Need Analysis of Critical Thinking Skills Training in Competitive Examinations Youth Aspirants

Ms. Savita Vivek Kulkarni¹ & Radhika Narendra Inamdar², Ph. D.
¹M.Sc (Chemistry), M.Ed., M. Phil (Ed.), Ph. D. Student, Savitribai Phule Pune University, Pune, Maharashtra, India
²M.A. (Geo), M.Ed., Ph. D (Ed.), Research Guide, Savitribai Phule Pune University, Pune, Maharashtra, India

Abstract

Union Public Service Commission (UPSC) conducts a multistage Civil Services Examination (CSE) for the selection of administrative officers which demands critical thinking (CT) at every stage. Not only for the examination but in their career also officers need CT skills. The present study was undertaken for UPSC CSE aspirants to find out need for training to enhance critical thinking in them. The sample was 315 in which female aspirants - 105, Male aspirants - 210, and all appeared for UPSC CSE at least once. A teacher made test comprising ten questions containing five questions each of knowledge of CT and need of training to enhance CT was administered for data collection. Subjects were to respond in binary way i.e. Yes or No to each question. Data was analysed on the basis of background of aspirants like rural or urban, technical or non-technical graduation and school medium. Findings revealed that aspirants having high knowledge about critical thinking showed high need for training to enhance CT. Aspirants having low knowledge about critical thinking showed low need for training to enhance CT. 238 out of 315 aspirants (76%) feel high need for CT enhancement training, 62 out 315 aspirants (20%) feel medium need for CT enhancement training and 15 out of 315 aspirants (4%) feel low need for CT enhancement training.

Introduction

Thinking has a very important place in our life. The prime aim of education is to help students develop thinking skills, mainly critical thinking skills. Plato mentioned that education should make students able to question, examine and reflect on ideas and values (Aune, 1967). Our educational evaluation of pupil’s progress is based on rote learning, memory and understanding of content. But in problem solving in a totally new situation, they require higher order thinking skills. Cognitive science speaks about critical thinking skills. So in 21st century the teachers have to be aware about critical thinking skills as an outcome of pupil’s learning.
Why the study for UPSC CSE aspirants?
Union Public Service Commission (UPSC) conducts a multistage Civil Service Examination every year to select Group A (IAS, IPS, IFS etc. and All India and Central Services) and Group B officers. Preliminary Examination, Main Examination and Interview (Personality Test) are the three levels of this examination. In the era of globalized every student is facing a very high competition for admissions and for jobs as well. The Civil Services Examinations are the most difficult examinations.
More than six hundred thousand students from all over India appear for the first level i.e. Preliminary Examination of UPSC Civil Services Examination every year. Out of these about one thousand get posts after stages of written Main Examination and Personality interview. This examination requires independent, critical thinking at every level of it.
Preliminary i.e. first level comprises multiple choice questions based on critical thinking. General Mental Ability Test mentions need of critical thinking explicitly. Reading Comprehension is an important part of Preliminary paper. In General Studies questions are asked on History, Geography, Economics, Sociology, Indian Polity, International Relations, Issues of social and National Importance, Internal Security, Science and Technology etc. The second level (Main Examination) is of descriptive nature. It covers questions like critically analyse, critically examine, discuss, and evaluate the given issue. These questions require critical thinking ability. For Ethical dilemma type Questions and Case Studies in paper of Ethics critical thinking is must. Essay writing, and questions on above mentioned subjects from social science, science and current issues appear in this examination. In personality interview, aspirants need to think critically on various issues, national international problems by evaluating them to generate opinion. This examination tests varied competencies of the graduate aspirants. A rigorous training to enhance critical thinking skills in these aspirants is needed.
The UPSC CSE aspirants need to be independent in studies because self-study, self-thinking, logic building and critical thinking are needed for this examination. Aspirants refer a lot of material including Current Events and study it to link it with the core part of subjects. They keep them updated in reading and thinking.

Objective of the Study
To analyse the need of a program to enhance critical thinking skills of UPSC CSE aspirants.

Methodology
Research Method – Survey method is used in the study.

Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies
Sampling method - The purposive method of sampling used.

Description of the sample – 1) 315 aspirants appeared for UPSC CSE from various competitive examination coaching classes in Pune.
2) Five faculty members of different UPSC CSE coaching classes in Pune.

Operational Definition of Critical thinking - Critical thinking is the cognitive process involving analysis, inference, interpretation, evaluation and arguments. (Watson & Glaser, 2002)

Tools for data collection
1) Researcher made Questionnaire - A questionnaire of 10 questions was framed to identify need of critical thinking skills enhancement programme. The questionnaire comprised questions checking awareness about critical thinking and need for enhancement of it in UPSC CSE aspirants. First four and eighth questions were based on awareness about CT skills and remaining five questions were checking feeling need for its enhancement. Aspirants responded to each question in Yes or No.
2) Structured Interviews - A structured interview was framed for getting information about present status of training for UPSC CSE and to understand the need of critical thinking in the preparation for these examinations.

Validation of Questionnaire and Interview by three experts:
Questionnaire and interview questions were discussed with the three experts from the field of Competitive Examinations, Education and Psychology. The objective was to decide the validity of the questionnaire and interview questions, grammatical structure, and whether or not the questions generate the required data.
Expert 1 - Ph D in Education, Ph D guide in Education, Working as a senior lecturer in a senior college.
Expert 2 - Ph. D in Psychology, Worked as a guide for Ph. D students in Psychology, Has an experience of test designing in psychology. Worked as a trainer for industries for long time.
Expert 3 - Ph. D in Engineering from IIT, Powai. Worked for more than 35 years in the field of Education and Competitive Examinations.

The experts went through the questionnaire and interview questions and suggested to keep the questions very simple and objective type. Changes were made like grammatical corrections, question rewording. Wording and structure of some ambiguous questions were changed to make them easily understandable.

Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies
Pilot testing of questionnaire-

Questionnaire was administered to five UPSC CSE aspirants to make it suitable for this sample. The aim of this activity was to test the validity of questionnaire for this sample. After pilot study of it, detail one on one discussion was held with all the five aspirants regarding grammar, structure and objective of each and every question.

Data collection

The questionnaire was administered to 315 UPSC CSE aspirants, preparing for this examination for two years. All the participants had appeared for UPSC examination at least once and continued with the preparation. Total time to solve the questionnaire was 10 minutes. 1 mark was awarded for correct answer and 0 mark for wrong answer.

Five faculty members, coaching for competitive examinations were interviewed to understand the need of critical thinking in the preparation for these examinations.

| Table 1 - Categories and percentages of aspirants according to their background |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Category | Rural | Urban | Technical | Non-Technical | Medium wise percentage |
| Rural | 62 | 38 | 53 | 47 | 63 |
| Urban | 40 | 60 | 57 | 43 | 54 |

Data analysis

a) Percentage of aspirants given YES or NO response.

b) Qualitative analysis of Interviews

Data collected from the need analysis questionnaire was analysed and question wise responses are given in the following table.

| Table 2 - Table showing number and percentage of aspirants given YES or NO response to the respective question of need analysis questionnaire. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| No. | Question | Correct expected response | Response YES No. of Participant % | Response NO No. of Participant % |
| 1 | Is critical thinking an inborn ability? | NO | 31 | 10 | 284 | 90 |
| 2 | Have you learned critical thinking in your school or college days? | NO | 181 | 57.5 | 134 | 42.5 |
| 3 | Does critical thinking ability get improved with age? | YES | 291 | 92 | 24 | 8 |

Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies
Question wise quantitative analysis -

For the first question i.e. whether critical thinking is an inborn ability? The expected answer was NO. The correct choice was given by 90% of the aspirants. So we could infer that these aspirants know that CT can be improved by training and with the age as well. Because the response to the question seeking information about improvement in CT with the age and explicit training were YES. But the aspirants in this study were confused about their training of critical thinking in their school or college, because many of them might not know the systematic programme and activities for enhancement of CT. YES response for the question asking the reality about the learning of CT at school or college days was given by 57.5% of the aspirants. The aspirants’ response to remaining questions getting information about use CT for UPSC CSE success, need of CT for newspaper reading, teaching CT skills along with UPSC subjects teaching, importance of CT for multiple choice questions, and insufficiency of readymade material for UPSC CSE which demanded self-thinking were synchronized with the correct answers. This showed that the aspirants participated in the study were very well aware about meaning and importance of critical thinking. The importance and need of explicit special training for critical thinking ability was mentioned by 79% of the aspirants.
Total number of subjects was 315 and 223 (70.8%) out of total subjects having high awareness showed high need for training for enhancement of critical thinking, 57 (18%) subjects having high awareness showed medium need and 10 (3.2%) having high awareness showed low need of training for CT skills enhancement. 12 (3.8%) subjects having medium awareness showed high need, and very negligible percent of subjects showed medium and low need of training for enhancement of critical thinking with medium awareness. 8 subjects had low awareness about critical thinking.

**Qualitative Analysis of interviews of five faculties of the UPSC coaching institutes**

Five heads and faculty members coaching for competitive examinations were interviewed to understand the need of critical thinking in the process of preparation for these examinations. Common points raised by these faculty were as follows.

The importance for developing critical thinking in the UPSC aspirants is to be given. Merits and demerits of any action or issue are thought. The basic characteristic required for developing critical thinking is inquisitiveness. For living examined life it is necessary. A special explicit training for improving this ability will surely make changes in student’s thinking pattern and ultimately attitude towards life.

Students need to be watchful about the surroundings and alert about various current issues. As a future administrator they have to be rational and dispassionate thinker which is an important aspect of critical thinking. Taking a stand on an issue, justifying it, seeing reason and making it rational is an important way of thinking needed to develop in these students.

In the enhancement programme for critical thinking, motivation for using thinking skills needs to be increased. Without motivation one cannot develop an urge to apply critical thinking skills in practical life. So during this programme awareness about importance of self-regulation, motivation, flexibility in thinking, fairness in judgments must be developed.

**Conclusion**

It can be concluded from the analysis of the performance in the questionnaire that no formal training for enhancement of critical thinking is available in our education right from school to post graduation. Therefore it has to be given proper attention to improve it through formal and informal education. The educational activities should be planned which will boost critical thinking. More and more challenges should be offered to the students in their higher studies. Only memorization of content is not sufficient for success in UPSC examination but critical thinking is an important and must ability required for all the three levels of this examination and while reading newspaper Multiple choice type of questions are based on various

*Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies*
objectives like analysis, logic, linkages among various subjects, inference etc. Notes making requires critical thinking ability as notes making is a process which comprises comprehension of news content, selection of news according to its importance, analysis of it, linkages of any news item with contemporary issues etc.

Studying for UPSC CSE examination is exceptionally different process. The aspirants need to inculcate critical thinking skills and apply them in the process of preparation becomes very important. Hence the need of explicit training for enhancement of critical thinking is underlined by the participant aspirants of this study.

References


Website – http://www.upsc.gov.in