to mother during the childbirth. All this has considerably lowered the mortality rate among women. Proper time to time checkups and treatment along with awareness programs about various diseases has been the priority area for government. In 2000-2001 government had invested 200 million yuan in a project intended to "lower the mortality rate of women in pregnancy and child birth and eliminate tetanus among the newborn". From 2002 to 2005, the central treasury and relevant local areas allocated an additional 400 million yuan for the continuation of this project, extending it to 1,000 counties and benefiting more than 300 million people⁷⁴. Not only this the same white paper also addresses the migrant women's health care as its priority area ensuring equal

⁷² Ibid, pp 15

⁷³ "China Publishes Gender Equality White Paper", [Online: Web] accessed 22 Jan. 2010, URL: <http://www.china.org.cn/english/2005/Aug/139404.htm#7>

⁷⁴ "China Publishes Gender Equality White Paper", [Online: Web] accessed 7 Feb. 2010, URL: <http://www.china.org.cn/english/2005/Aug/139404.htm#7>



and quality health care services similar to those enjoyed by the women with permanent address.

Chinese government had also laid special emphasis on the treatment of HIV/AIDS as it forms the major obstacle in the development of Chinese economy as well as in its commitment of creating a harmonious society. It has set up the State Council Work Committee on the Prevention and Treatment of AIDS. Chinese government has been allocating huge amounts of funds in this area. As the recent trends suggests women have been the worst sufferers from this disease. Government has been laying special attention to the prevention of AIDS from mother to child. Special pilot projects have been initiated by the government which along with relevant government departments which aim at campaigns to educate people about HIV/AIDS and other sexually transmitted diseases, providing services and also educating people about condoms and other safe practices. In 2004, government launched “World AIDS Day” with women specific theme, “Show Concern for Women, Say No to AIDS” which aimed at disseminating sexual education and awareness towards the disease.

Apart from providing curative treatment and spreading awareness solely through its own departments, Chinese government has also emphasized the role of NGOs in this regard. It has called for the encouraged NGO involvement in the field of healthcare. All- China Women's Federation, the oldest government NGO working for the women has launched many programs including “Health Express for Mother” which targeted the prevention and treatment of AIDS under the theme of “Stay away from AIDS to benefit the Whole Family”. Apart from ACWF, which is governmental NGO China has also cooperated with many international organizations like the United Nations Fund for Population Activities, United Nations Children Fund, United Nations Development Fund for Women, World Bank, World Health Organization, and Joint United Nations Program on HIV/AIDS, in the fields of hygiene for women and children, reproductive health, family planning, and the prevention and treatment of AIDS⁷⁵.

In his opening speech on World AIDS Day 2009, Dr Michael O'Leary emphasized on the need of securing social welfare services and other human rights of the health staff and patients along with the actions on prevention and treatment of HIV. The right to not to be exposed to harmful infection is a part of the right to health for both health workers and patients⁷⁶. In 2005 UNAIDS estimated a figure of 650,000 people living with HIV in China⁷⁷. Listing many reasons for the disease including high mobility, large-scale labour migration, high numbers of sex workers, low condom use, a large number of people who inject drugs, low overall awareness of AIDS, it also pointed out the high social stigmas related to the disease. In this regard UNAIDS has

⁷⁵ “China Publishes Gender Equality White Paper”, [Online: Web] accessed 7 Feb. 2010, URL: <http://www.china.org.cn/english/2005/Aug/139404.htm#7>

⁷⁶ WHO Representative in China, Dr Michael O'leary's speech on Universal Access and Human Right, Infection Control in Health Settings at a World AIDS Day 2009 Activity, [Online: Web] accessed 15 Feb. 2010, URL: http://www.wpro.who.int/china/media_centre/speeches/speech_20091128.htm

⁷⁷ “Supporting people living with HIV in China”, [Online: Web] accessed 2 March. 2010, URL: http://www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2007/20070426_supporting_PLHIV_China.asp



been cooperating with Chinese government in making networks and engaging other national and international partners to work on this issue. It also supports the Red Ribbon Center, which provides an open and friendly environment to the people living with AIDS. Infectious Disease Department of Beijing Ditan Hospital along with Home of the Red Ribbon has formed the WHO collaborating Center for Comprehensive Management of HIV Treatment and Care. All this shows that there is a considerable amount of cooperation between the government and non- governmental organizations in order to combat and threat of the health perils.

On January 2009, China State Council's decision to pass the medical reform that has been in process since 2006 has been a step ahead by the government to provide medical service to the country's 1.3 billion population⁷⁸. The plan aims at bringing down the soaring medical fees and the provision of affordable medical services to the people. It also seeks to provide medical security to all the Chinese urban and rural areas. The State Council's meeting has decided to take the following five measures till 2011 in order to make the medical system of China more people friendly⁷⁹ :

- Increase in the medical insurance cover provided to the rural and urban population upto 90 % till 2011. This will account to a subsidy of 120 yuan to each person from 2010.
- In order to deal with the fraudulent medical services and soaring medicine prices government has to take the control of medicine supplies and a special attention has to be given, infact an administration for this has to be established.
- Improvement in the grassroots medical institutions, especially at county and township levels.
- Reduction in the gap between the urban and rural areas.
- Improvement in the quality of public hospitals, their administration and supervision.

In order to bring out all these changes government has decided to increase its share of budget allocation.

In a move towards upgrading the rural health services China has encouraged the villagers to seek the outpatients' healthcare, which will be covered under the New Rural Cooperative Medical Care system (NCMS).

In 2016, Central Committee of the Communist Party launched Healthy China 2030 Plan which was aimed at providing far reaching goals in the field of public health an also reaching out for sustainable and holistic health care system for all the Chinese citizens. The Plan is aimed to bring China at the level of the developed countries by 2030, while providing each and every citizen basic health care by 2020. It covers all the important areas of child and maternal health care, healthy life style, mental health, creating awareness about health through education along with building healthy and safe environment.

⁷⁸“China Passes new medical reform plan”, Beijing, Jan.21, 2009 (Xinhua), [Online: Web] accessed 26 Feb. 2010, URL: http://news.xinhuanet.com/english/2009-01/21/content_10698501.htm

⁷⁹“China Passes new medical reform plan”, Beijing, Jan.21, 2009 (Xinhua), [online web] accessed on 25 July, 2010, http://news.xinhuanet.com/english/2009-01/21/content_10698501.htm



Conclusion

Thus in the recent times one can see the shift in the government's attitude towards the emerging health problems in China. Government has been initiating new programs to help the rural poor so that affordable health is easily available to them. Though quite a step ahead but Chinese policies still have some lacunae. Such a large investment in the health sector will only be successful if it is properly allocated and the targeted groups get the benefits. Since the plan comes as a general welfare program, the very specific needs of the certain sections of society can even now be neglected. Most importantly the Chinese government need to rework on its household registration system so that the new generation of rural to urban migrants who plan to stay in cities longer can afford the social benefits. The new public health program works in the direction of providing health care to the rural people but it somewhere lacks in mobilizing the needful to utilize them. The role of civil society in this direction is most important as it is only through non state organizations working at the grassroots level for the needy government can reach out to them. In such case NGOs have a bigger role to play in connecting the rural and marginalized people to the new plans and policies.



RELIGION AND WAR IN THE SELECT NOVELS OF KURT VONNEGUT

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Abstract

Kurt Vonnegut Jr. is a one of the most prominent satirical writers of our time. He writes about the follies of men and society. In his novels *The Sirens of Titan*, *Slaughterhouse-Five*, and *Cat's Cradle* we see the faults of mankind through its belief in false truths like religion and war. Vonnegut talks about illusions that society believes in. There is often no evidence to credit these beliefs, ideas, or events, but people still acknowledge them. Vonnegut believes that war is one of the greatest follies of mankind. He thinks war is just a very horrible experience that we should strive to avoid, but people think that it is the solution to everything. People also do not realize how horrible it is and how many people actually die during war.

Keywords: Religion, War, Truth and Science.

Kurt Vonnegut Jr. is a one of the most prominent satirical writers of our time. He writes about the follies of men and society. In his novels *The Sirens of Titan*, *Slaughterhouse-Five*, and *Cat's Cradle* we see the faults of mankind through its belief in false truths like religion and war. Vonnegut points out that many of the things we believe in are probably not true. He thinks that too many people simply accept ideas as being truths. He wants his readers to question society and their beliefs that are not backed up by logical reasoning. For example, religion is not founded on any scientific premises and Vonnegut thinks we should question why so many people believe in it. In *The Sirens of Titan*, *Slaughterhouse-Five*, and *Cat's Cradle*, Kurt Vonnegut Jr. urges his readers to question popular beliefs and ideas that are accepted by society. Vonnegut tells us to think independently and search for the truths in the world.

The book *The Sirens of Titan* is about the main character Malachi Constant and his travels through the universe to deliver a replacement part to a stranded alien ship. Though Malachi did not know until the end, every person in the world, including him, was being controlled by the alien to slowly deliver the replacement part to his ship. Throughout the book, there are many passages about religion and how people are pacified by illusions in the world. Vonnegut writes, "The Church was ready for a miracle... The prophecy was that the weary Space



Traveler would be naked, that the suit of clothes would fit him like a glove. That suit was of such design as to fit no one but the right man well” (The Sirens of Titan 214). This event in the book had been set up to happen as it was predicted. The Church knew that the Space Traveler would come naked and had the suit specially made for him. It was not really a miracle. This quote shows how religion can be founded on lies. Many people believe in religion even though it may not be true. Vonnegut is saying that we should think independently and figure out our own ideas. Reed says of The Sirens of Titan:

It asserts that while an indifferent universe may confirm no purpose in our existence, we can give meaning to life by the way we lead it. This entails giving up the search for a rationale in the incomprehensible workings of the universe, the hunt for some answer from above, and turning to ourselves to provide meaning... (496)

Reed also says that Vonnegut is saying we are the ones that need to search for purpose ourselves. We need to think independently. We cannot always turn to religion to give us the answers because religions are not necessarily truthful.

Vonnegut talks about illusions that society believes in. There is often no evidence to credit these beliefs, ideas, or events, but people still acknowledge them. Vonnegut writes: “The materializations had been happening for nine years, once every fifty-nine days. The most learned and trustworthy men in the world had begged heartbrokenly for the privilege of seeing a materialization. No matter how the men worded their requests, they were turned down cold. The refusal was always the same, handwritten by Mrs. Rumfoord’s social secretary”. (The Sirens of Titan 116)

The materializations are something that everyone believes in though they have never actually seen one. Some people try to question their credibility, but they find no answers. Vonnegut is showing that when we try to question popular beliefs, we may not always find the answers. He wants us to keep striving to find the answers. Olderman says of Vonnegut, “...he finds we have exhausted our values and can go on living only through the acceptance of illusions” (505). This is saying that many people live on illusions, like the materialization. Vonnegut wants people to question illusions, like religion, and think for themselves. He thinks it is crazy that so many people live by things that may not be true. This is why he wants us to think independently and find the answers ourselves.

In The Sirens of Titan, Vonnegut also talks about science. Science is something very highly valued by him. Science is actually backed by logical reasoning and it can be proved. Religion is something that is not backed by logical reasoning and it cannot be proved. He writes, “Quit talking the language of science to each other! Nothing will be restrained from you which you have imagined to do, if you all keep on talking the language of science to each other, and I don’t want that!” (The Sirens of Titan 127). This quote shows how religions do not want



people to learn about science. Science can discredit everything religion says are truths. Vonnegut thinks people should learn about science, so they can figure out what beliefs and ideas are true or not. Reed says that “Vonnegut places considerable emphasis on the fact that we know very little about a great deal” (498). This means that people do not really know that much about what is real. They do not know that much about science, which is a defining element of what is really a truth. People do not care to learn enough about science to determine what is real and what is not. There is a lot to be learned, but many people do not care because they are happy living on false facts.

Slaughterhouse-Five is about Billy Pilgrim and his hardships through World War II. The character Billy Pilgrim is actually based off of Kurt Vonnegut and his actual travels during the war. Vonnegut grew to despise war during his time in service. He was at the worst bombing of the war in Dresden. The book Slaughterhouse-Five is an anti-war book. Vonnegut believes that war is one of the greatest follies of mankind. He thinks war is just a very horrible experience that we should strive to avoid, but people think that it is the solution to everything. People also do not realize how horrible it is and how many people actually die during war. He writes: “The advocates of nuclear disarmament seem to believe that, if they could achieve their aim, war would become tolerable and decent. They would do well to read this book and ponder the fate of Dresden, where 135,000 people died as the result of an air attack with conventional weapons. On the night of March 9th, 1945, an air attack on Tokyo by American heavy bombers, using incendiary and high explosive bombs, caused the death of 83,793 people. The atom bomb dropped on Hiroshima killed 71,379 people. So it goes”. (Slaughterhouse-Five 188)

This shows how he thinks people want war to be an acceptable thing, but if people would just look at the numbers of the people dead, we would realize how horrible it is. Vonnegut wants us to question the idea of war and search for the truth of how inhumane it really is. McNelly writes of Slaughterhouse-Five.

In these journeys, Billy, who is both Vonnegut and a modern Everyman, seeks an answer to the inevitable questions about suffering. In addition, he ponders the incredible violence of war, its insanity and blind cruelty, and probes the proud flesh of an American society that – an even greater horror to Vonnegut – has managed to ignore the moral responsibility for Dresden as well as the ethical implications of the senseless attack. (452)

McNelly is also says how Vonnegut is showing that war is a horrific thing and that most Americans have not even heard about the bombing of Dresden. It is a fact that is hidden from us, so that we do not realize how many people could be killed in just one attack. Vonnegut thinks this is horrible and that we need to search for the truths about war.



Vonnegut talks about how we need to try to make a difference in our lives and the world. He writes, “God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to tell the difference. Among the things Billy Pilgrim could not change were the past, the present, and the future” (Slaughterhouse-Five 60). The reason why Billy could not change the past, the present, and the future is because of war. Reed says, “War provides the ultimate measure of man’s folly, his inhumanity, his inability to match means and ends, and his incapacity to maintain an ordered control over his destiny...” (498). War takes control over Billy. He is stuck in the military and must do what he is ordered to do. The war takes away his ability to question ideas and think individually. He is not able to change anything while he is in the war. Vonnegut shows how war is bad in that it is very violent, but he also shows how war in bad in that we cannot control our actions.

Vonnegut uses one quote many times throughout the novel. He says, “So it goes” (Slaughterhouse-Five 106). It is a very simple sentence with a powerful message. This quote is used every time someone dies in the book, and because it is said so many times, the reader realizes that there are a lot of people that die during the war. The quote also shows that nothing is challenged when someone dies. People do not realize that when someone dies it is a big deal. Vonnegut wants to point out how people can be ignorant and we should not fall in that category. We should just not accept deaths as numbers, but as actual people. Society does not always think this way. Kazin writes, “It is the idea of human vulnerability: we are still too innocent in the face of war to offer any political explanation or protest” (505). This quote shows how society just accepts war and its consequences, such as death, without protest. Vonnegut wants us to question war and to search for the real truths of war.

The book *Cat’s Cradle* is about the main character John searching for information to write a novel, called *The Day the World Ended*, of events leading up to the day the atom bomb was dropped on Hiroshima. His search for information leads him to the day the world is actually destroyed. In *Cat’s Cradle*, Vonnegut talks a lot about science and religion. He writes about how religion is based on lies and that science can disprove it. There is a fictional religion in the book, called Bokononism, which everyone follows. Bokononism is introduced through this passage:

‘I do not intend that this book be a tract on behalf of Bokononism. I should like to offer a Bokononist warning about it, however. The first sentence in *The Books of Bokonon* is this: ‘All of the things I am about to tell you are shameless lies.’ My Bokononist warning is this: Anyone unable to understand how a useful religion can be founded on lies will not understand this book either.’ (*Cat’s Cradle* 5)



Vonnegut is criticizing all religions in this passage. He is saying they might as well start off their scriptures saying that everything they are about to read is a lie. He thinks we should question religions and search for meaning in life ourselves. Klinkowitz says of Vonnegut, “He consistently portrays the masses the ‘little people’...as grotesque or despicable, or just stupid, unthinking sheep” (563). Vonnegut considers people who do not think independently to be “stupid, unthinking sheep.” They are people of society who simply do what everyone else is doing. Vonnegut wants people to search for the truths, such as the truth about religion.

Vonnegut does not consider religion to be true because none of it is based on scientific reasoning. He writes, “‘New knowledge is the most valuable commodity on earth. The more truth we have to work with, the richer we become.’ Had I been a Bokononist then, that statement would have made me howl” (Cat’s Cradle 41). Vonnegut is showing how religions do not like how we are learning more and more every day. Bokononism is based off of lies, and the more we know, the less credible Bokononism would be. The same applies with our religions. Olderman says, “The universe he pictures is indifferent to man and man spends his time trying to twist that indifference into order and meaning” (505). Vonnegut wants us to take what we know and apply our knowledge to search for the truths, as Olderman says. Vonnegut does not think it is right to just accept whatever society accepts. We need to think independently.

Vonnegut believes that science is the one thing to clarify all questions. Science can discredit or credit all ideas and beliefs. He writes, “‘The trouble with the worlds was,’ she continued hesitatingly, ‘that people were still superstitious instead of scientific. He said if everybody would study science more, there wouldn’t be all the trouble there was’” (Cat’s Cradle 24). This shows how Vonnegut thinks science is the answer to everything. Science would solve many problems if people would just take the time to learn about it. He wants us to question popular beliefs and ideas with science. Schulz writes:

Cat’s Cradle is a novel about the varieties of truth available to man: scientific, religious, political, social, economic, humanistic. Ultimately, in its presentation of the open-ended, unconfirmable dilemma of human knowledge and wisdom, the novel sardonically blurs veracity and falsehood, treating them as interchangeable for all practical human purposes. It refuses to confirm what is reality.” (348)

This shows how there are many different truths in the world, and many of them contradict each other. Vonnegut wants us to search for the real truths; he wants us to find the facts. Without the facts, we will be lost in a jumble of contradictory beliefs and ideas. He wants us to find the truths and set ourselves apart from the rest of the ignorant society.



Kurt Vonnegut Jr. is a satirical author that writes about the follies of men. Specifically, he writes about how people accept whatever society accepts and how people should question popular ideas and beliefs, like religion and war. In *The Sirens of Titan*, *Slaughterhouse-Five*, and *Cat's Cradle*, Kurt Vonnegut Jr. urges his readers to question popular beliefs and ideas that are accepted by society. Vonnegut tells us to think independently and search for the truths in the world.

Works Cited

- Kazin, Alfred. *Bright Book of Life: American Novelists & Storytellers from Hemingway to Mailer*. Atlantic Monthly Press, 1973.
- Klinkowitz, Jerome. *The Vonnegut Statement*. Dell Publishing, 1973.
- Kroll, Jack. "No More Heroes." *Newsweek* October 1970: 123.



EASE OF DOING BUSINESS AND EASE OF LIVING - A GATEWAY TO URBAN HUMAN DEVELOPMENT

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Abstract

“Success in economic growth must ultimately be judged by what it does to our lives – the quality of life we can enjoy and the liberties we can exercise.”

Amartya Sen

Development is a process which improves the quality of life. Urbanisation is an integral part of development. Urbanisation in India has gained momentum with the shift of surplus population from rural to urban areas with the adoption of mixed economic path after Independence. Speedy urbanisation after liberalisation is not in a systematic manner. Mostly businesses concentrate in urban areas and in cities to enjoy external economies of scale. It results in serious social, economic and environmental problems. Recent ranking of cities on the basis of ease of living index may help the states to compete among themselves to improve the living conditions of urban dwellers.

Key words: Urbanisation: Development: External economies: Ease of living.

“Ease of doing business will ultimately lead to ease of Living”

Prime Minister Narendra Modi

Since Independence India has adopted mixed economic path this allows private sector to grow as complementary to public sector. The basic objective of Indian planning has been acceleration of economic growth so as to raise the living standards of the people. In the first four decades of planning, Indian economy has moved towards a growth path which is jobless, voiceless, ruthless, voiceless and rootless as pointed by UNDP. However, the economic crisis of 1990's has compelled the government to adopt New Economic Policy. The NEP consists of wide range of economic reforms to create more competitive environment in the economy. The Liberalisation, Privatisation and Globalisation policy has removed all the barriers on the entry and growth of firms from time to time. As a result India is now in 77th position in ease of doing business.

On the other hand, globally it is realised that national and per capita incomes no more reflect the well-being of the masses. Human Development Index has



become the key indicator of development which consists of longevity, education and standard of living. Later the Millennium Development Goals (2000-2015) and the Sustainable Development Goals (2015-2030) have focused attention on ending extreme poverty, hunger and preventable diseases..At this juncture, the Moody organisation has taken an initiative called “The Ease of Living Index” to measure the living conditions across the world. Ease of Living indicates the live ability of cities where there is concentration of business. Ranking of cities on the basis of Ease of Living Index directs the governments to take certain initiatives for sustainable human development. India also has realised that raising pressure on environmental resources lead to adverse consequences on self sufficiency, income distribution and on future growth potential. Keeping these challenges in mind the government of India has launched several programmes like Swachh Bharat, Amrut, Hriday, Smart cities and so on. In this connection, this paper makes an attempt to examine two aspects – achieving rapid economic growth through business friendly environment and the impact of ease of doing business on living conditions of people in urban areas.

Objectives:-

1. To examine the concept of ease of doing business,
2. To study the measures taken to improve the business friendly environment,
3. To observe the effects of ease of doing business on living conditions of urban people,
4. To examine the concept of Ease of Living index,
5. To review the measures taken for the improvement of urban environment,
6. Suggestions and policy implications.

Methodology :-

This paper is based on secondary data published in various government bulletins, internet sources and plan documents.

Ease Of Doing Business Index

The Ease of Doing Business means the regulatory environment which is more conducive to the starting and operation of a local firm. It facilitates the domestic as well as foreign producers. The benefits of domestic business are obvious. The foreign business will not only provide jobs, but also bring new technology with them. The history of advanced countries proved that steps taken for more business and start ups made their cities smarter, environment friendly. The Ease of Doing Business consists of 10 parameters including starting business, construction permits, getting electricity, getting credit, paying taxes, trade across boarders, enforcing contracts, and resolving insolvency etc., The World Bank



ranks the countries on these parameters from 1-190. A high rank in ease of doing business implies more conducive environment to the new firm.

India is the second largest populous country in the world. With a large proportion of young population, job creation becomes an opportunity as well as a challenge to the economy. By realising the fact the Government makes several efforts to make India a start up nation and a global manufacturing hub. In recent years several measures are being taken by the government e.g. SWIFT initiative, GST, Insolvency and Bankruptcy code, National Investment and Infrastructure Fund (NIIF) with the aim to attract investments from both domestic and international sources for infrastructure development in commercially viable projects, Foreign Investment Promotion Board etc which made India the 5th best performing nation on reforming the business environment.

Ease of Doing Business – Impact on the environment:

Focus on business friendly atmosphere is good. It brings investments, creates employment opportunities and improves productivity. As experts say, if wealth is created, then only we can distribute the wealth. In this connection, everyone accepts the truth that ease of doing business also means ease of living. Getting electricity, construction permits, tax payments are also a part of ease of living. They generate revenue to the government; reduces the burden on the government and also trigger a virtuous cycle of skilled population and financial inclusion. Urban areas have been recognised as engines of inclusive economic growth. The big business houses mainly concentrate in cities. Cities provide major opportunities for sustainable development given that they have large number of people in a small area and offer significant economies of scale. There is a need to fully realise the potential of cities for ecological, economic and social sustainability.

The Ease of Doing Business is meant to measure regulations directly affecting business and does not directly measure more general conditions such as a nation's proximity to large markets, quality infrastructure etc., Speedy urbanisation and unplanned growth of cities pose many unconstructive implications towards social and environmental aspects. There are so many problems such as urban sprawl, overcrowding, housing, slums, transport, water, sewage problems, trash disposal, urban crime and urban pollution. Hence there is a need for proper urban governance and planning.

In 2015, The Department of Industrial Policy and Promotion and NITI Ayog together set out the Business Reforms Action Plan. However there is need for systematic discussion over each of the reforms at each level of government. The government of India and the State Governments have initiated reforms in favour of large enterprises. The entire concern of large enterprises is to control major share of nation's wealth by influencing the policy formulations. The World



Bank, the custodian of big business releases ranks on business friendliness based on availability of land for lower prices, favourable labour laws to exploit workers, immediate licence without considering environmental degradation and government support with low corporate taxes. The State Governments also compete among themselves to get good position in doing business keeping aside the environmental problems. India, which upgraded its rank in ease of doing business, has determined to get good rank in ease of living index as well.

Ease of living index :

It is estimated that urban areas contribute approximately more than two-thirds of GDP and nearly 75% of new jobs by 2030. In this context, ranking of cities on the basis of ease of living serves as knowledge base for taking policy decisions and for planning. The highlight of the ease of living frame work is its strong link to the Sustainable Development Goals (SDGs). SDG 11 says to make cities inclusive, safe, resilient and sustainable. The SDG 6 says to “Ensure availability and sustainable management of water and sanitation for all.” Ease of Living Index empowers citizen in aspiring better quality of life from their city authorities.

The key objective of the Ease of living index is to

1. Catalyse actions to achieve broader development outcomes including SDGs.
2. Generate information to assist evidence based learning.
3. Serve as a basis for dialogue between citizens and urban decision makers.
4. Assess out comes achieved from various urban policies and schemes.

Ease of living index was conceived by Ministry of Housing & Urban Affairs (MoHUA) in June,2017. It aims to help cities to assess their liveability vis-a-vis global and national benchmarks and encourage them to move towards ‘out come-based ‘ approach to urban planning and management. It seeks to help cities with population one million plus to undertake 360 degree assessment of their strengths, weaknesses, opportunities and threats. The ranking of cities aims to help cities to attain liveable city status, get them more investments and improve tourism. The data driven approach promotes competitive spirit among cities.

It captures quality of life based on data collected from urban local bodies on 4 parameters which are further divided into 15 categories. The four parameters include

1. Institutional factors (Governance),
2. Social (identity, education, health, security),
3. Economic (economy and employment),
4. Physical (wastage water and solid waste management, pollution, housing, inclusiveness, mixed land use, power and water supply, transport, public open spaces)



Institutional and social parameters carry 25 points each physical factors have weight age of 45 points and economic factors have 5 points totalling to 100 mark scale on which cities were evaluated.

The Ministry of Housing and Urban Affairs (MoHUA) released the ranks of 111 cities of population 1 million plus. The following table gives the pillar wise ranks of top 10 cities

Table.1 Top 10 cities on ELI parameters.

Institutional factors	Social factors	Economic factors	Physical factors
1. Navi Mumbai	1. Tirupathi	1. Chandigarh.	1. Greater Mumbai
2.Tirupathi	2.Tiruchirapalli	2. Ajmer	2. . Pune
3. Karimnagar	3.Navi Mumbai	3. Kota	3. Thane
4.Hyderabad	4. Chandigarh	4. Indore	4. Chandigarh
5. Bilaspur	5. Pune	5. Tirupathi	5. Raipur
6.Kochi	6. Greater Mumbai	6. Itanagar	6. Tirupathi
7. Ahmedabad	7. Amaravathi	7. Pune	7. Navi Mumbai
8. Pune	8. Vijayawada	8. Ludhiana	8.Bhopal
9. Vijayawada	9. Indore	9. Thane	9.Bilaspur
10. Visakhapatnam	10.Vasai vihar	10. Vijayawada	10. Visakhapatnam

The above ranking of cities on different ELI parameters is also subjected to criticism. It is completely based on secondary data in the form of old reports and no weightage given even to the small sample of 60000 people's remarks. The index has conceptual problem as it is a mix of human development index and physical index. Cities in different states differ in various aspects and it is not justified to compare them. This measure is not only replete with many flaws but also fails in taking stock of the living conditions of people. The top 10 ranked cities also have a large proportion of slum population, with the absence of affordable housing and rehabilitation. The residents of one of the top 10 cities report about bad transport. No doubt the Eli encourages healthy competition. To make it better, it should include broader citizen participation and needs to be evaluated in a macro frame work.

Policy Implications for Urban Human Development:

Under the constitution of India urban development is a state subject. Yet the central government plays an important supporting role in facilitating appropriate policies that provide a frame work for urbanisation. Currently there is no national urban policy frame work. The ELI will be crucial for guiding the national government's financial support to cities. Existing legal frame work and policies that regulate the urban sector need to be reviewed by the State and urban local bodies to see what changes, if any are required. The Government has taken up



many initiatives in recent times aiming at urban planning and management. The Swachh Bharat mission, the Smart Cities Mission, AMRUT, HRIDAY, PMAY, WASH etc., aim at providing better quality of life to urban dwellers through improving urban governance, city planning and accessibility to quality infrastructure. The following are some of the programmes for urban human development in the sustainable and inclusive growth path.

1. Swachh Bharat Mission (urban): It was launched on October 2nd, 2014 with 6 components viz, household toilets, community toilets, public toilets & urinals, solid waste management, public awareness, capacity building for urban local bodies with private sector participation. Under SBM (urban), MoHUA has been conducting the Swachh Sarvekshan – an annual survey to rank cities on various sanitation and cleanliness parameters. Its focus is on innovation, sustainability, garbage free status, citizen participation etc,

2. Smart Cities Mission: It aims to leverage the “smart cities” in selected urban clusters to drive job creation and economic growth, improve efficiencies in service delivery for inclusive, sustainable and participatory development. In India, the strategy is proposed to leverage the mission across the 4 paradigms of Economy, Equity, Environment and Engagement by 2022-23

3. Atal Mission for Rejuvenation and Urban Transformation - AMRUT: It was launched in 2015 which aims to establish an infrastructure that ensure adequate robust sewage networks and water supply for urban transformation. AMRUT aims to

- Provide a tap with assured water supply to each household
- Develop greenery in open spaces
- Reduce pollution by switching to public transport

4. Heritage city development and Augmentation Yojana (HRIDAY):

It was launched in 2015 with a focus on holistic development of heritage cities to preserve and rejuvenate the rich cultural heritage of the country. It aims to bring urban planning economic growth and heritage conservation together for heritage cities.

5. Pradhan Mantri Awas Yojana Programme PMAY(U):

PMAY(Housing for all –urban) was launched by MoHUA in a mission mode. It seeks to address the housing requirement of urban poor including slum dwellers.



6. Deen Dayal Antyodaya Yojana (National Urban livelihood Mission):

The NLUM aims at universal coverage of the urban poor for skill development and credit facilities.

Conclusion

India is urbanising at a fast pace and it is expected that by 2050, close to 50% of Indian population would be residing urban areas. Hence there is proper coordination between business friendliness as well as better quality of life. Each city needs to be recognised as a distinct unit of the economy. In larger cities, City Economic Councils can serve as clearing houses between businesses and governments to hasten the progress of specific projects to improve the ease of doing business and catalyse investments into the city. A quarterly city dash board capturing city level investments, GDP, employment growth, financial position and financial performance and status of infrastructure projects can provide a framework for data driven decisions. Such policy frame work include

- a) Decentralisation and metropolitan governance
- b) Spatial planning and land titling,
- c) Strengthening finances of ULBs and civic agencies,
- d) Capacity building by skilling for municipal jobs and strengthening institutions,
- e) Citizen participation.

However political will and accountable leadership, sufficient public funding, constant engagement with advanced countries as partners of WASH, public private partnership as well as people's participation with behavioural change together are needed for sustainable change to achieve Sustainable Development goals.

References:

1. World Bank Development Report, 2003, 2010
2. United Nations Development Programme, Human Development Report, 1996
3. The Hindu Daily News Paper
4. <https://mdws.gov.in/sites/default/files/UNICEF-Economic-Impact-Study>
5. Civil Services CHRONICLE, February, 2019
6. Yojana ,November, 2018
7. EconomicTimes.Indiatimes.com/blogs/et-
8. Amrut.gov.in
9. [Hdr.undp.org>content>population-urbanisation](http://Hdr.undp.org/content/population-urbanisation)
10. [https://en.m.wikipedia.org>wiki>urban](https://en.m.wikipedia.org/wiki/urban)



WORK STRESS AND STRESS MANAGEMENT ORGANISATIONAL BEHAVIOUR AND DESIGN

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Abstract

Stress is a general feature in human existence. Either it is “Eustress” or “Distress”, but it is present everywhere in human life. We really cannot talk about the existence of Human beings without stress in their life. Majority of us perceive this term negatively but this is also essential for the growth of human beings in general. Positive stress is required in everyone’s life for the achievement of the desired goals and fulfils the aim and purpose of anyone’s life. It is not related to specific culture, though it is experienced by humans in varied form and intensity. Each stressful experience reminds people that their world is not altogether stable and that, no matter how well we fortify our defences, the unexpected, even the unthinkable, can happen. Now days, stress in organizations are rapidly increasing due to complexity of the human life. It is found in almost All types of organizations at every level. Stress in organizations is a wide-spread fact with extensive practical and economic consequences. Organizational stress is assumed to be related to various pros and cons such as increased absenteeism, health competitive spirit etc. There are various factors which affect the level of stress among people in the organizations like working conditions, communication patterns, organizational relationships etc. This research paper focuses on how the one can deal effectively with the causes and consequences of The stress and how the organizations strategically deal with such stress.

Keywords: Stress Management, Stimulus-Response, Eustress, Distress

Introduction

Workplace stress is a major risk factor for anxiety and depression. Most jobs have some degree of stress, and this is often beyond our control – we can't always set our own workloads and deadlines, or change the workplace culture. However, there are some strategies everyone can adopt to manage and reduce their own stress levels, as well as finding a positive work-life balance. Part of taking care of your mental health is also about looking at your overall wellbeing. A balanced diet, exercising regularly, getting enough sleep and



avoiding harmful levels of alcohol and other drugs all contribute to mental wellness.

Everyone knows what stress feels like and we've probably all experienced it at some stage – at home, school or work, or while getting outside our comfort zone. But when we talk about work or job-related stress, we're referring to situations where there's a mismatch between the requirements of your job, and your capabilities or available resources. As a result, you're put under an unsustainable level of pressure.

A range of factors can contribute to job stress, including:

- Working long hours or overtime, working through breaks or taking work home
- Time pressure, working too hard or too fast, or unrealistic targets
- Work that's monotonous and dull, or which doesn't use your range of skills or previous training
- Roles where you have low levels of control or inadequate support from supervisors and/or co-workers
- Job insecurity
- A lack of role clarity or poor communication
- Conflict with colleagues or managers
- Bullying
- Discrimination – whether based on gender, ethnicity, race or sexuality.

Hans Selye defined stress (1942) as stress is a non-specific response of the body to any demand made on a person. He believed that when a person is under stress a set of symptoms of the body get manifested in the form of headache and backache. Workplace stress can be explained as the change in one's physical or mental state in response to workplaces that pose an appraised challenge or threat to that employee. Generally, there are four stress concepts such as the stimulus concept; the response concept; the transactional concept; and the discrepancy concept. The stimulus concept focuses on situational conditions or events. In this concept, certain stimuli are stressful, for example high time pressure, interpersonal clash at work, or accidents. However, the stimulus concept is challenging because not all individuals react in a consistent manner to the same stressor. Nearly every situational condition or every event may evoke strain in some individuals. The reaction concept focuses on physiological reactions as a crucial constituent of stress, i.e. stress exists if an individual shows a specific reaction pattern, irrespective of situational characteristics (Selye, 1956). However, this type of stress also has its limitations. It does not take into account that very different situations can result in the same physiological responses and



that an individual's coping efforts may have an effect on this individual's reactions, thus altering the stress response.

Another category of concepts refers both to the situation and the person when defining stress. The transactional concept defined by Lazarus (1966) supposes that stress results from a transaction between the individual and the environment, including the individual's perceptions, expectations, interpretations, and coping responses. The discrepancy concept explains stress as an incongruence between what individual's desires and the environment (Edwards, 1992). However in operationalizing such a discrepancy, researchers face great difficulties. One of the most important models of stress process is the transactional model of Lazarus. Lazarus and Folkman describe psychological stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p. 19). According to the Cybernetic Model of Edwards (1992), stress is "a discrepancy between an employees' perceived state and desired state, provided that the presence of this discrepancy is considered important by the employee".

Objectives of the Study

1. To analyze the factors that trigger stress in workplace.
2. To study the various signs of work stress.
3. To study the strategies to deal with stress at workplace.

Research Methodology

The study is explorative cum descriptive in nature. It is an empirical research based upon secondary data. The theory is basically developed from secondary sources of information and a thorough study of various academic works in the relevant field has been attempted.

Causes and Consequences of Stress

There are some factors that trigger stress in workplace that include low salaries, excessive workloads, few opportunities for growth or advancement, work that isn't engaging or challenging, lack of social support, not having enough control over job-related decisions, conflicting demands or unclear performance expectations.

There are three levels of stress that include episodic stress, and chronic stress (Lazarus, 2000). Each level of stress exhibits emotional and physiological symptoms. Acute stress occurs when new demands, pressures, and expectations are placed on an individual and these demands place their stimulation levels above their threshold of adaptability. These demands can be in the form of receiving impractical work demands, unanticipated meetings that frustrate



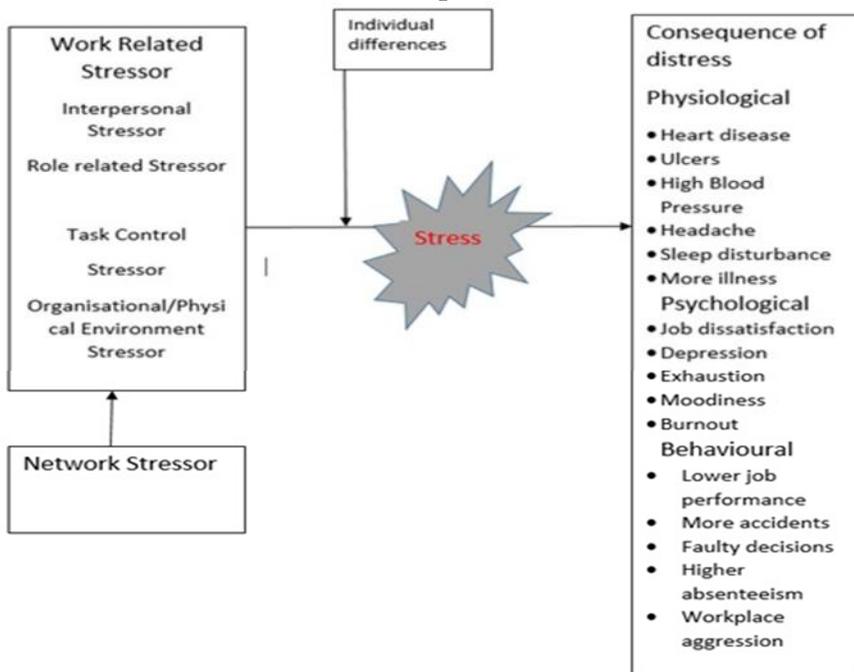
attempts to get work completed, and other situations that might cause frustration but generally occur for a short period. Symptoms of acute stress are emotional disturbance such as increased anxiety, worry, frustration, and hostility. Physical symptoms of acute stress can include fatigue, increased blood pressure, rapid heart rate, dizziness, headaches, jaw pain, back pain, inability to concentrate, and confusion. With acute stress there is a clear onset and offset of symptoms (Zimbardo et al., 2003).

Episodic stress includes the norms for acute stress. The stress is experienced regularly and consistently in multiple episodes. The person who experiences episodic stress will tend to show belligerence, low tolerance, impatience, and a sense of time urgency. The symptoms are more similar to the acute stress. Persons who experience episodic stress are at risk for heart disease, chest pain, asthma, hypertension, and persistent headaches (Lazarus, 2000).

Another level of stress is chronic stress which is characterized by the accumulation of stressors that continue and are long-standing. Chronic stress is related with family problems, poverty, long-term illness (Lazarus, 2000). It also occurs when there is job strain (Broadbent, 1985). Hans Seyle (1956) described a three stage general pattern of physical responses as a result of chronic stressors. Stress is not merely a physiological response to a stressful situation. Stress is an interaction between that individual and source of demand within their environment (Long, 1995). The employee must observe the situation that is threatening. Perception of the situation occurs at the level of cognitive assessment. The employee's emotional, cognitive, behavioural, and physiological response to stress has a direct association to the characteristics of the stressor, the resources the employee has to safeguard the stressor, and the employee's personal characteristics.

Psychologists define many factors that can contribute to workplace stress. These stressors include the employee's evaluation of adaptation to a technologically changing environment. Some individuals have the capacity and the resources to improve their skills while others cannot do. The varying environment creates pain when that challenge is perceived as a risk to the employee and his health. Employees who experiences chronic work stress develop unstable blood pressure, increased cholesterol levels, muscle tension, diabetes, hypertension, ulcers, headaches, substance abuse, and clinical depression. Furthermore, their capacity to concentrate and retain information becomes a problem. The employee also may experience anxiety, anger, and irritability which may affect his or her capacity to maintain interpersonal relationships outside of the organization (Israel et al., 1989). A workplace stress result in lower productivity, increases in absenteeism, and creates persistent patterns of dysfunction in the workplace.

Causes and Consequences of Stress:



The most serious interpersonal stressor is the increase of physical violence in the workplace. Workers who experience violence usually have symptoms of severe suffering after the traumatic event. Stressed workers have a high risk of mental health problems, ranging from anxiety and substance abuse, and perhaps, the most significant, depression. In fact, stress and clinical depression go hand-in-hand. Family crisis is the second and third most significant problems in the workplace. Job stress affects both men and women, although there are some gender differences in certain aspects. Generally, women are more likely than men to experience physical symptoms of stress, such as fatigue, irritability, headaches and depression. Women are also more likely than men to cope with job stress with unhealthy behaviours, such as poor eating habits. Murphy (1995) explains five categories of workplace stress such as factors unique to the job, role in the organization, career development, interpersonal work relationships, and organizational structure or climate. These categories reveal that stress can occur particularly when there is a disagreement between the employee and the job demands placed on that employee. Actually, when the employee cannot control the situation, the tolerable challenging stress becomes distress. Role-related stressors comprise of conditions where



employees have problem to understand, reconcile or perform the various roles in their lives. Three types of role-related stressors are role conflict, role ambiguity, and work intensification. Employees are more stressed when they lack control over how and when they carry out their tasks as well as over the pace of work activity. Work is more worrying when it is paced by a machine, involves monitoring equipment, or the work schedule is controlled by others.

Stress Management

Stress is obvious and employees have to adapt to stress in such a way that they are no longer aware of it. Companies can effectively manage stresses by removing the stressors that cause needless tension and job burnout. Other stress management strategies may keep employees "stress-fit," but they don't solve the fundamental causes of stress. Organizations manage stress by investigating the main causes of stress in their workplace. Another suggestion is to change the corporate culture and reward systems so they support a work-life balance and no longer reinforce dysfunctional workaholism. More generally, the most effective ways to remove workplace stressors is to empower employees so that they have more control over their work and work environment. Role-related stressors can be lessened by selecting and assigning employees to positions that match their capabilities. Noise and safety risks are stressful, so improving these conditions would minimize stress in the workplace. Workplace bullying can be minimized through clear guidelines of behaviour and feedback for those who infringe those standards.

Signs of Work Stress

Stress is a normal response to the demands of work. It can be beneficial in short bursts, helping you stay alert and perform at your best. However, prolonged or excessive job stress can be damaging to your mental health. Stress can be a trigger for someone with depression and/or anxiety, and may cause an existing condition to worsen. And it's not just your health that can suffer – as well as affecting your relationships and life outside work, stress can increase your risk of injury, fatigue and burnout

Physical signs of stress include:

- chest pain or a pounding heart
- fatigue
- reduced interest in sex
- nausea, diarrhoea or constipation
- getting colds more often
- muscle tension, pains and headaches
- episodes of fast, shallow breathing and excessive sweating
- loss or change of appetite



- sleeping problems.
- Non-physical signs include:
- feeling overwhelmed or frustrated
- feeling guilty or unhappy
- being irritable
- losing confidence and being indecisive
- thinking negatively
- having racing thoughts
- memory problems
- excessive worrying.

Stress Management Strategies

Stress Management Strategies

- Remove the Stressor
- Withdraw from the Stressor
- Change Stress Perceptions
- Control Stress Consequences
- Receive Social Support

Managers have an important contribution in the identification and intervention of constant workplace stress. Lazarus (1991) has recognized three main strategies for reducing work-related stress. In the first strategy, managers can help their employees to cope up with workplace stress by changing the working conditions so that they are more favourable to effective coping. When barriers are removed such as work overload, environmental annoyances, isolation, and lack of autonomy, an environment is created in which an employee can perform better. The second strategy to reduce work-related stress is to facilitate the employee to improve his or her transaction with the environment. Managers should provide the worker with services such as an employee assistance program or links to stress management resources to help them work through the issues that hamper adequate appraisal of the situation. Moreover, such programs will teach the employee how to utilize behavioural skills such as implementing a new diet, meditation techniques, and relaxation techniques in order to relieve the physical and psychological effects of stress. Usually, these programs will involve cognitive behavioural interventions (Long, 1988). The third strategy is to assist



the employee recognizes the stressful relationship between the individual or group and the work setting (Lazarus, 1991) and developing a strategy to help reduce the tension in that affiliation.

To summarize, Stress is an adaptive reaction to a threatening situation that is perceived by person in work setting or in his life. Stressors are the causes of stress and include any environmental conditions that place a physical or emotional demand on the person. Stressors are found in the physical work environment, the employee's various life roles, interpersonal relations, and organizational activities and conditions. Conflicts between work and non-work obligations are a common source of worker stress. Workplace stress has dangerous consequences on the health of employees such as it can cause significant psychological and physiological problems. Workplace stress has been associated with the aetiology of physical disorders such as heart disease, hypoadrenia, immunosuppression, and chronic pain. Additionally, the psychological impact of workplace stress includes depression, persistent anxiety, pessimism, and resentment.

The impact of these symptoms on organizations is significant as these symptoms lead to antagonism in the workplace, low morale, interpersonal conflict, increased benefit expenses, decreased productivity, and increased absenteeism. To cope up with stressful situation, experts provide various stress management strategies. By providing the foundation for employees to prosper while also allowing employees to take responsibility for their stress related symptoms, organizations will find considerable improvement in productivity and an improved workplace dynamism. Some tactics directly remove superfluous stressors or remove employees from the stressful environment. Other strategies facilitate employees to modify their interpretation of the environment so that it is not viewed as a severe stressor. Wellness programs promote employees to develop better physical defences against stress experiences. Social support provides emotional, informational, and material resource support to safeguard the stress experience.

Finding a Balance that Works for you

With busy schedules, it's easy to become overwhelmed with work and not find time for anything else. The trick is achieving a balance that promotes your overall health and the success of your career or business – often easier said than done.

We've put together some tips to help you manage your stress levels and look after yourself.

- If you're feeling stressed or anxious, try and postpone major life changes such as moving house or changing jobs.



- Finding someone to talk to can help – either a close friend, a family member, counsellor or psychologist.
- Learn to relax. Make sure you set aside time for the things you enjoy, such as exercising, meditating, reading, gardening or listening to music.
- Take your annual leave each year and make sure you have a proper break from work.
- Get out of the workplace during lunch – even if it's just for a 10 minute walk. You'll feel refreshed and more productive in the afternoon.
- Try scheduling meetings during core work hours, not your personal time.
- Restrict your overtime hours and speak to your manager if demands are unreasonable.
- If you frequently work late, try leaving on time at least a couple of times a week. Check out these helpful tips.
- Avoid checking your email or answering work calls out of hours.
- If you notice any changes in your thoughts, feelings or behaviour, see your GP or health professional. The earlier you seek support, you sooner you can recover.

What can i do to Better Manage Stress?

In general, stress is related to both external and internal factors. External factors include your physical environment, your job, relationships with others, your home, and all the situations, challenges, difficulties, and expectations you're confronted with on a daily basis. Internal factors determine your body's ability to respond to, and deal with, the external stress-inducing factors. Internal factors which influence your ability to handle stress include your nutritional status, overall health and fitness levels, emotional well-being, your ability to control stress through relaxation techniques or other strategies, and the amount of sleep and rest you get.

Managing stress, therefore, can involve learning tips to change the external factors which confront you or the internal factors which strengthen your ability to deal with what comes your way.

Exercise

Exercise can be a key, central method to compensate for stressors. Physical exercise not only promotes overall fitness, but it helps you to manage emotional stress and tension as well. Exercise can also aid in relaxation and improve sleep. For one thing, exercise can emotionally remove one temporarily from a stressful environment or situation. Being fit and healthy also increases your ability to deal with stress as it arises.



Relaxation techniques and meditation

- Share Your Story
- There are many ways to use structured relaxation techniques to help control stress and improve your physical and mental well-being. While some types of meditation and relaxation therapies are best learned in a class, it's also possible to learn meditation techniques on your own. There are literally hundreds of different types of relaxation methods ranging from audio CDs to group martial arts and fitness classes. The following are only examples of the types of structured programs available that can increase our capacity for relaxation:
 - Autogenic training: Developed in the early 20th century, this technique is based upon passive concentration and awareness of body sensations. Through repetition of so-called autogenic "formulas" one focuses upon different sensations, such as warmth or heaviness, in different regions of the body. Autogenic training has been used by physicians as a part of therapy for many conditions. Popular in Europe (where it is even covered by some insurance plans), this method is currently gaining acceptance in the United States. No particular physical skills or exercises are involved; however, people desiring to learn this technique must be prepared to invest time and patience. Since this technique is slightly more complex than some relaxation methods, a course is generally the best way to learn the method.
 - Biofeedback: Biofeedback is one method of learning to achieve relaxation, control stress responses, or modify the body's reactions through the use of monitoring equipment that provides information from the body which would normally not be available. This method is based upon the principle first advanced in the early 1960s that the autonomic nervous system (the part we don't consciously use) is trainable. For example, instruments can be used to measure heart rate, blood pressure, brain activity, stomach acidity, muscle tension, or other parameters while people experiment with postural changes, breathing techniques, or thinking patterns. By receiving this feedback, one can learn to identify the processes that achieve the desired result, such as reduction in heart rate and blood pressure. Biofeedback is used by many practitioners for a variety of psychological and physical conditions. Because the technique involves the use of measuring devices, it can only be performed by a professional.
 - Imagery: Imagery, sometimes referred to as guided imagery, is the use of pleasant or relaxing images to calm the mind and body. By controlling breathing and visualizing a soothing image, a state of deep relaxation can occur. This method can be learned by anyone and is relatively easy to try out.
 - Meditation techniques: Ranging from practices associated with specific religions or beliefs to methods focusing purely on physical relaxation,



meditation is one of the most popular techniques to achieve physical and mental relaxation. There are thousands of different types of meditation, and many can be learned on your own. The meditative state is one in which there is a deep centering and focusing upon the core of one's being; there is a quieting of the mind, emotions, and body. The meditative state can be achieved through structured (as in a daily practice of a routine) or unstructured (for example, while being alone outdoors) activities. While teachers of meditative arts are readily available, some techniques can be learned through books or online tutorials. A form of meditation popularized for several decades is transcendental meditation (TM). TM has the goal of achieving transcendental consciousness (the simplest form of awareness). It is practiced for 15-20 minutes in the mornings and evenings and is relatively easy to learn. Numerous classes and teaching materials are available for beginners. Another variant of a meditation technique has gained popularity in the U.S. since its description in the 1970s by Harvard physician Herbert Benson. This technique involves generation of the so-called relaxation response through the repetition of a word or phrase while quietly seated, 10-20 minutes per day. Designed to evoke the opposite bodily reaction to the stress response (or "fight or flight" reaction), this method carries no religious or spiritual overtones. Its value has been documented in the reduction of blood pressure and other bodily stress responses. Like other forms of meditation, it can be learned on one's own, but time and practice are required to elicit the desired relaxation state.

- Progressive muscle relaxation: Progressive muscle relaxation is a method developed in the 1930s in which muscle groups are tightened and then relaxed in succession. This method is based upon the idea that mental relaxation will be a natural outcome of physical relaxation. Although muscle activity is involved, this technique requires no special skills or conditioning, and it can be learned by almost anyone. Progressive muscle relaxation is generally practiced for 10-20 minutes a day. As with the relaxation response, practice and patience are required for maximum benefits.
- Qigong: The martial art qigong is an ancient Chinese health-care system that combines physical training (such as isometrics, isotonic, and aerobic conditioning) with Eastern philosophy and relaxation techniques. There are many different kinds of qigong, including medical qigong. Some forms are practiced while standing, sitting, or lying down; others involve structured movements or massage. Over 70 million Chinese practice some form of qigong daily. Qigong has been used for centuries in China for the treatment of a variety of medical conditions. Learning qigong involves time, commitment, patience, and determination, and learning from a master or group is advisable. Since this technique involves physical exertion, check



with your doctor before beginning, particularly if you have a chronic medical condition or are over 40 years old.

- Tai chi: Like qigong, tai chi is a Chinese martial art. It has been termed a kind of "meditation in motion" and is characterized by soft, flowing movements that stress precision and force. Also known as tai chi chuan, this method is thousands of years old. As with qigong, training from a master is necessary to learn the art of tai chi. Again, since motion and force are required, check with your doctor before beginning training.
- Yoga: There are many forms of yoga, an ancient Indian form of exercise based upon the premise that the body and breathing are connected with the mind. The practice of yoga is thought to be over 5,000 years old. One goal of yoga is to restore balance and harmony to the body and emotions through numerous postural and breathing exercises. Yoga, which means "joining" or "union" in Sanskrit, has been called the "search for the soul" and the "union between the individual and the divine." Among the benefits of yoga are increased flexibility and capability for relaxation. No special level of conditioning is required; yoga can be learned by nearly anyone. Classes, books, and videos are widely available. Those with special or chronic physical conditions will want to get clearance from their doctor before beginning.

References

1. Ashforth, B.E. & Humphrey, R.H. (1995) Emotions In The Workplace: A Reappraisal. *Human Relations*, 48 (2), 97-125.
2. Bryman, A., & Bell, E. (2011) *Business Research Methods*, 3th Edition. New York: Oxford University Press.
3. Bloisi, W., Cook, C.W., & Hunsaker, P. L. (2007) *Management and Organizational Behaviour*. 2th Edition. London. McGraw publication
4. Bano, B., & Jha, R.K. (2012) Organizational Role Stress Among Public and Private Employees. *The Lahore Journal of Business*. 1 (1), 23-36. CIPD (2008), Building the business case for managing stress in the workplace. Stress management. Available via: [Retrieved: April 25, 2013]
5. Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*, 18 (1), 8-21.
6. Leka, S., Griffiths, A., & Cox, T. (2004) *Work Organization and Stress*. 3th Edition. United Kingdom. World Health Organization
7. Rumbol J. L., Fletcher, D., & Daniels, K. (2012) A Systematic Review of Stress Management Interventions With Sport Performers. *Sport, Exercise, and Performance*, 1 (3), 173-193.



8. Saunders, M., Lewis, P. & Thornhill, A. (2009). Research methods for business students. Fifth Edition, Harlow: Financial Times Prentice Hall. [E-book] .
9. Sekaran, U., & Bougie, R. (2010), Research Methods for Business, Fifth Edition, Great Britain, TJ International Ltd,
10. Padstow, Cornwall. Thorgren, S., & Wincent, J. (2013) Passion and Role Opportunity Search: Interfering Effects of Conflicts and Overloads. International Journal of Stress Management. 20 (1) 20- 36.
11. Tennant, C. (2001). Work-related Stress and Depressive Disorders. Journal of Psychosomatic research, 51 (3) 697-704.
12. Volvo Group (2011) AB Volvo - Company Profile, Information, Business Description, History, Background Information on AB Volvo. Available via: Website [Retrieved: April 2, 2013] Volvo group (2011). Volvo Group Annual Report. Available via: Website [Retrieved: April 28, 2013]
13. WHO (2004). Work organization and stress protecting workers' health. World Health Organization. Available via: Website [Retrieved: April 20, 2013].