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CONTENTS

EDITORIAL

“The way to do research is to attack the facts at the point of greatest astonishment”

Celia Green

Educational research is essentially concerned with exploring and understanding social phenomena. In doing so, it deals with educational questions that can be investigated in a satisfactory manner and the methods which enable such satisfactory investigation and the utility of results emanating from such investigation (Dash, 1993). Since theoretical questions in education emerge from different conceptions and interpretations of social reality, different paradigms have been evolved to determine the criteria according to which one would select and define problems for inquiry. Thomas Kuhn who is known for the term 'paradigm characterizes a paradigm as: "An integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools..." A paradigm is a matrix of beliefs and perceptions, it is a "worldview" or a set of assumptions about how things work. Rossman & Rollis define paradigm as “shared understandings of reality”

Quantitative and qualitative research methods involve very different assumptions about how research should be conducted and the role of the researcher. Different paradigms have taken birth due to the remarkable growth in social sciences research. Positivism and anti-positivism (or naturalistic inquiry) are the two main paradigms which has definite research methods that is carried out in scientific investigation. Positivism an objectivist approach focuses on quantitative analysis, anti-positivism a subjectivist approach attaches importance to a range of research techniques focusing on qualitative analysis. The question arises: how does a researcher while selecting a research paradigm raises questions like, What is the nature or essence of the social phenomena being investigated?, Is social phenomenon objective in nature or created by the human mind?, What are the bases of knowledge corresponding to the social reality, and how knowledge can be acquired and disseminated? And what is the relationship of an individual with her environment? Is he/she conditioned by the environment or is the environment created by him/her? Based on the above questions, the researcher can identify whether the research questions pertain to positivism, anti-positivism, and choose the appropriate methodology accordingly.

Dr. G. Subramanian & Dr. N. Muthaiah in their Research 'Do Managerial Skills Address Quality issues in Teacher Education -An Introspection' insists that Innovation in Teaching, promotion of research, participation of teachers in innovative programs must be mode part and parcel of any teachers education program. Dr. K.S. Premi/a in her investigation on the Aptitude of teacher and Disabled graduates towards usage of Technology in teaching - learning process found that loco-motor disabled persons are using technology and visually impaired students are deprived of it. Dr. J. Kausalya and Anita Ezra in their study on five life skills explored that English medium students have better critical thinking, private management school students have better problem solving skills, co-education school students life skills are better. Dr. K. Saikumari in her research study recommends that the Mathematics teachers must be given training in helping the students to develop positive attitude towards mathematics and get rid of their anxiety in studying mathematics. Finally Dr. Jain Shanthini in her article on job stress discusses about the signs and causes of job Stress and provides measures to prevent Job Stress. We express our sincere gratitude to the contributors and look forward to quality Research articles on the current trends in Education.

Dr. A. Alma Juliet Pamela

Associate Editor.

Research Article

Do Managerial Skills Address Quality Issues In Teacher Education – An Introspection

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ABSTRACT

Management of education is an integral part of the total education system. Providing good quality education to the masses at an affordable cost should be the utmost concern of a developing country. Leadership in TQM requires a continuous cultural change, and all the meri1bers need to be guided through that change. So the concept of leadership needs to follow some requirement in TQM environment. For the present study, investigators selected the Principals (Head of the Institution) in various Colleges of Education (Teacher Training Colleges) in Tamil Nadu state was chosen. The investigator used random sampling technique for the study. Principals Institutional Perception Scale (PIPS) was used for the study. Analysis of data deals with analysis of perception of Principals on quality indicators and inter correlation study of all the quality indicators. The major implication of the study was, Innovation in teaching, promotion of research, pa1ticipation of teachers in innovative programs must be made as part and parcel of any teacher education program. Student centered approach and need based approach should be followed in planning for curricular and co-curricular activities of teacher education program.

Keywords: Managerial Skills, Quality Issues, Teacher Education, Educational Leadership, Introspection

Introduction

Education is an indispensable need of mankind. It aims at educating the masses to become better citizens and more useful members of society. Education plays a major role in bringing together social, economic and political systems which are responsible for national development. Education is associated with quality of life, related to production and interrelated with the promotion of social and national integration. Management plays an important role for effective functioning of the education system. Effective management of educational system helps all individuals experience in those fields which contributes to national development. Due to globalization, quality assurance has become a demand of the clientele. Management is a commonsense approach to get the work done. It requires a consensus of mindset for the group executing the decisions. Management dynamics should be capacity driven depending on the resources, time and cost. Management of education is an integral part of the total education system. The Head of Institution or the Principal of any educational institutions should acquire certain managerial skills, knowledge and attitudes for the successful handling of quality enhancement.

The concept of Quality in Teacher Education

Quality refers to the basic and essential character, the distinguishing element or characteristic of a product, service, organization or entity. In fact, quality is a matter of perception, it is relative, attainable, measured inferentially and is applicable to the system and its parts. Providing good quality education to the masses at an affordable cost should be the utmost concern of a developing country. In the field of teacher education, the concept of quality refers to the totality of features and characteristics of the student teachers acquired as a result of the teacher education program. In the words of Feignbaum (1951), if the expectations of schools, students, parents and other stakeholders in the society are met to indicate that the right type of teachers have been prepared by the teacher education institutions and if the teachers continue to improve themselves, then and there the value added is education. Such teachers will continue to meet the needs of the society.

Academic, administrative and financial aspects- these are the three aspects need to be managed in any educational institution. Besides these, the human and physical resources to be

managed in their optimum level. In other words, management of input-process-output (product) is of utmost concern of the system of teacher education. If every aspect possessing good quality, then the output, i.e., the teacher will fulfil the needs of the society.

Leadership and Quality Management

In the words of Mittal (1999), leadership is defined in the context of Total Quality Management as providing and driving the vision. It is a management approach for an organization which concentrates on quality practice based on the participation of all of its members aiming at long term success through customer satisfaction and benefits to all members of the organization and to the society. Continuous improvement results in the continuous success in an organization are the only way of achieving total quality in an organization. Leadership in TQM requires a continuous cultural change, and all the members need to be guided through that change. Such a continuous improvement can be achieved through motivated employees, who work in terms and used productive resources for the benefit of increasing customer's satisfaction. So the concept of leadership needs to following requirements in TQM environment.

- Defining and communicating jobs and directions
- Ensuring the goals and expectations are met
- Reviewing perfom1ance and taking appropriate action
- Promoting creativity, innovation and continuous improvement
- Recognizing and ensuring all employee contributions
- Motivating, inspiring and energizing employees
- Get feedback from users.

Dimensions of Quality Indicators in Teacher Education

Quality of education is a multi-dimensional concept. It includes the quality of INPUTS in the form of students, faculty, staff, infrastructural facilities, curriculum, library and laboratory, learning resources and management. The quality of PROCESS in the fom1 of curriculum transaction, teaching learning process and utilization of learning resources, and the quality of OUTPUT in the form of a well-trained teacher, who move out of the system. As in the words

of Seymour (1992), with more attention paid to the quality of higher education, quality has increasingly been seen as something that can and should be managed and improved. Total Quality Management (TQM) can be considered as the first quality management mode] in higher education that caused a lot of discussions about potential relevance for the sector, as well as its educational and social implications (Stensaker, 2007)

To ensure the quality aspects in a teacher education institution, the Head of the institution should follow certain parameters as the quality of students, quality of faculty, appropriate teaching pedagogy, quality infrastructure, quality control, proper leadership and management etc. For our

study, the head of the institutions has to focus on the following essential quality indicators:

* Customer orientation
* Client Education
* Satisfaction with quality
* Participation
* Innovation
* Parents Involvement
* Linkage

Rationale for the study

Quality is the totality of characteristics of an entity that bears on its ability to satisfy stated and implied needs. Generally, the mission and vision of any educational organization is the development of individual and society. The development in the proper direction is possible only if education provided by the organization is of relevance which is one major components of quality. In this context, if we think about providing quality education, it becomes necessary to know what constitutes quality in education. Therefore, the results indicate that quality factors can and should be used in teacher education also.

The report of Education Commission (1964-66) states, "The destiny of India is being shaped in classrooms. The most important and urgent reform needed in education is to transform it, to endeavour to relate it with the life, needs and aspirations of the people and hereby make it a powerful instrument of social change necessary for the realisation of the national goals."

Teachers are the backbone of the society. The reforms in the teacher education are the need of the hour to achieve the national goals. The national goals spelled out the education should be developed so as to increase productivity, achieve social and national integration, strengthen democracy, accelerate the process of modernisation and cultivate social, moral and spiritual values. The national goals cannot be achieved without the educational development. Teacher education has a significant role to play in maintaining the quality of education quantitatively as well as qualitatively. Quality management is not an overnight process and it is not the product of a single hand. At this point, quality management becomes important and The investigator has attempted to make a thorough study on the application of quality management in teacher education institutions in Tamil Nadu.

Objective of the Study

To analyse the perception of principals on different quality indicators as customer orientation, client education, satisfaction with quality, participation, innovation, parents Involvement, and linkage on line with total quality management.

Population and Sample

For the present study, Colleges of Education (Teacher Training Colleges) in Tamil Nadu state was chosen. The investigator selected the Principals (Head of the Institution) of all Government and Government Aided Colleges of Education in Tamil Nadu.

Variables used in the study

The 'perception' is the dependent variable. This study aimed at investigating the effect of inter-correlation between the variables selected for the study. This study aimed at finding out how the quality indicators are linked with each one and also which one dominating in taking effective decisions.

Tool used for the study

Principals Institutional Perception Scale (PIPS) was used for the study. The scale consists of seven quality indicators namely, customer orientation, client education, satisfaction with quality, participation, innovation, parents involvement and linkage.

Statistical Techniques used

For the present investigation, quantitative analysis was made on the data collected through the perception scales prepared for the principals. Coefficient of correlation were used for interpreting the results of the perception scores of on total quality management.

Analysis of Data

Analysis of data deals with analysis of perception of Principals on quality indicators and inter con-elation study of all the quality indicators. It consist of, analysis of Mean scores of Principals on various quality indicators and inter con-elation between quality indicators.

Analysis of Mean scores of Principals on various quality indicators

The perception scores of principals on seven quality indicators of total quality management using PIPS were analysed and presented in the Table I.

Table 1

Perception Scores of Principals on Quality Indicators using PIPS

Serial No.	Quality Indicators	Average Mean Score
1	Customer Orientation	13.87
2	Client Education	14.87
3	Satisfaction with Quality	15.2
4	Participation	13.67
5	Innovation	15.47
6	Parents involvement	13.07
7	Linkage	13.08
Overall Average		**14.27**

Table 1 focused the various mean scores of seven quality indicators prescribed for the perceptions of the principals using PIPS. Higher mean values (15.47, 15.2)obtained by the indicators such as 'innovation' and 'satisfaction with quality' revealed that the Principals perceived these as important factors of Total Quality Management (TQM) processes in maintaining quality in Teacher Education for implementing continuous improvement. Almost similar mean values were obtained by the other indicators selected for the study as perceived by the Principals on total quality management. It indicated that the quality of education need to be further improved upon to ensure total quality in Teacher Education.

Inter-Correlation between quality indicators of PIPS on the basis of responses of Principals

The perception scores of principals on seven quality indicators of TQM using PIPS were analyzed and derived inter con-elation between those quality indicators. The result were presented in the Table 2.

Table 2

Inter - Correlation between quality indicators of PIPS on the basis of response of Principals

	Customer Orientation	Client Education	Satisfaction with Quality	Participation	Innovation	Parents involvement	Linkage
Customer Orientation	1.000	0.098	0.034	0.276	0.544	0.138	0.076
Client Education		1.000	0.187	0.341	0.019	0.227	0.188
Satisfaction with Quality			1.000	0.331	0.774	0.198	0.067
Participation				1.000	0.295	0.115	0.247
Innovation					1.000	0.087	0.044
Parents involvement						1.000	1.204
Linkage							1.000

It revealed that there was high correlation (0.774) between 'satisfaction with quality' and 'innovation'. Substantial correlation (0.554) noticed between 'customer orientation' and 'innovation'. The inter relationship between other quality indicators among themselves was found 'low' and 'negligible'. It indicated the framed null hypothesis, **"There is no inter relationship between the quality indicators as perceived by the principals towards total quality management in teacher education"** is rejected at 0.01 level of significance with regard to quality indicators innovation, satisfaction with quality and customer orientation. Hence, it was inferred that there was interrelationship between innovation and other indicators of satisfaction with quality and customer orientation.

In the case of inter relationship between other quality indicators among themselves, the framed hypothesis, **"There is no inter relationship between the quality indicators as perceived by the principals towards total quality management in teacher education"** is tenable at 0.01 level of significance as there were low and very negligible relationship among quality indicators.

Implications of tile study

The present study puts forth the result that there were interrelationship between the quality indicator 1innovation1 and other indicators •satisfaction with quality1 and 'customer orientation. The following are the implications of the study.

* Innovation in teaching, promotion of research, participation of teachers in innovative programmes must be made as part and parcel of any teacher education programme.
* Besides fulfilling the existing needs of quality maintenance, the stakeholders of any teacher education programme should go for further improvement of quality as and when required.
* Student centered approach and need based approach should be followed in planning for curricular and co-curricular activities of teacher education programme.
* Interdisciplinary approach must be followed in dealing with any situation in a teacher education programme.
* Obtaining regular feedback from teachers and students would be more useful to plan for implementing any new innovative idea in teacher education.

Conclusion

Teacher education comes under the higher education. This higher education takes a vital role in human capital formation. Economic development of one country is also correlated with the development of higher education, says the \World Bank (1998). In any educational programme, the teacher is the most important element. Adequate number of well qualified teachers can implement the educational process through which the desired development of the students is brought out. The quality of the teacher, to a large extent, depends on the quality of teacher education received by him/her. The present study clearly indicated that the principal as leader is stronger area in all types of institutions such as government, government aided and self-financing institutions. Thus, the leader of the institution need to possess important qualities of leadership, manager, administrator and researcher.

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Research Article

A Study on the Aptitude of Teachers and Disabled Graduates towards Usage of Technology in Teaching-Learning Process

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ABSTRACT

The purpose of this study was to examine the aptitude of teachers and disabled graduates towards usage of technology in teaching-learning process. The investigation elicited the attitude of teachers and disabled students with regard to usage of Technology in education. Therefore, the survey method is the suitable method which is used for the present study. Qualitative analysis was made on the data collected through the scale 'Attitude towards Usage of Technology for Disabled- Student Scale'. Mean, Standard deviation and Student 'f were applied for interpreting the results of the scores. Teachers revealed that the loco-motor disabled persons are using technology as that of non-disabled persons whereas the visually impaired persons are deprived of it. Also revealed that they will use technology in teaching to the disabled if they are provided with equipment and required training facilities. Most of the visually impaired graduates said that they have not accessed technology for their leaning. They are not aware of what technology can be helpful to them.

Keywords: Teachers' Aptitude, Disabled Graduates, Technology Integration, Teaching-Learning Process, Special Education

Introduction

Technology is defined as a systematic development of methods, machines or processes that help in the achievement of a given objective. The Individuals with Disabilities Education Act (U.S.A) amendments of 1997 defined that term "Assistive Technology" as" any item, piece of equipment or product system that is used to increase, maintain or improve the

functional capabilities of the individuals with disabilities." Assistive Technology can be broadly conceptualised as any technology with the potential to enhance the performance of person with disabilities. It includes both low technologies and high-tech devices, and it incorporates technologies designed specifically for people with disabilities as well as general public. The above definition is used in this study.

If disabled persons are to function fully in this society, they must have access to the myriad technologies that can improve communication, information processing, and learning. While technological advances are making in-roads in the reduction of the impact ofmotoric, sensory, and cognitive disabilities, the real potential is yet to be met.

The computer is second only to the printing press in its impact on the way in which humans acquire and distribute information. As computers are reduced in size and cost, their impact is multiplied geometrically. The computer has two characteristics that are particularly significant for disabled individuals:

* as hardware decreases in size, it generally increases in capacity; and
* the more sophisticated computers become, the easier they are touse.

These characteristics are very important for handicapped individuals in several respects. First, as computers become smaller, they also become more portable. For example hand-held microcomputers can be attached to wheelchairs to improve mobility. Second, as computers become easier to use, they are more accessible to the handicapped. For example, reducing the number of keystrokes required to perform ce1iain computer functions has greatly facilitated their use.

Microprocessor-based technology facilitates communication in two ways: as a compensatory device for sensory disabilities and as an assistive device for individuals whose physical impairments make communication difficult. Examples of compensatory devices include talking computer terminals that can translate text into speech (Stoffel, 1982); special adaptive devices for microcomputer that can provide visual displays of auditory information by translating sound into text (Vanderheiden, 1982); and Cognivox, an adaptive device for Apple personal computers that combines the capabilities of voice recognition and voice output (Murray, 1982) - Enyclopaedia of Special Education.

For individuals with motoric disabilities, communica6on aids have been developed that allow them to operate computers with single-switch input devices. These devices may be as simple as game paddles and joysticks or as sophisticated as screen-based optical head pointing systems. Keyboard enhancers and emulators help individuals with restricted movement by reducing the number of actuations necessa1y for communication. For example, Minispeak is a semantic compaction system that can produce thousands of clear, spoken sentences with as few as seven keystrokes (Baker 1982). Adaptive communication devices can also be linked with microcomputers to help the disabled control their living environments (e.g., by I11Illling appliances, answering the telephone, or adjusting the thermostat).

The Technology has become common to all nowadays. But, it is still strange for the disabled persons because of many reasons. The present investigation helps us to understand the attitude of teachers who are handling disabled persons in the classroom and disabled graduates on computers in teaching and learning process.

OBJECTIVES

The following are the objectives of the present study.

* To study the attitude of teachers and disabled graduates towards the usage technology in teaching and learning process.
* To identify the mental setting of teachers in teaching to the disabled persons through technology
* To elicit the information how effective the usage of technology in the learning of disabled graduates.
* To collect the information regarding the availability software specific to their disability condition.
* To elicit the suggestion from the teachers and disabled persons with regard to availability and accessibility of technology in learning process.
* To suggest the effective use of technology in teaching learning process.

HYPOTHESIS

* The investigator framed the following null hypotheses for the present study.

* There is no significant difference between the attitude of teachers and disabled graduates towards the usage technology in teaching and learning process.
* There is no significant difference between the male and female teachers with regard to the usage of technology for the learning of disabled persons.
* There is no significant difference between the rural and urban teachers with regard to the usage of technology for the learning of disabled persons.
* There is no significant difference between the attitude of visually impaired graduates and loco-motor disabled graduates in line with the usage of technology.
* There is no significant difference between the male and female disabled graduates with regard to the usage of technology for the learning of disabled persons.
* There is no significant difference between rural and urban disabled graduates with regard to the usage of technology for their learning of disabled persons.

METHODOLOGY

Sample

A total of 20 Loco-motor impaired graduates, 20 Visually impaired graduates and 20 College Teachers were selected as the sample through random sampling technique.

Subjects	Male		Female		Total
	Rural	Urban	Rural	Urban	
Visually Impaired	5	5	5	5	20
Loco-motor disabled	5	5	5	5	20
Teachers	5	5	5	5	20

Tool

The investigator constructed and standardised the tool 'Attitude towards Usage of Technology for Disabled-Student Scale' similar to the Likert type Scale of Summated Ratings.

The supplementary tool interview schedule was prepared to elicit the responses from the teachers and graduate disabled persons.

Research Design

The investigation elicited the attitude of teachers and disabled students with regard to usage Technology in education. Therefore, the survey method is the suitable method which is used for the present study.

Statistical Techniques and Data Analyses

Qualitative analysis was made on the data collected though the scale 'Attitude towards Usage of Technology for Disabled-Student Scale'. Mean, Standard deviation and Student 'f were applied for interpreting the results of the scores.

ANALYSIS AND RESULTS

Quantitative analysis

The student 't' was employed to investigate the effect of independent variables namely gender, locality of teachers and disabled students; disability conditions-orthopaedically impaired and visually impaired, on the dependent variable 'Usage of Technology'. The analysis of the data are tabulated as below.

Table 1: Analysis of Independent Variables and Dependent Variable

S.No.	Variables	f	Test of significance
1	Teachers Graduates	1.53	Not significant at 0.05
2	Male Teachers Female Teachers	0.86	Not significant at 0.05
3	Rural Teachers Urban Teachers	1.02	Not significant at 0.05
4	Visually Teachers Loco-motor disabled	3.23	significant at 0.01
5	Male disabled Female disabled	1.41	Not significant at 0.05

6	Rural disabled Urban disabled	0.96	Not significant at 0.05

* The result reveals that the calculated 'f value of teachers and graduates is 1.53 which is lesser than the table value. Therefore, the null hypothesis 1: "There is no significant
* difference between the attitude of teachers and disabled graduates towards the usage of technology in teaching and learning process" is tenable.
* The calculated 'f value of male teachers and female teachers is 0.86 which is leaser than the table value. Therefore, the null hypothesis 2: "There is no significant difference between the male and female teachers with regard to usage of technology for the learning of disabled persons" is tenable.
* The calculated 'f value of rural teachers and urban teachers Is 1.02 which is lesser than the table value. Therefore, the null hypothesis 3: "There is no significant difference between the rural and urban teachers with regard to usage of technology for the learning of disabled persons" is tenable.
* The calculated' t' value of visually impaired graduates and loco-motor disabled graduates is 3.23 which is higher than the table value. Therefore, the null hypotheses 4: "There is no significant difference between the attitude of visually impaired graduates and loco-motor disabled graduates inline with usage of technology" is rejected.
* The calculated' t' value of male disabled graduates and female disabled graduates is 1.41 which is leaser than the table value. Therefore, the null hypothesis 5: "There is no significant difference between the male and female disabled graduates with regard to usage of technology for the learning of disabled persons" is tenable.
* The calculated 'f value of rural disabled graduates and urban disabled graduates is 0.96 which is lesser than the table value. Therefore, the null hypothesis 6: "There is no significant difference between rural and urban disabled graduates with regard to usage of technology for their learning" is tenable.

Qualitative analysis:

The following are the summary of results obtained through the analysis of interview responses of the subjects.

1. Teachers mentioned that the loco-motor disabled persons are using technology as that of non-disabled persons whereas the visually impaired persons are deprived of it.
2. Teachers said that visually impaired persons are in need of training and special software facilities to access technology. Colleges are not having sufficient provision for the education of visually impaired students to access computers for their education purpose.
3. Teachers observed that most of the visually impaired children are coming from poor family so that they are not able to use technology for their education.
4. Teachers mentioned that they will use technology in teaching to the disabled if they are provided with equipments and required training facilities.
5. Most of the loco-motor disabled persons revealed that they do not have any problem in accessing the technology because there is no need of any adaptation or special software meant for disabled condition.
6. Most of the visually impaired graduates said that they have not accessed technology for their leaning. They are not aware of what technology can be helpful to them.

RECOMMENDATIONS

The following recommendations are made out of the present investigation.

* All the disabled persons will be provided with relevant technology and educational software for the learning.
* Free training on technology usage will be given to all disabled persons.
* All educational institutions should have the provision for technology availability and accessibility for the disabled persons.
* Commercial Internet Centres, Disabled people work places, Job oriented training centres, etc., should have the disability friendly atmosphere to provide equal opportunities for our disabled brethren.
* All software producers should keep in mind that their software should also be viable to all including the disabled.

* District level resource centres should be established to take care of the usage of technology to the disabled persons for their education and employment.

SUGGESTIONS FOR FURTHER RESEARCH

The investigator provides the following suggestions for further researches.

* A study may be conducted to focus what kinds of software programs are needed, where to get and how to access, for the specific disabled persons.
* A training package should be developed for disabled persons according to the mental and physical development, nature of disability and educational qualification.
* Guide books, resource materials and audio assisted devices to provide self learning instructions to the disabled persons on computer are to be developed.
* A study may be conducted to find out the challenges faced by the functionaries of educational institutions and disabled students towards the computer application in teaching and learning process.

CONCLUSION

The Technology should not be a remote access to persons with disabilities. A Jot of advancement has come to make education reachable, accessible and interesting to all. These advanced technologies are to be made easy for the persons with disabilities to enhance their learning and doing fast and perfect. Let us try to bring up our brethren with disabilities together with us in all education and employment opportunities so as to provide them better life in the society.

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Research Article

Life Skills Acquisition of Higher Secondary Students in Relation to Their Academic Achievement

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ABSTRACT

Life skills are skills that enable individuals to deal effectively with the challenges of everyday life. Realising the importance of life skills education, the investigator has made an attempt to study the relationship between five important life skills and the academic achievement in Higher Secondary students in Coimbatore district of Tamil Nadu .The findings of the study revealed a positive correlation between the skills. The English medium students seemed to have better C1itical Thinking skills than their Tamil counterparts. Private management school students have better Problem Solving skill scores than the government school students. The percentage analysis revealed that in co-education schools, the life skills scores were high whereas the achievement scores were medium.

Keywords: Life Skills, Higher Secondary Students, Academic Achievement, Student Development, Education

INTRODUCTION

The term 'life skills' refers to a broad group of psychosocial and interpersonal skills that can help an individual to make important decisions, communicate effectively and navigate this increasingly complex world. Beyond reading writing and arithmetic, a child needs to develop a broad set of competencies-cognitive, social and practical to cope with challenge and

confidently make its way in the world. WHO defines 'life skills' as the abilities for adaptive and positive behaviour that enables individuals to deal effectively with the demands and challenges of everyday life. WHO (1994) identified a core set oflife skills that included problem solving, decision making, goal setting,· critical thinking, creative thinking, communication skills, assertiveness, self awareness, empathy and skills for coping with stress and emotions. These skills are pivotal to lead a healthy and happy life.

In this present study of life skills of students in the adolescent group belonging to the Higher Secondary classes, five skills have been focused on mainly, namely Problem Solving skill, Decision Making skill, Critical Thinking skill, Stress Coping skill and Goal Setting skill .The idea of the study is to find the interplay between the skills. Perhaps, a deeper insight into the five skills taken for the study would be appropriate before proceeding into the details of the study.

Problem solving skill

This means the ability to identify the problem correctly, understanding its source, eliminating or reducing the source, thinking of alternative solutions and choosing the best option possible. Wikipedia states." Problem Solving is a mental process .Considered the most complex of all intellectual functions, it has been defined as a higher order cognitive process that requires the modulation and control of more routine or fundamental skills."

Decision making skill

This is closely linked with the Problem solving skill as they both require creativity in identifying and developing options. Good Decision making requires a mixture of skills: creative development and identification of options, clarity of judgement, fimmess of decision and effective implementation. Thus we see that the Decision Making skill calls for objectivity and clear thinking rather than emotion based and instinctive action.

Critical Thinking skill

The concept of critical thinking has its roots in ancient Greece-Kriticos (meaning discerning judgement) and Kriterion (meaning standards). Etymologically, the word implies the development of a discerning judgement based on standards. It is that mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her

thinking skilfully analyzing, assessing and reconstructing it. It is self-directed, self-motivated and self-corrective thinking.

Stress coping skill

The process of managing stress is called coping.' Coping is cognitive and behavioural eff01t to master, reduce or tolerate the internal and external demands that are created by the stressful transaction.' (Folkman and Lazarus 1980) Vol 2"All the behaviours to erase the aversive effects of stress are coping behaviours" [Jeanne Civil 2003]. Giridano and others [1997] define 'stress management is the ability to reduce stress or to cope in competent manner with stressors.'

Goal Setting skill

Setting and achieving goals play an important role in a successful personal development plan. A goal setting system improves chances of success. Goal setting raises one's self confidence and properly set goals can be incredibly motivating. Goals should be specific, measurable, attainable, and relevant and time bound. Effective goal setting requires knowing what one wants to achieve and how to achieve it in a focussed and decisive manner by doing the right actions in a lesser time frame.

SIGNIFICANCE OFTHE STUDY

The Higher Secondary students are adolescents. The adolescents are in a stage of sorting out their childhood habits and values and laying the foundation for a mature adult personality. The adolescent stage calls to fore the actualization of potentials, achievement of adequate coping styles, sharpening of cognitive powers namely the ability of the mind to think critically, analyze, reason out and logically work out solutions to problems in daily life and take decisions independently with confidence weighing the pros and cons of a situation. The importance of the application oflifc ski11s at this stage oflife lies in the fact that it lays the foundation for a well-developed personality in later life with good self-concept, high self-esteem and socially acceptable behaviour.

HYPOTHESIS

* There is no significant difference between the mean scores of life skill scores of students in terms of the independent variables.

* There is no correlation between the life skills of the students.
* There is no significant difference between the mean scores of the problem solving skills of the students in tem1s of the independent variables.
* There is no significant difference between the mean scores of the Decision making skills of the students in terms of the independent variables.
* There is no significant difference between the mean scores of the Critical Thinking skills ofthe students in terms of the independent variables.

METHODOLOGY

The survey method was selected for the present study.

SAMPLE

For the present study, 32 schools in Coimbatore city in Tamil Nadu state were selected. The schools were located in urban and rural areas. They were co-educational or just boys' or girls' schools. They were government or private management schools with English or Tamil as the medium of instruction. A sample of 623 students was selected by the random stratified sampling method.

TOOLS USED

To know the background information of the school students, a general information schedule was used. The tools for assessing the five life skills were prepared by the investigator. They were tested for validity and reliability. The over-all percentage of marks obtained in the 10th Std. Board Examinations was taken as the achievement score of the students.

STATISTICAL TECHNIQUES USED

* "t" test to find the significant difference between the mean scores of life skills scores of students in terms of the independent variables.
* Pearson's Product Moment Correlation to find the correlation between the life skills and also between each life skill and achievement.
* Percentage analysis of total life skill score and achievement test score of the school students I terms of the type of school.

* ANOVA test was used to find out whether there is a significant difference between the mean scores of the Problem Solving and Decision making skills of the students in terms of the independent variables.

ANALYSIS OF DATA

H_0 - no significant difference is observed

H_1 - significant difference is observed

TABLE-1:

SIGNIFICANCE OF DIFFERENCE BET\VEEN THE MEAN SCORES OF LIFE SKILL SCORES OF STUDENTS IN TERMS OF THE INDEPENDENT VARIABLES.

Independent variable	Categories	N	Mean	Std. Deviation	f value Deviation(Sl,S2)	Remarks
Management	Govt	402	80.9422	4.74772	-4.991	H_0 accepted
	Private	221	82.8063	3.88272		
Gender	Male	207	81.4868	4.80987	-0.452	H_0 accepted
	Female	416	81.6616	4.41275		
Medium	English	310	81.9974	4.40285	2.159	H_0 accepted
	Tamil	313	81.2134	4.65656		
Locality	Rural	69	81.0943	4.26568	-0.987	H_0 accepted
	Urban	554	81.6669	4.57874		

Table -1 shows that English medium students have higher level of life skill scores compared to the tamil medium students.

TABLE-2:

SIGNIFICANCE OF INTER CORRELATION BETWEEN THE FIVE LIFE SKILL SCORES OF STUDENTS

	Problem Solving Score	Decision Making	Critical Thinking Score	Stress Coping Score	Goal Setting Score
Problem Solving Score	1	.633"	.412"	.158°	.217"
Decision Making	.633"	1	.502"	.232"	.230"
Critical Thinking Score	.412"	.502"	1	.333"	.403"
Stress Coping Score	.158"	.232"	.333"	1	.349*'
Goal Setting Score	.217**	.230"	.403"	.349"	1

As shown in Table-2 a Pearson product-moment correlation was rllil to determine the relationship between an individual's five life skill scores. There was a strong, positive correlation between life skill scores, which was statistically significant. It is worth noting that the problem solving skill score has the highest positive correlation (0.633) with decision making skill score, the critical thinking skill score has highest positive correlation (0.502) with decision making skill score, goal setting score has highest positive correlation with critical thinking score.

TABLE-3:

PERCENTAGE LEVEL OF TOTAL LIFE SKILLS SCORE AND ACHIEVEMENT TEST SCORE OF THE SCHOOL STUDENTS IN TERMS OF THE TYPE OF SCHOOL. PERCENTAGE ANALYSIS

Type of School	Total	Life Skill Level			Achievement Level		
		Low	Medium	High	Low	Medium	High
	Count	0	14	85	0	3	96

Boys	**% of Total**	.0%	2.2%	13.62%	.0%	.5%	15.4%
Coed	**Count**	3	151	253	24	206	177
	% of Total	.5%	24.2%	40.6%	3.9%	33.1%	28.4%
Girls	**Count**	2	21	94	32	32	85
	% of Total	.3%	3.4%	15.1%	.1%	5.1%	13.6%

Achievement - ≤50 low , 51-69 medium , ≥70 high

Life skill - ≤65 low , 66-79 medium , ≥80 high

Table-3 shows that most of the school students have higher life skill scores and higher achievement scores. In terms of boys school, the life skill scores and achievement scores are high. In terms of co-ed school, the life skill scores are high whereas the achievement scores are medium. In terms of girls school, the life skill scores and achievement scores are high.

TABLE-4:

ANOVA TEST TO FIND THE SIGNIFICANCE OF DIFFERENCE BETWEEN THE MEAN SCORES OF THE PROBLEM SOLVING SKILLS OF THE STUDENTS IN TERMS OF THE INDEPENDENT VARIABLES.

Problem solving skills in terms of Independent Variables	Sum of Squares	df	Mean Square	F	Sig.	Remarks
Gender of students	161.569	1	161.569	1.523	.218	H_0 accepted
	65858.290	621	106.052			
Management type of schools	2035.723	1	2035.723	19.758	.000	H_0 accepted
	63984.136	621	103.034			
	104.394	1	104.394			

Medium of schools	65915.465	621	106.144	.984	.322	H_0 accepted
Locality of the schools	5.102	52	.098	.994	.489	H_0 accepted

Table -4 shows that since the sigma value .000 is lesser than .05, there is a significant difference between the mean scores of problem solving skills of students in terms of the management type of the school of the students.

TABLE-5:

SIGNIFICANCE OF DIFFERENCE BETWEEN THE MEAN SCORES OF THE DECISION MAKING SKILLS OF THE STUDENTS IN TERMS OF THE INDEPENDENT VARIABLES.

ANOVA

Decision Making Skills in terms of Independent Variables	Sum of Variation	Sum of Squares	df	Mean Squares	F	Sig.	Remarks
Medium of schools	Between Groups	1228.037	1	1228.037	13.858	0	**H_0** is accepted
	Within Groups	55029.69	621	88.615			
Gender of students	Between Groups	1.921	1	1.921	0.021	0.884	**H_0** is accepted
	Within Groups	56255.806	621	90.589			
Management type of schools	Between Groups	6103.042	1	6103.042	75.566	0	**H_0** is accepted
	Within Groups	50154.685	621	80.764			
Locality of the schools	Between Groups	5.18	52	0.1	1.011	0.457	**H_0** is accepted

	Within Groups	56.178	570	0.099			

Table-5 shows that since the sigma value .000 is lesser than .05, there is a significant difference between the mean scores of decision making skills of students in tenns of the management type of the school and also the medium of schools. Private School students have better decision making skill scores than the government school students. English medium students have better decision making skill scores than the tamil medium students.

FINDINGS

* There was a significant difference between the mean scores of life skill scores of students in terms of the medium of instruction.
* There was a strong positive correlation between the life skills scores especially between the problem solving skill score and the decision making skill score.
* In terms of boys' and girls' schools the percentage of life skill scores and achievement scores are high whereas in terms of co-ed schools the percentage of life skill scores are high and achievement scores are medium.
* There was a significant difference between the mean scores of problem solving skills of students in terms of the type of management of schools.
* There was a significant difference between the mean scores of Decision making skills in terms of the management type of the schools and also the medium of the schools.

CONCLUSION

The study revealed (from table 1) that English medium school students had a higher level of life skill scores compared to the Tamil medium students. The problem solving skill and the critical thinking skill had a high positive correlation with the decision making skill also the goal setting skill had a high positive correlation with the critical thinking skill (table 2).The percentage of achievement scores was medium in co-ed schools and the percentage of life skills scores was high in boys', girls' and co-ed .type of school(table 3). Private management school students had a better problem solving skill than government school students (table 4).Private

school students and English medium students had better Decision making skill scores (Table 5).

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Research Article

Mathematical Anxiety and Achievement in Mathematics among Standard Ix Students.

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ABSTRACT

The value of mathematical education and the power of mathematics in the modern world arise from the cumulative nature of mathematics. The word "Mathematics" comes from the Greek word mathematical which means in ancient Greek what one learns and what one gets to know.

Keywords: Mathematical Anxiety, Mathematics Achievement, Standard IX Students, Academic Performance, Learning Difficulties

Need and significance of the study

Mathematical anxiety is a phenomenon that is often considered when examining student's problem in learning mathematics. Ashcraft,H.(2002) defined mathematical anxiety as a feeling of tension, apprehension or fear that interferes with maths performance. Anxiety is the state of being anxious, uneasiness with fear and desire regarding something doubtful. This anxiousness is expressed in many areas and individuals differ in their level of anxiety .Low level of anxiety is considered to be a correlate of high achievement. But high level of anxiety has a debilitating effect on one's performance. Mathematical anxiety has an indirect influence on achievement in mathematics. Mathematical anxiety when accompanied with tension prevents the students from learning mathematics. Mathematical anxiety is the most crucial topic in the area of mental health and when mental health is affected the students become unable to learn which in turn affects their achievement in mathematics. Furthermore the streamlining of courses is done at higher secondary level .Most of the students hesitate to choose the first group having mathematics as one of the subject due to their phobia and anxiety. Therefore an

attempt had been made to investigate the relationship of mathematical an.,xiety and achievement in mathematics among standard IX students .This might help the parents and teachers in reducing the mathematical anxiety. This will enable the students to enhance their perforn1ance in mathematics. Only few research works have been done in India pertaining to the relationship between mathematical anxiety and achievement in mathematics. Hembree (1990) conducted a thorough meta analyses of 151 studies concerning mathematical anxiety. The findings indicated that mathematical anxiety to be directly related to mathematics avoidance behavior among students. Ashcraft (2002) found out that highly anxious students studying mathematics avoided situations in which they have to use mathematical equations and formulae. Mathematical avoidance resulted in less competency exposure and mathematics practice,

leaving students more anxious and mathematically unprepared to achieve. From the review of related literature, studies regarding mathematical anxiety and achievement in mathematics were found to be scarce. As overcoming mathematical anxiety is significant in enhancing the performance in mathematics, the investigator conducted a study to assess the influence of mathematical anxiety on achievement in mathematics among IX standard students.

Objectives of the study

* To investigate the mathematical anxiety of IX standard students in terms of a) gender b) medium of instruction c) types of school management.
* To investigate the achievement in mathematics among IX students in terms of a) gender b) medium of instruction c) types of school management.
* To investigate the relationship between mathematical anxiety and achievement in mathematics among standard IX students.
* To investigate the relationship between mathematical anxiety and achievement in mathematics among standard IX students in terms of a) gender b) medium of instruction c) types of school management.

Methodology

The study investigated the influence of demographic variables like types of school management, gender and medium of instruction upon the dependent variable achievement in mathematics .Along with the demographic variables mathematical anxiety was considered as

the independent variable whose influence on the dependent variable, achievement in mathematics was also investigated. The investigator used random sampling technique for selecting samples from government, government aided and private schools. The sample size was 300. The samples belonged to the age group of 14. The samples were selected from 8 schools belonging to different types of school management like government, government aided and p1ivate schools in Chennai.

Tools Used

The mathematical anxiety scale was developed by the investigator. It had 34 statements out of which 12 were positive statements and remaining were negative statements. The reliability of the scale was established by the split half method using Pearson product moment correlation and the reliability of the full scale was determined using spearn1an -Brown prophecy formula and was found to be 0.88 .Intrinsic validity was established by taking the square root of reliability coefficient which was found to 0.94,which is highly reliable. The maximum possible score was I 70 and the minimum is l. For achievement in mathematics, Half yearly examination marks in Mathematics was collected from the schools.

Table-1:

Mean scores of mathematical anxiety and the factors

(Gender and Medium of instruction)

Variable	Sub sample	N	Mean	SD	CR	Level of significance
Gender	Boys	155	62.05	17.71	4.08	.01
	Girls	145	54.06	16.20		
Medium of instruction	Tamil	100	63.32	16.57	3.86	.01
	English	200	55.62	17.33		

Table-2:

Mean scores of achievement in mathematics and the factors

(Gender and Medium of instruction)

Variable	Sub sample	N	Mean	SD	CR	Level of significance
Gender	Boys	155	44.68	22.48	5.07	.01
	Girls	145	60.88	25.16		
Medium of instruction	Tamil	100	36.42	20.01	9.28	.01
	English	200	60.55	25.53		

Table-3:

Mean scores of mathematical anxiety and the factors

(Schools under Different Types of Management.)

Variable	N	Mean	SD	CR	Level of significance
Government	100	57.86	18.03	1.22	N.S
Aided	100	60.97	17.89		
Private	100	60.97	17.89	2.18	.05
Government	100	55.72	16.08		
Aided	100	57.86	18.03	0.88	N.S
Private	100	55.72	16.08		

Table-4:

Mean scores of achievement in mathematics and the factors

(Schools under Different Types of Management.)

Variable	N	Mean	SD	CR	Level of significance
Government	100	49.82	24.25	2.61	.01
Aided	100	41.21	22.37		
Private	100	41.21	22.37	8.05	.01
Government	100	66.49	21.99		
Aided	100	49.82	24.25	5.1	.01
Private	100	66.49	21.99		

Table -5:

Correlation scores of mathematical anxiety and achievement in Mathematics among IX standard students

Variable	N	r-value
Mathematical anxiety And achievement in mathematics	300	-0.55

Table-6:

Correlation scores of mathematical anxiety and achievement in Mathematics among IX standard students(Gender, medium of instruction and type of school management)

Variable	Sub Variable	N	r -value
Gender	Boys	155	-0.53
	Girls	145	-0.51
Medium of instruction	Tamil	100	-0.56
	English	200	-0.51

Type of school management	Government	100	-0.61
	Government aided	100	-0.59
	Private	100	-0.46

Analysis and Interpretation

Analysis was done to investigate the influence of various demographic factors such as gender, types of school management upon mathematical anxiety and achievement in mathematics. Relationship between mathematical anxiety and achievement in mathematics was also analyzed. There is significant difference between students in the mathematical anxiety in terms of their gender and medium of instruction. Boys had more mathematical anxiety than the girls. Tamil medium students had more mathematical anxiety than English medium students.

1. There is significant difference between students in the achievement in mathematics in tem1s of their gender and medium of instruction. Boys are lesser in their achievement in mathematics than the girls. Tamil medium students are lesser in their achievement in mathematics than English medium students.
2. There is significant difference between students in the mathematical anxiety in terms of their school management.
3. There exists no significant difference in mathematical anxiety between students studying in government and aided schools.

3.1. There exists no significant difference in mathematical anxiety between students studying in government and private schools.

3.2. There exists significant difference in mathematical anxiety between students studying in aided and private schools.

4. There exists significant difference m achievement among the students from different types of school management.

4.1. There exists significant difference between the students studying in government and aided schools in their achievement in mathematics

4.2. There exists significant difference between the students studying in government and private schools in their achievement in mathematics

4.3. There exists significant difference between the students studying in aided and private schools in their achievement in mathematics

5. There exists negative correlation between mathematical anxiety and achievement in mathematics
6. There exists negative c01Telation between mathematical anxiety and achievement in mathematics among students in terms of their gender, medium of instruction and type of school management.

Findings and Discussion

From the above analyses, it was fom1d that factors like gender, medium of instruction and types of school management influences both mathematical anxiety and achievement. Boys had more mathematical anxiety than the girls, hence their achievement in mathematics was poor. Tamil medium students had more mathematical anxiety than English medium students; hence their achievement in mathematics was poor. The students studying in private schools had lesser anxiety hence their achievement in mathematics was good when compared to aided and government schools. The study has proved the existence of negative correlation between mathematical anxiety and achievement in mathematics in terms of their gender, medium of instruction and type of school management. .If there is increase in mathematical anxiety the achievement in mathematics decreases among students.

Conclusion

From the findings of the study, the investigator realized the significance of the role of maths teacher in helping the students to overcome their mathematical anxiety. The teachers working in government, aided and private schools must be given training in helping their students to develop positive attitude towards mathematics and getting rid of their anxiety in studying mathematics. They must encourage them to work out mathematical problems, their doubts must be clraified, simple ways for solving problems and memorizing equations must be taught .They must help them in understanding the reasons behind misconceptions .They must help them in mastery learning which will enhance their achievement in mathematics.

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Conceptual Article

JOB STRESS

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Abstract

Stress is a body's reaction to demanding situations, resulting in a series of automatic physical and psychological changes. Factors that cause or contribute to stress, known as stressors, vary across age groups. Teenagers often experience stress due to academic pressures, family conflicts, and peer influences, whereas adults may encounter stress from work responsibilities, family conflicts, serious illness, or loss of loved ones. Understanding the sources and effects of stress is crucial for implementing strategies to manage it effectively and maintain overall well-being.

Keywords: Job Stress, Stressors, Teenagers, Adults, Work-Life Balance, Psychological Health

Academic Paper related to Minor Research Project (UGC)

Stress is a body's reaction to a demanding situation. A series of physical changes takes place automatically when a person is in a highly stressful situation. Something that causes or contributes to stress is called stressor. Stressors for teenagers include grades and school work, family arguments and peer pressures. For adults, stressors might include work responsibilities and family conflicts. Other stressors are serious illness, death in the family, poor eating habits, lack of physical activity, feeling of loneliness, a change or loss of friends. Regular physical activity will reduce mental stress, enhance psychological wellbeing and a positive attitude towards life.

The nature of work is changing at whirlwind speed perhaps now more than ever before. Job stress poses a threat to the health of workers and, in turn, to the health of organizations.

Job Stress

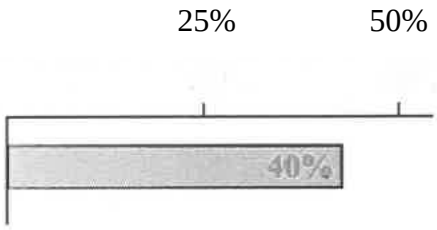
Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury.

Research on job stress has the following inputs.

* One-fourth of employees view their jobs as the number one stressor in their lives.
  -Northwestern National Life
* Three-fourths of employees believe the worker has more on-the-job stress than a generation ago.
  -Princeton Survey Research Associates
* Problems at work are more strongly associated with health complaints than are any other life stressor-more so than even financial problems or family problems.
  -St. Paul Fire and Marine Insurance Co.

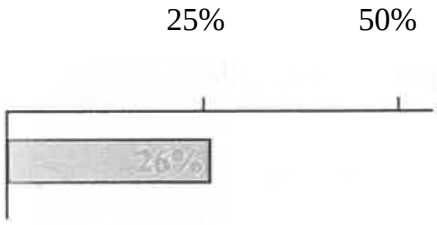
Survey by Northwestern National Life

Percentage of workers who report their job is "very or extremely stressful".

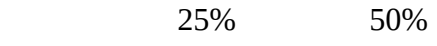


Survey by the Families and Work Institute

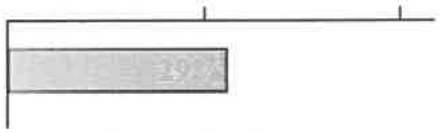
Percentage of workers who report they are "often or very often hurned our or stressed by their work".



Survey by Yale University



Percentage of workers who report they feel "quite a bit or extremely stressed at work".



Fortunately, research on job stress has greatly expanded in recent years. But inspite of this attention, confusion remains about signs, the causes, effects, and prevention of job stress.

Signs of Job Stress

* Headache
* Sleep Disturbances
* Difficulty in concentrating
* Short temper
* Upset stomach
* Job dissatisfaction
* Low Morale

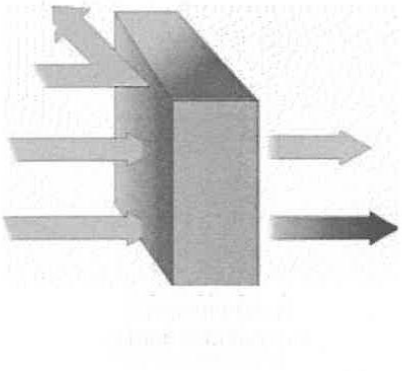
Causes of Job Stress

Nearly everyone agrees that job stress results from the interaction of the worker and the conditions of work. Worker characteristics versus working conditions is the primary cause of job stress. According to one school of thought, differences in individual characteristics such as personality and coping style are most important in predicting whether certain job conditions will result in stress. What is stressful for one person may not be a problem for other person. This viewpoint leads to prevention strategies that focus on workers and ways to help them cope with demanding job conditions. Although the importance of individual differences cannot be ignored, scientific evidence suggests that certain working conditions are stressful to most people.

The National Institute for Occupational Safety and Health (NIOSH) job stress model suggests that job stress is a mixture of job conditions and situationa1 factors.

NIOSH Model of Job Stress

Stressful Job Conditions



Risk of Injury and Illness

Individual and Situational Factors

Individual factors include the ability to adopt a positive mental attitude, optimism and a positive outlook in the face of stress. Situational factors may include having a supportive home and/or work environment, or having adequate work life balance.

Individual and situational factors that can help to reduce the effects of stressful working conditions include the following:

* Balance between work and family or personal life
* A support network of friends and coworkers
* A relaxed and positive outlook

Primary Causes of Job Stress

* **The Design of Tasks.** This refers to the activities done in performing the job. Some tasks that can be particularly stressful are critical decisions (e.g. emergency medical staff or police officers), excessive complexity and many alternative options (e.g. nursing and patient care), boredom and/or repetitiveness (e.g. factory line workers) and excessive time urgency accompanied by unrealistic expectations.
* **Management Style.** A lack of participation in decision making by workers, poor communication and poor family-friendly policies can increase job stress.

* **Interpersonal Relationships.** A lack of supportive relationships with supervisors and co-workers can increase job stress This may play out in power struggles between workers and management, discrimination or sexual harassment in the workplace.
* **Work Roles.** Conflicting or uncertain job expectation, having too much responsibility (or not enough) and having too many "hats to wear".
* **Career Concerns.** A lack of opportunity for growth or advancement can increase job stress. Changes in the workplace and job in securtiy are also career concerns that can Increase overall work stress.
* **Environmental Conditions.** Dangerous and unwelcome environments can place pressure on workers and increase work stress. For example, some work may be exposed to noisy or polluted environments that may increase work related stress.

Knowing what is causing work stress can help individuals to put into place, stress management strategies to deal with work stress.

Job Stress and Health

Stress sets off an alarm in the brain, which responds by preparing the body for defensive action. The nervous system is aroused and hormones are released to sharpen the senses, quicken the pulse, deepen respiration, and tense the muscles. This response (sometimes called the fight or flight response) is important because it helps us defend against threatening situations. The response is preprogrammed biologically. Everyone responds in much the same way, regardless of whether the stressful situation is at work or home.

Short-lived or infrequent episodes of stress pose little risk. But when stressful situations go unresolved, the body is kept in a constant state of activation, which increases the rate of wear and tear to biological systems. Ultimately, fatigue or damage results, and the ability of the body to repair and defend itself can become seriously compromised. As a result, the risk of injury or disease escalates.

In the past 20 years, many studies have looked at the relationship between job stress and a variety of ailments. Mood and sleep disturbances, upset stomach and headache, and disturbed relationships with family and friends are examples of stress-related problems that are quick to develop and are commonly seen in these studies. These early signs of job stress are usually easy to recognize. But the effects of job stress on chronic diseases are more difficult

to see because chronic diseases take a long time to develop and can be influenced by many factors other than stress.

Evidence is rapidly accumulating to suggest that stress plays an important role in several types of chronic health problems-especially cardiovascular disease, musculoskeletal disorders, and psychological disorders.

* **Cardiovascular Disease**

  Many studies suggest that psychologically demanding jobs that allow employees little control over the work process increase the risk of cardiovascular disease.

* **Musculoskeletal Disorders**

  On the basis of research by NIOSH and many other organizations, it is widely believed that job stress increases the risk for development of back and upper- extremity musculoskeletal disorders.

* **Psychological Disorders**

  Several studies suggest that differences in rates of mental health problems (such as depression and burnout) for various occupations are due partly to differences in job stress levels. (Economic and lifestyle differences between occupations may also contribute to some of these problems.)

* **Workplace Injury**

  Although more study is needed, there is a growing concern that stressful working conditions interfere with safe work practices and set the stage for injuries at work.

* **Suicide, Cancer, Ulcers, and Impaired Immune Function**

  Some studies suggest a relationship between stressful working conditions and these health problems. However, more research is needed before firm conclusions can be drawn. -Encyclopaedia of Occupational Safety and Health.

According to **Journal of Occupational and Environmental Medicine** ,Health care expenditures are nearly 50% greater for workers who report high levels of stress.

Stress Prevention and Job Performance

A healthy organization is defined as one that has low rates of illness, injury, and disability in its workforce and is also competitive in the marketplace. Healthy working

condition is necessary for any organisation to remain productive and profitable in today's economy. Studies show that stressful working conditions are actually associated with increased absenteeism, tardiness, and intentions by workers to quit their jobs-all of which have a negative effect on the bottom line.

Policies benefitting worker health include the following:

* Recognition of employees for good work performance
* Opportunities for career development
* An organizational culture that values the individual worker
* Management actions that are consistent with organizational values.

The best method to explore the scope and source of a suspected stress problem in an organization depends partly on the size of the organization and the available resources. Group discussions among managers, labour representatives, and employees can provide rich sources of information. Such discussions may be all that is needed to track down and remedy stress problems in a small company. In a larger organization, such discussions can be used to help design formal surveys for gathering input about stressful job conditions from large numbers of employees.

Interventions might be implemented rapidly like improved communication, stress management training, assertiveness training etc., to improve the stressful condition.. Many interventions produce initial effects that do not persist. Long-term evaluations are often conducted annually and are necessary to detem1ine whether interventions produce lasting effects.

Job stress prevention should be seen as a continuous process to refine or redirect the intervention strategy.

Measures to Prevent Job Stress

* Ensuring that the workload is in line with workers' capabilities and resources.
* Designing jobs to provide meaning, stimulation, and opportunities for workers to use their skills.
* Clearly defining workers' roles and responsibilities.
* Giving workers opportunities to participate in decisions and actions affecting their jobs.

* Improving communications-reduce uncertainty about career development and future employment prospects.
* Providing opportunities for social interaction among workers.
* Establishing work schedules that are compa6ble with demands and responsibilities outside the job

Conclusion

Job stress comes in different forms and affects one's mind and body in different ways. Too much stress or being under stress for too long isn't good for our health. Constant stress can make us more likely to get sick often. It can make chronic pain worse and can also lead to long-term health issues. Job stress could be reduced by learning how to manage time and job duties.

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