"A study of Problem – Solving Skill with relation to Peronality Traits of Teacher."

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Abstract:

Problem solving skills are a necessary part of life. The students must acquire these skills to be able to solve their own problems as well as build their self esteem and self confidence. Problem solving skill is a cognitive skill. Which involves looking at the difficulties in a novel situation. The teachers should intentionally develop these skill in children, therefor we must know the problem solving skill in teachers. The present study was conducted to study how the discipline, sex, area of school affect the problem solving skill and the personality traits of teachers and also to find relation, If any exits, between the problem solving skill and personality traits of teachers.

Introduction

The problem solving skills is a high level cognition act because it is joined with a high level of mental process.

In the context of cognitive psychology, a problem is a situation in which there is no immediately apparent standard or routine way of reaching a goal. This creates problems and serious and deliberate efforts have to be made to overcome these impediments. The productive work involved in the evolution of the situation and the strategy worked out to reach one's set goal is collectively termed problem solving according to **Woodworth and Marquis** (1948) - "Problem solving behavior occurs in novel or difficult situation in which a solution is not obtainable by the habitual methods of applying concepts and principles derived from past experiences in very similar situation."

"Problem solving is a process of overcoming difficulties that appear to interfere with the attainment of a goal. It is a procedure of making adjustment in spite of interferences." **Skinner**(1968)

The analysis of these definitions brings some observations about problem solving which are as follows -

• Problem solving behaviour arises only when the goal is purposeful and essential for the individual.

- One has to utilise one's thinking and reasoning powers and engage in serious mental work by systematically following some sell organized steps for the removal of the difficulties.
- The Problem solving behaviour helps in the removal or adjustment with interference and ultimately helps an individual with interference and ultimately helps an individual to reach his goal and satisfy his motives.
- Problem solving behaviour involves quite deliberate conscious and serious efforts on the part of the problem solver.
- The problem solving behaviour helps and individual in the growth and development of his personality.

Problem-solving skills are necessary part of life. These skills are necessary to solve student's on problems as well as self esteem and self confidence.

The teachers should be more intentional about problem solving skill. They can develop problem solving skill in students.

Thus it is necessary to study problem-solving skills in a teacher.

Objectives

- 1. To study the influence of discipline, sex, area of school and their interaction on problem solving skills of teacher.
- 2. To study the influence of discipline, sex, area of school and their interaction on personality traits of teachers.
- 3. To study the relation between problem solving skills and personality traits of teacher.

Hypothesis -

The following hypothesis were tested -

- 1. There is no influence of discipline, sex, area of school and their interaction on problem solving skills of teacher.
- 2. There is no influence of discipline, sex, area of school and their interaction on personality traits of teachers.
- 3. There is no relation between problem solving skill and personality traits of teachers.

Methodology

In the present study descriptive survey method was employed. The study was conducted on randomly selected sample of 200 teachers. for collecting the data two tools have been used (1) problem solving skill test (PSST) developed by researcher and (2) dimensional personality inventory (DPI) developed by Dr Mahesh Bhargava. PSST consists of five dimensions which are - 1. logical ability, 2. perceptual ability, 3. Numerical Ability, 4. Analysis Ability and 5. Synthesis Ability. Dimensional personality inventory DPI consists of six statements related to 6 personality dimension namely - 1. Activity-passivity, 2. Enthusiastic-Non enthusiastic, 3. Assertive-Submissive, 4. Suspicious-Trusting 5. Depressive-Non depressive and 6. Emotional

instability - Emotional stability. Analysis of variance and correlation were used for data analysis.

Data analysis

3x3 factorial design (Anova) applied to to study the influence of discipline, sex, area of a school on the problem solving skills with relation to personality traits of teachers.

Table -1Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on problem solving skill of teachers follows –

Source of Varience	Df	SS	MSS	F-Value
Discipline	2	71.525	35.762	1.744
Sex	1	2.137	2.137	0.104
Area of school	1	31.286	31.286	1.526
Discipline * Sex	2	12.700	6.350	0.310
Discipline * Area of	2	10.171	5.086	0.248
school Sex * Area of school	1	0.227	0.227	0.011
Discipline * Sex *	2	42.605	21.302	1.039
Area of school Total	200			
Total	200			

Table- 2Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on personality trait (Activity-Passivity) teachers

Source of Varience	Df	SS	MSS	F-Value
Discipline	2	1.468	0.734	0.088
Sex	1	3.094	3.094	0.377
Area of school	1	3.074	8.074	0.967
Discipline * Sex	2	52.848	26.424	3.163*
Discipline * Area of school	2	5.435	2.712	0.325
Sex * Area of school	1	5.720	5.720	0.685
Discipline * Sex * Area of school	2	47.755	23.877	2.858
Total	200	44685.00		

Table -3Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on personality trait (Enthusiastic-Non enthusiastic) Teachers

Source of Varience	Df	SS	MSS	F-Value
Discipline	2	32.029	16.014	0.346
Sex	1	11.694	11.964	0.252
Area of school	1	109.500	109.500	2.364
Discipline * Sex	2	12.156	6.078	0.131
Discipline * Area of school	2	143.036	71.518	1.544
Sex * Area of school	1	0.633	0.633	0.014
Discipline * Sex * Area of school	2	292.429	146.214	3.156*
Total	200	44124.00		

Table -4Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on personality trait (Assertive-Submissive) teachers

Source of Varience	Df	SS	MSS	F-Value
Discipline	2	30.638	15.319	1.330
Sex	1	42.482	42.482	3.689*
Area of school	1	0.333	0.333	0.029
Discipline * Sex	2	7.197	3.598	0.312
Discipline * Area of school	2	3.576	1.788	0.155
Sex * Area of school	1	6.725	6.725	0.584
Discipline * Sex * Area of school	2	13.793	6.897	0.599
Total	200	22764.00		

Table 5Summary of 3 way ANOVA for influence of discipline, sex, area of school and their intereation on personality trait (Suspicious-Trusting) teachers

Source of Varience	Df	SS	MSS	F-Value
Discipline	2	67.761	33.881	1.542
Sex	1	6.715	6.715	0.306
Area of school	1	2.745	2.745	0.125
Discipline * Sex	2	0.313	0.157	0.007
Discipline * Area of school	2	9.333	4.666	0.212
Sex * Area of school	1	2.796	2.796	0.127
Discipline * Sex * Area of school	2	9.536	4.768	0.217
Total	200	13176.00		

Table -6Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on personality trait (Depressive-non depressive) of teachers

Source of Variance	Df	SS	MSS	F-Value
Discipline	2	7.53	3.786	0.208
Sex	1	18.258	18.258	1.005
Area of school	1	19.797	19.797	1.090
Discipline * Sex	2	33.139	16.569	0.912
Discipline * Area of school	2	18.887	9.444	0.520
Sex * Area of school	1	1.754	1.754	0.097
Discipline * Sex * Area of school	2	12.688	6.344	0.349
Total	200	11238.00		

Table -7Summary of 3 way ANOVA for influence of discipline, sex, area of school and their interaction on personality trait (Emotional instability – Emotional stability) of teachers

Source of Variance	Df	SS	MSS	F-Value
Discipline	2	11.283	5.642	0.244
Sex	1	13.974	13.974	0.604
Area of school	1	9.029	9.029	0.390
Discipline * Sex	2	30.776	15.388	0.665
Discipline * Area of school	2	37.975	18.987	0.820
Sex * Area of school	1	57.533	57.533	2.485
Discipline * Sex * Area of school	2	20.353	10.176	0.440
Total	200	17297.000		

Table - 8Coefficient of correlation between problem-solving skill and Personality traits

		Six Traits of personality					
Problem	solving	1	2	3	4	5	6
skill		-0.04	-0.88	-0.09	-0.10	-0.105	+0.056

Result and discussion -

- It is clear from analysis of above tables that discipline, sex and area of school do not affect problem solving skills.
- It is found that female science teacher are more active as compared to arts and commerce female teacher.
- Urban female arts teacher and urban male science teacher are more interesting in comparison to others.
- In assertive submissive trait of personality female teachers are to be found more submissive than to male teachers.
- Female arts teacher are to be found more submissive in comparison to female commerce and science teacher.
- Discipline, sex and area of school do not affect personality traits like suspicious, trusting depressive non depressive and emotional instability-emotional stability.
- It is also found that there is no significant relation between personality and problem solving skills.

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