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## RESEARCH ARTICLE

### IRRATIONAL BELIEFS AND TOLERANCE FOR AMBIGUITY AMONG PROSPECTIVE TEACHERS

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#### ABSTRACT

The Changing nature of the society and reconstruction of youth aspirations and impact of technology makes teaching complicated today. It demands broad and heterogeneous knowledge of subject matter, curriculum and standards, enthusiasm, a caring attitude and love of learning, knowledge of discipline and classroom management techniques, a desire to make difference in the lives of young people etc. To attain all these qualities, teachers have to sustain professionalism. They must also need tolerance, healthy mind set up and positive attitude. When should they attain all these? They have to internalize these from their pre service training period itself. Do our prospective teachers have the right mind set up to become a great teacher? Even though so many traits are involved in good mental set up two traits rationality and tolerance for ambiguity are considered to be most important. These qualities regulate their behavior, thoughts and emotions and help them to pursue their most complicated job effectively. So the researchers were interested to know the level of rationality and ambiguity tolerance of our prospective teachers and conducted a study to examine these qualities. It is found out that our teacher trainees possess only an average level of rationality and ambiguity tolerance. It is also found that there was variation on these traits when cross compared with their optional subject of study. The result revealed there is a positive relationship between rationality and ambiguity tolerance of our prospective teachers. The study projected the need of mental health training programmes among teacher trainees.

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#### INTRODUCTION

If a person is more intellectual and emotionally mature, the greater is his capacity for functioning as a responsible member of society. Besides having positive self concept makes a way of an objective judgment and looking at all kinds of facts squarely and accurately. He neither overlooks some, nor exaggerates others. This ability is also called rationality. A person with good mental health abandons or masters the inevitable conflicts, frustrations, disappointments and temporary defeats without undue emotional tumult. Rationality and tolerance for ambiguity are two psychological traits or conditions which regulate our mental balance and psychological health. Rationality is the state or quality of being rational or logical. (Dictionary.com). Rationality implies the conformity of one's beliefs with one's reasons to believe or of one's actions with one's reasons for action. Irrational belief is defined as an illogical or absurd idea that does not fit reality. (en.wikipedia.org). REBT focuses on a special type of beliefs, namely evaluative beliefs (Ellis, 1962). Ellis (1962) divides evaluative beliefs into two types, rational beliefs (rBs) and irrational beliefs (iBs). rBs are: (a) pragmatic; (b) logical (non absolutist); (c) reality-based; and/or (d) flexible.

Conversely, iBs are: (a) non-pragmatic; (b) illogical, absolutist beliefs; (c) non-reality-based beliefs; and/or (d) rigid. (David, 2003). Many related studies favored Albert Ellis point of view that most of the psychopathological problems, emotional disturbances mentally unhealthy behaviour are due to our irrational beliefs. Psychopathology is the result of adhering to irrational beliefs; several studies have demonstrated that individuals showing signs of maladjustment have high irrationality than normal. (Fox and Davis, 1971; Mac Donald and Games, 1972). Most of the theoretical reviews points out that one of the major reasons for psychological and emotional maladjustment of people was their irrational beliefs. Budner (1962) defined Tolerance for Ambiguity as "the tendency to perceive ambiguous situations as desirable" and set about one of the first measures in the field. McLain (1993) for instance, addresses the contextual meaning of ambiguity defining the construct as "a range, from rejection to attraction, of reactions to stimuli perceived as unfamiliar, complex, dynamically uncertain, or subject to multiple conflicting interpretations"(p.184) Because ambiguity exists, and humans must cope with it; individuals display varying levels of tolerance to or intolerance of ambiguity or ambiguous situations. Budner (1962) believed that intolerance for ambiguous situations is usually perceived as sources of threats. According to Jonassen and Grabowski (1993) tolerant individuals perform well in new and complex learning

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situations. However, intolerant learners may tend to avoid or give up when encountering ambiguous situations. Davis and Sherman (1987) find out that those most tolerant are also most likely to be active in the classroom and able to share their views with less tolerant classmates. Students less able to tolerate ambiguity will less likely expose their views to others, and less likely to modify their ways of looking at the world. The theoretical constructs and reviews acknowledges that tolerance for ambiguity is a psychological construct which enables the individual to cope effectively with complex life conditions and this quality will help us to achieve success in life. Therefore we should take measures to increase student's tolerance for ambiguity. Teachers have influential role in the promotion of a child's good mental health.

They should actively involve in the child's development, offering consistent encouragement and support. The mental health of teachers determines how effectively they adjust with the students and how much they are able to direct and guide their students. The basic personality traits and the developmental conditions help to develop good mental health. Besides teachers attain a good psychological health while they are regularly interacting with their pupils. It is during the pre service period orientation and further molding of the teacher with all these qualities are expected to materialize. Hence it is essential and important to know the psychological conditions of the student teachers who are going to be the future teachers of our society. This prompted the researchers to conduct a study to find out the rational beliefs and tolerance for ambiguity of student teachers of Kerala.

### Objectives

- To find out the level of Tolerance for Ambiguity of teacher trainees for total sample and subject wise sub samples.
- To find out the level of Irrational Beliefs of teacher trainees for total sample and subject wise sub samples.
- To find out the subject wise difference in Tolerance for Ambiguity among teacher trainees.
- To find out the subject wise difference in Irrational Beliefs among teacher trainees.
- To find out the relation between Tolerance for Ambiguity and Irrational Beliefs of Teacher trainees in total samples and subject wise sub samples.

### Hypotheses

- There will be a high level of Tolerance for Ambiguity among total sample and subject wise sub samples of teacher trainees.
- There will be a high level of Irrational Beliefs among total sample and subject wise sub samples of teacher trainees.
- There will be no significant difference of Tolerance for Ambiguity among teacher trainees based on subject.
- There will be no significant difference of Irrational Beliefs among teacher trainees based on subject.
- There will be no significant correlation between tolerance for Ambiguity and Irrational Beliefs among teacher trainees based on subject.

## MATERIALS AND METHODS

### Participants of the study

A representative sample of total 508 students, 72 Commerce, 64 English, 80 Malayalam, 64 Mathematics, 84 Natural Science, 64 Physical Science and 80 Social Science teacher trainees who are undergoing teacher training programme at graduate level belonging to different colleges of teacher education forms the participants of the study. Due representation was given to the factors such as gender, locale, and type of institution so as to ensure real representation of the population.

### Instruments used for the study

Irrational Belief Inventory by Musthafa and Bisini (2014) and Ambiguity Tolerance Inventory by Musthafa and Bisini (2014) were employed for gathering data. Irrational Belief Inventory consists of 53 items; Likert type response format ranging from strongly agree to strongly disagree. The reliability coefficient is 0.814. The inventory ensures content validity. Ambiguity Tolerance Inventory consists of 56 items, in a Likert type response format ranging from very often to never. The reliability coefficient is 0.878. The inventory ensures content validity.

### Procedure

After collection of data the level of Irrational Beliefs and Tolerance for Ambiguity among total sample and sub samples based on subjects were found out using percentage analysis. The difference of Irrational Beliefs and Tolerance for Ambiguity among teacher trainees based on subjects was found out using the analysis of mean difference. The relationship between Irrational Beliefs and Tolerance for Ambiguity among teacher trainees was found out by calculating the Spearman's rho correlation coefficient.

### Analysis and Interpretation

For the analysis and interpretation of data the mean, standard deviation and percentage score of two variables Tolerance for Ambiguity and Irrational beliefs were found out.

### Tolerance for ambiguity for total sample and subject wise

To find out the percentage of Tolerance for Ambiguity of teacher trainees among total sample and subject wise the total score was calculated then divided them by its maximum score and percentage calculated. The mean and standard deviation of Tolerance for Ambiguity of teacher trainees for subject wise were 178.44, 33.42 Commerce, 200.75, 31.82 English, 187.55, 29.91 Malayalam, 164.50, 25.46 Mathematics, 172.33, 24.61 Natural Science, 177.81, 23.96 Physical Science, 174.50, 22.21 Social Science and 179.22, 29.29 for total sample respectively. The percentage obtained for Tolerance for Ambiguity is presented as Figure 1.

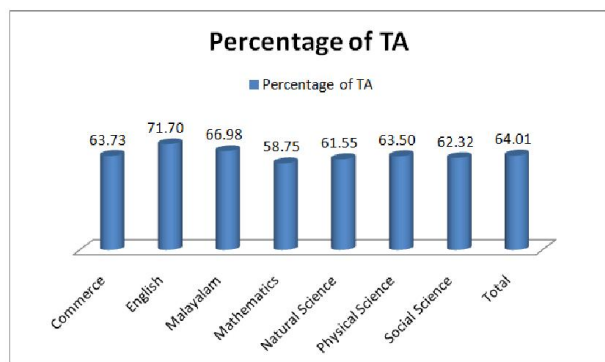


Figure 1. Percentage of Tolerance for Ambiguity for Total and subject wise among Teacher Trainees

Table 2. Test of Significance of coefficient of correlation between Tolerance for Ambiguity and Irrational Beliefs for total sample and subject wise

SL No	Samples	Number of Samples	Coefficient of correlation	Level of Significance
1	Total	508	0.413	.000**
2	Commerce	72	0.395	.001**
3	English	64	0.431	0.000**
4	Malayalam	80	0.487	0.000**
5	Mathematics	64	0.651	0.000**
6	Natural Science	84	0.274	0.012*
7	Physical science	64	0.661	0.000**
8	Social science	80	0.228	0.042*

Fig.2 reveals the overall Tolerance for Ambiguity of teacher trainees was 64.01 percentages i.e. at an average level. Among the different subject students English students were better than the rest while Mathematics students possess less tolerance among all. If we arrange teacher trainees in a descending order of tolerance for ambiguity they come in a line as English, Malayalam, Commerce, Physical Science, Social science, Natural science and Mathematics.

#### Irrational beliefs for total sample and subject wise

To find out the percentage of Irrational Beliefs of teacher trainees for total samples and based on subject, the total score was calculated then divided them by its maximum score and percentage calculated. Because the Irrational Belief is a negative variable the low score indicates irrationality and high score indicates rationality. The mean and standard deviation of Irrational Belief of teacher trainees for subject wise were 166.22, 16.60 Commerce, 180.06, 21.44 English, 166.35, 18.10 Malayalam, 161.00, 12.37 Mathematics, 174.38, 16.55 Natural Science, 167.63, 19.38 Physical Science, 164.15, 17.82 Social Science and 168.53, 18.47 for total sample respectively.

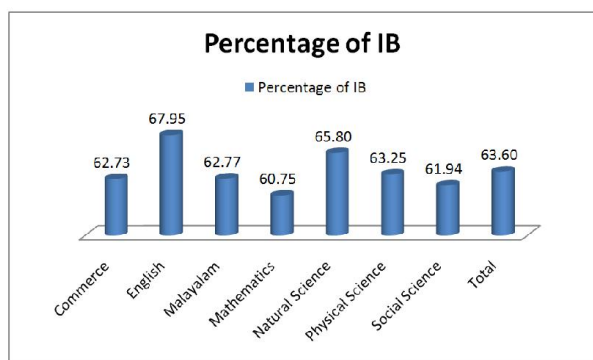


Figure 2. Percentage of Irrational Beliefs among Total sample and subject wise

Fig.2 reveals the overall Irrational Beliefs of teacher trainees was 63.60 percentages. It shows that teacher trainees have an average level of rational beliefs. Among the different subject students English students were better than the rest while Mathematics students possess high Irrational Beliefs among all. If we arrange teacher trainees in a descending order of Irrational Beliefs they come in a line as English, Natural science, Physical Science, Malayalam, Commerce, Social science, and Mathematics.

#### Relation between tolerance for ambiguity and irrational beliefs for total sample and subject wise

Table 2 reveals that there is statistically significant relation between Tolerance for Ambiguity and Irrational Beliefs at 0.01

level of significance for total sample. In the case of sub samples Commerce, English, Malayalam, Mathematics and Physical Science students have a significant relation between Tolerance for Ambiguity and Irrational Beliefs at 0.01 levels of significance whereas Natural Science and Social Science student's shows significance at 0.05 levels.

## RESULTS AND DISCUSSION

The researchers through this investigation tried to probe into the level of Tolerance for Ambiguity and Irrational Beliefs of teacher trainees and subject wise difference of these variables among them. Further this attempt examined the relationship between the Tolerance for Ambiguity and Irrational Beliefs of teacher trainees for total and subsamples based on subjects. The study revealed that the level of Tolerance for Ambiguity and Rational Beliefs were at an average level rejecting the hypothesis. Among the sub sample based on subject it is found that English students had high level of Tolerance for Ambiguity and Rational Beliefs than the other subject students. It was also found that Mathematics students were less tolerant and with high irrational beliefs as compared to other subject students. In the case of tolerance Malayalam students own second to English students. It indicates that in general, language students were highly tolerant than other subject students. In the case of rationality Natural Science students came next to English students.

The study depicts a positive correlation between Tolerance for Ambiguity and Rationality for total sample. In the case of sub samples a significant correlation were found for Commerce, English, Malayalam, Mathematics and Physical Science students at 0.01 levels and Natural Science and Social Science students at 0.05 levels. This means Tolerance for Ambiguity and Rationality are variables influencing each other. The study

points out the need to take measures to increase level of Tolerance for Ambiguity and Rationality among teacher trainees.

### Conclusion

Students learn from the teacher they love. To become a lovable person one should not be rigid or irrational. He /she should be flexible, adjustable and realistic. The present study shows that student teachers are tolerant and rational at a moderate level. They have to be turned into highly rational and tolerant. It also shows the role of subjects of study in developing the rationality and tolerance. As the findings of the study implied that there is a need for including more value enriching programmes, seminars, camps, counseling etc. to develop teacher trainees with high tolerance and rationality. The findings of the study is to be infused with the B Ed curriculum to facilitate the developmental process of a generation with scientific temper and high code of tolerance which are the pillars of democratic system of living.

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