APPLICATION OF FUZZY MATRIX FOR RECOGNIZING THE QUALITIES OF EFFECTIVE TEACHER

PROJECT REPORT

Submitted to

Sri G.V.G Visalakshi College for Women (Autonomous), Udumalpet

Affiliated to Bharathiar University

In partial fulfillment of the requirements for the award of Degree of

BACHELOR OF SCIECE IN MATHEMATICS

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DECLARATION

DECLARATION

We **V.Abirami, A.Pavithradevi, P.Pradeepa, T.Praveena, S.Sahana** hereby declare that the Project entitled **"APPLICATION OF FUZZY MATRIX FOR RECOGNIZING THE QUALITIES OF EFFECTIVE TEACHER AND YOGA IN OBESITY"** submitted to **Sri G.V.G Visalakshi College for women(Autonomous) Udumalpet,** Affiliated to Bharathiyar University, in partial fulfillment of the requirements for the award of Degree of **"BACHELOR OF SCIECE IN MATHEMATICS"** is a record of original project work done by us during the period June 2020 – December 2020 of our study under the supervision and guidance of **Mrs. D. Kavitha** and the project has not formed on the basis for the award of any degree/diploma/associate ship/fellowship or other similar title to any other candidate of any university.

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CERTIFICATE

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This is to certify that the project report entitled **"APPLICATION OF FUZZY MATRIX FOR RECOGNIZING THE QUALITIES OF EFFECTIVE TEACHER"**Submitted to **Sri G.V.G Visalakshi college for women (Autonomous), Udumalpet,** Affiliated to Bharathiar University , in partial fulfillment of the requirements for the award of Degree of **"BACHELOR OF SCIENCE IN MATHEMATICS"** is a record of original project work done by V.Abirami, A.Pavithradevi, P.Pradeepa, T.Praveena, S.Sahana during the period June 2020 – December 2020 of their study in the Department of Mathematics, Sri G.V.G Visalakshi college for Women (Autonomous), Udumalpet under my supervision and guidance and the project has not formed on the basis for the award of any degree/diploma/associate ship/fellowship or other similar title to any other candidate of any university.

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Examiners

Internal   **External**

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ABSTRACT

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In this dissertation an attempt is made to study about fuzzy matrices and its applications in Recognizing the Qualities of Effective Teacher and Yoga on Obesity. An approach for recognizing the qualities of effective teacher and yoga on obesity is **FRM (Fuzzy Relational Maps)** and **Max average composition**.

ACKNOWLEGEMENT

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CHAPTER I

CHAPTER I

PREFACE

This work is a summary of application of fuzzy matrix in recognizing the quality of effective teacher and yoga on obesity. Fuzzy set theory introduced by professor Zadehin 1965. A fuzzy is set with fuzzy boundaries, such as short, average or tall for height. The basic ideas of the fuzzy set theory is that an element belongs to a fuzzy set with the certain degree of membership, thus a proposition is not either true or false, but may be partly true to any degree is usually taken as a real number in the interval [0,1].

Vasanta Kandaswamy introduced the notion of **Fuzzy Relational Maps (FRMs).** Teacher quality matters a great deal in terms of student learning. The purposes of this research are to determine the components of teacher quality and to apply the Teacher Quality Index (TQI) for recognizing the qualities of effective teacher, using **FRM (Fuzzy relational maps)** for the developments of educational institutes. In FRMs he divide the very causal associations into two disjoint units, for example, the relation between a teacher and a student or relation between doctor and patient and so on.

Obesity is fast becoming the developed world's versed health problem. Adult obesity they are at least two to three stone overweight and putting their health at graverisk. Fast food, high calorie snacks, cold drink and large portion of meals given more energy than required. Thus obesity is generated in the body. Fuzzy Matrices occur in the modelling of various fuzzy systems, with **"Max average composition"** rule arising from fuzzy set theory. In this paper some sufficient conditions for convergence under "max average" composition of the fuzzy matrix and of a fuzzy state process are established. Now yoga is being applied as a therapy around the world. It has observed that yoga is very beneficial for obese people to remain healthy and also to reduce the weight. As we find yoga brings as very positive change in attitude and behaviour and increases mental capacities.

CHAPTER II

CHAPTER II

PRELIMINARIES

The basic definitions that are required to study fuzzy matrices are dealt in this chapter.

Fuzzy matrices

A fuzzy matrix is a matrix with elements having values in the closed interval [0,1]

An $m \times n$ matrix $A = (a_{ij})$ whose components are unit interval [0,1] is called a fuzzy matrix. It is denoted by F_{mn}.

Example

$$A = \begin{bmatrix} 0.5 & 0.6 & 0.4 \\ 0.2 & 0.7 & 0.3 \\ 0.6 & 0.4 & 0.7 \end{bmatrix}$$

Addition of fuzzy matrix

Let $A = (a_{ij}) \in F_{mn}$ and $B = (b_{ij}) \in F_{mn}$. The matrix $A+B = (\sup\{a_{ij}b_{ij}\}) \in F_{mn}$ is the addition of the matrices A and B.

Example

$$\text{If } A = \begin{pmatrix} 0.5 & 0.6 & 1 \\ 0.8 & 0.2 & 0.3 \\ 0 & 0.6 & 0.1 \end{pmatrix} \quad B = \begin{pmatrix} 0.2 & 0.4 & 0.6 \\ 0.5 & 0.3 & 0.3 \\ 0.7 & 0.8 & 0 \end{pmatrix}$$

$$A+B = \begin{pmatrix} \sup(0.5,0.2) & \sup(0,0.4) & \sup(1,0.6) \\ \sup(0.8,0.5) & \sup(0.2,0.3) & \sup(0.3,0.3) \\ \sup(0,0.7) & \sup(0.6,0.8) & \sup(0.1,0) \end{pmatrix}$$

$$A+B = \begin{pmatrix} 0.5 & 0.4 & 0.1 \\ 0.8 & 0.3 & 0.3 \\ 0.7 & 0.8 & 0.1 \end{pmatrix}$$

Fuzzy Relational Maps (FRM):

Definition 2.1:

A FRM is a directed graph or a map from D to R with concepts like policies or events etc as nodes and causalities as edges. It represents causal relation between spaces D and R.

Definition 2.2:

Let $D_1, \ldots, D_n$ be the nodes of the domain space D of an FRM and $R_1, \ldots, R_m$ be the nodes of the range space R of an FRM. Let the matrix E be defined as $E = (e_{ij})$ where eij is the weight of the directed edge D_iR_j (or R_iD_j), E is called the relational matrix of the FRM.

Definition 2.3:

Let $D_1, \ldots, D_n$ and $R_1, \ldots, R_m$ denote the nodes of the FRM. Let D_iR_j (or R_iD_j), be the edges of an FRM, j = 1, 2,…, m and i= 1, 2,…, n. Let the edges form a directed cycle.

An FRM is said to be a cycle if it possess a directed cycle. An FRM is said to be acyclic if it does not possess any directed cycle. **This equilibrium is called a limit cycle.**

Max Average Composition:

Definition 2.4:

$$\check{R} = \begin{pmatrix} 0.5 & 0 \\ 0.8 & 0.2 \end{pmatrix} \text{ and } \check{S} = \begin{pmatrix} 0.2 & 0.4 \\ 0.5 & 0.3 \end{pmatrix}$$

$$\tilde{T} = \frac{1}{2}\{\max(\mu_{\check{R}} \circ_{av} \mu_{\check{S}})\}$$

$$= \frac{1}{2}\begin{pmatrix} \max(0.1,0) & \max(0.2,0) \\ \max(0.1,0.1) & \max(0.3,0.06) \end{pmatrix}$$

$$= \frac{1}{2}\begin{pmatrix} 0.1 & 0.2 \\ 0.1 & 0.3 \end{pmatrix}$$

$$= \begin{pmatrix} 0.05 & 0.1 \\ 0.05 & 0.1 \end{pmatrix}$$

Definition 2.5:

Max-Min composition of fuzzy matrices

For $A = (a_{ij}) \in F_{mn}$ $B = (b_{ij}) \in F_{mn}$, the max-min composition of fuzzy matricesis defined by,

$A \Theta B = (\sup\{\inf\{a_{ij}, b_{ij}\}) \in F_{mn}$

Example

If A $= \begin{pmatrix} 0.5 & 0 \\ 0.8 & 0.2 \end{pmatrix}$ B $= \begin{pmatrix} 0.2 & 0.4 \\ 0.5 & 0.3 \end{pmatrix}$

A⊙B $= \begin{pmatrix} \sup\,[\inf(0.5,0.2)\,,\inf(0,0.5)] & \sup\,[\inf(0.5,0.4)\,,\inf(0,0.3)] \\ \sup\,[\inf(0.8,0.2)\,,\inf(0.2,0.5)] & \sup\,[\inf(0.8,0.4)\,,\inf(0.2,0.3)] \end{pmatrix}$

A⊙B $= \begin{pmatrix} \sup\,(0.2,0) & \sup\,(0.4,0) \\ \sup\,(0.2,0.2) & \sup\,(0.4,0.2) \end{pmatrix}$

A⊙B $= \begin{pmatrix} 0.2 & 0.4 \\ 0.2 & 0.4 \end{pmatrix}$

Definition 2.6:

BMI : "BMI takes both a person's Height and Weight into account and is expressed in units of kilograms per square meter (kg/m^2). The national institute of health (NIH) now defines normal Weight, overweight and obesity.

Definition 2.7:

The membership function (characteristic function or discrimination function), we can represent whether an element x is involved in a set A or not. The most commonly used range of values of membership functions is the unit interval [0,1]. In this case, each membership function maps elements of a given universal set X, which is always a crisp set, into real number in [0,1]

(i) The membership function of a fuzzy set $\tilde{A}$ is denoted by A

$\mu_{\tilde{A}}$

(i.e.,) $\mu_{\tilde{A}}: x \rightarrow [0,1]$

Definition 2.8:

Let $\tilde{R}_1$ and $\tilde{R}_2$ and be two fuzzy relations on **(X,Y)** and **(Y,Z)** respectively. Then the max-avg composition is denoted as is defined as $\tilde{R}_1 \; °_{av} \; \tilde{R}_2$

$\tilde{R}_1°_{av}\tilde{R}_2\,(x,\,z) = \{[(x,z),\frac{1}{2}\max z \in Z\,\{\mu_{\tilde{R}_1}(x,y)+\mu_{\tilde{R}_2}(y,z)\}]\}, \forall\,x \in X, y \in Y, z \in Z$

CHAPTER III

CHAPTER III

APPLICATION OF FAZZY MATRIX FOR RECOGNIZING THE QUALITIES OF EFFECTIVE TEACHER

This chapter deals with the application of fuzzy matrices in recognizing the qualities of effective teacher using FRM$'^s$ (Fuzzy Relational Maps)

3.1 RECOGNIZING THE QUALITY OF EFFECTIVE TEACHER USING FUZZY RELATIONAL MAPS:

PROBLEM 1:

Teacher: One who teaches or instruct, one whose business is or occupation is to instruct others.

Student: A person who studies, one who is devoted to learning.

Method

Here we are giving a simple example to understand the FRM method as suggested by Kandasamy Suppose the domain space as the concepts belonging to the teacher say D_1, D_2, D_3 and the range space denote the concepts belonging to the student say R_1, R_2, R_3 describe as follows

Domain Space

D_1– Teaching is good.

D_2 – Teaching is average

D_3 – Teaching is poor

Range Space

R_1– Good Student

R_2 – Average Student

R_3 – Bad Student.

Map Representation:

$$D_1 \rightarrow R_1$$
$$D_2 \rightarrow R_2$$
$$D_3 \rightarrow R_3$$

The relational matrix E got from the above map is

$$E = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

If A = (0 0 1) is passed on in the relational matrix E, the instantaneous vector ,

$$AE = (\,0\,0\,1\,) \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

AE = (0 0 1) implies that the student considered is a bad student.

Considering

$$AE = A_1$$

Then

$$A_1 E^T = (\,0\,0\,1\,) \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} = (0\,0\,1)$$

Gives the outcome is that the student is bad student.

Conclusion and Results

Teacher quality matters a great deal in terms of student learning. Therefore, teacher quality measurement is important. Regulation of Ministry of National Education No.1,2007 article 1 states that every teacher must full fill the academic qualification standard and teacher competency. Teacher competency includes pedagogical, personal, social, and professional competencies while the qualifications are achieved by getting higher education certificate.

The qualities of effective teachers were investigated through the series of statements in each category:

• teacher as a person

• planning for instruction

• classroom management and organization

• implementing instruction, as well as monitoring student progress and potential.

Senior high school students were surveyed across Indore City; including Government and Private Schools.

PROBLEM 2:

Suppose the domain space as the concepts belonging to the teacher say $D_1 \ldots \ldots D_{12}$ and the range space denote the concepts belonging to the student say R_1, R_2, R_3 as follows :

Domain space

D_1- Teacher has quality of passionate about teaching, and tries to motivate his student.

D_2- He has uses the latest technology in teaching, uses creativity and variety.

D_3 - The full fillment of the prerequisite to get to know his student individually.

D_4- Expression and affection towards his student.

D_5- Influencing his student towards positive change.

D_6- Teaching is good.

D_7- Teaching style by traditional methods.

D_8- Problem solution is average.

D_9- Teaching is poor.

D_{10}- Doesn't spend time thinking about student.

D_{11} - Often gets angry.

D_{12}- Does not listen to students.

Range Space

R_1- Excellent student (Creative in nature, consistently doing something forms a habit, willing to learn, Pays attention in class, help other students about their difficulties)

R_2- Good Student (Interactive in class, ask question about his queries, complete his home work.)

R_3 - Average student. (Often misunderstands original thoughts of a speaker or writer and derives a wrong conclusion).

R_4 - Bad Student. (not interested to learn., Angry on others)

Map Representation:
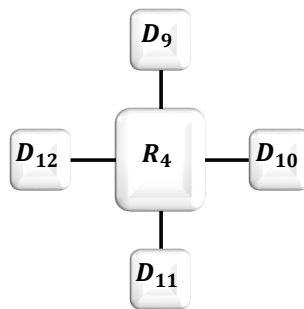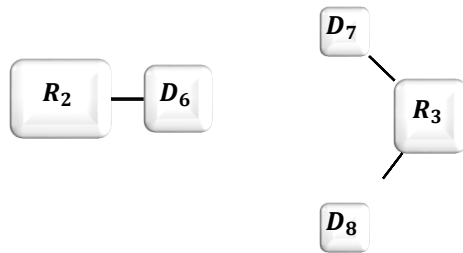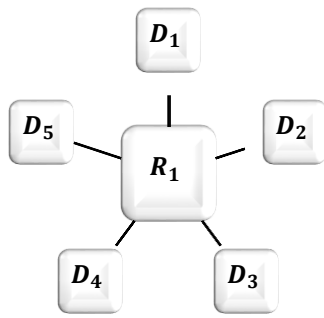
$$E \text{ (Relational matrix)} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

$$A = \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

$$AE = \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

$AE = \begin{bmatrix} 1 & 0 & 0 & 0 \end{bmatrix} \Rightarrow$ Excellent Student.

Now let $AE = A_1$ then

$$A_1 E^T = \begin{bmatrix} 1 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 1 \end{bmatrix}$$

$= \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$

Here we find five best qualities of Teachers which implies we got Excellent Student and the quality as follows:

1. Teacher has quality of passionate about teaching and tries to motivate his student.

2. He has uses the latest technology in teaching, uses creativity and Varity.

3. The full fillment of the prerequisite to get to know his student individually.

4. Expression and affection to words his student.

5. Influencing his student to words his student.

Now again we put $A_1 E^T = A_2$. Then

$$A_2 E = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

$= [5 \quad 0 \quad 0 \quad 0]$

After threshold

$= [1 \quad 0 \quad 0 \quad 0]$

Which implies that the student is excellent student.

Let,

$A_3 E = A_3$

$A_3 E^T = [1 \quad 0 \quad 0 \quad 0] \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 1 \end{bmatrix}$

$= [1 \quad 1 \quad 1 \quad 1 \quad 1 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0]$

Again we found best five qualities of teachers.

After updating and threshold the instantaneous vector at each stage we obtain the following chain $A_1 \rightarrow A_2 \rightarrow A_3 \ldots \rightarrow A_i \rightarrow A_1$

Thus the equilibrium a limit cycle and A_1 is a fixed point. We can say if the teacher having the best qualities, then the result has come out with excellent students and subsequently institutes get benefited for better results of student's future.

CHAPTER IV

CHAPTER IV

APPLICATION OF FUZZY MATRIX IN YOGA ON OBESITY

This chapter deals with the application of fuzzy matrices in yoga on obesity. An Algorithm is developed to illustrate the concept and it is verified.

ALGOTHIRM :

Case (i)   **:** Input the fuzzy Matrix $\check{R}$ refers to height and weight

Case (ii)   **:** Input the fuzzy Matrix $\tilde{S}$ refers to height and BMI.

Case (iii)   **:** Complete the corresponding Matrices $\check{R}$ and $\tilde{S}$

Case (iv)   **:** Compute $\tilde{T} = \check{R} \circ_{av} \tilde{S}$

Case (v)   **:** Compute $\tilde{T}_{av} = \frac{1}{2}(Max(\mu_{\check{R}} + \mu_{\check{S}}))$

CASE STUDY:

First symptom of obesity is increase in weight; body loses its shape due to accumulation of fats in various parts of body. After Practicing yoga their range of movement increased metabolic rate is improved. Fat mobilized and muscle became stronger. Both body and mind became stable.

Step: 1

Input the fuzzy Matrix

$$\check{R} = \begin{array}{c} \\ P_1 \\ P_2 \\ P_3 \\ P_4 \\ P_5 \\ P_6 \end{array} \begin{pmatrix} H & W \\ 0.1 & 0.39 \\ 0.1 & 0.51 \\ 0.1 & 0.65 \\ 0.1 & 0.45 \\ 0.1 & 0.76 \\ 0.1 & 0.86 \end{pmatrix}$$

H = Heights and W = Weights in after yoga

Step: 2

Input the fuzzy Matrix

$$\tilde{S} = \begin{array}{c} \\ H \\ BMI \end{array} \begin{pmatrix} P_1 & P_2 & P_3 & P_4 & P_5 & P_6 \\ 0.1 & 0.1 & 0.1 & 0.1 & 0.1 & 0.1 \\ 0.21 & 0.24 & 0.26 & 0.22 & 0.26 & 0.27 \end{pmatrix}$$

H=Height and BMI=Body Mass Index in after yoga.

Step: 3

Compute the corresponding Matrices $\check{R}$ and $\tilde{S}$

$$\tilde{T} = \mu_{\check{R}} \circ_{AV} \mu_{\check{S}}$$
$$= \frac{1}{2}\{max(\mu_{\check{R}} \circ_{av} \mu_{\check{S}})\}$$

$\tilde{T} =$

$$\frac{1}{2}\begin{array}{c} P_1 \\ P_2 \\ P_3 \\ P_4 \\ P_5 \\ P_6 \end{array} \begin{pmatrix} \max(0.2,0.6) & \max(0.2,0.6) & \max(0.2,0.6) & \max(0.2,0.6) & \max(0.2,0.6) & \max(0.2,0.6) \\ \max(0.2,0.7) & \max(0.2,0.7) & \max(0.2,0.7) & \max(0.2,0.7) & \max(0.2,0.7) & \max(0.2,0.7) \\ \max(0.2,0.8) & \max(0.2,0.8) & \max(0.2,0.9) & \max(0.2,0.8) & \max(0.2,0.9) & \max(0.2,0.9) \\ \max(0.2,0.6) & \max(0.2,0.6) & \max(0.2,0.7) & \max(0.2,0.6) & \max(0.2,0.7) & \max(0.2,0.7) \\ \max(0.2,0.9) & \max(0.2,1.0) & \max(0.2,1.0) & \max(0.2,0.9) & \max(0.2,1.0) & \max(0.2,1.0) \\ \max(0.2,1.0) & \max(0.2,1.1) & \max(0.2,1.1) & \max(0.2,1.0) & \max(0.2,1.1) & \max(0.2,1,1) \end{pmatrix}$$

$$\tilde{T} = \frac{1}{2}\begin{array}{c} P_1 \\ P_2 \\ P_3 \\ P_4 \\ P_5 \\ P_6 \end{array} \begin{pmatrix} 0.6 & 0.6 & 0.6 & 0.6 & 0.6 & 0.6 \\ 0.7 & 0.7 & 0.7 & 0.7 & 0.7 & 0.7 \\ 0.8 & 0.8 & 0.9 & 0.8 & 0.9 & 0.9 \\ 0.6 & 0.6 & 0.7 & 0.6 & 0.7 & 0.7 \\ 0.9 & 1.0 & 1.0 & 0.9 & 1.0 & 1.0 \\ 1.0 & 1.1 & 1.1 & 1.0 & 1.1 & 1,1 \end{pmatrix}$$

Step: 4

$$\tilde{T} = \mu_{\check{R}} \circ \mu_{\check{S}} = \begin{array}{c} P_1 \\ P_2 \\ P_3 \\ P_4 \\ P_5 \\ P_6 \end{array} \begin{pmatrix} 0.3 & 0.3 & 0.3 & 0.3 & 0.3 & 0.3 \\ 0.3 & 0.3 & 0.3 & 0.3 & 0.3 & 0.3 \\ 0.4 & 0.4 & 0.4 & 0.4 & 0.4 & 0.4 \\ 0.3 & 0.3 & 0.3 & 0.3 & 0.3 & 0.3 \\ 0.4 & 0.5 & 0.5 & 0.4 & 0.5 & 0.5 \\ 0.5 & \mathbf{0.6} & \mathbf{0.6} & 0.5 & \mathbf{0.6} & \mathbf{0.6} \end{pmatrix}$$

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It is clear from the above matrix the patient P_6 is suffering from overweight. This is obese **Class III (Extremely high weight)**

This study indicates to apply yoga for a long time with patience and regularly so that obesity can receive more advantage at various level of personality.

CONCLUSION

CONCLUSION

Application of fuzzy set theory in recognizing Effective Teacher quality matters a great deal in terms of student learning. Therefore, teacher quality measurement is important. And Obesity is big social problem which leads to many psychosomatic disorders or disease. It is noticed that obesity have many other problems and complications at emotional and psychological levels. At the conclusion, it can be asserted that intervened yogic program gives a very good result in weight reduction and positive promotion of health.

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