

UTILIZE FACTOR ANALYSIS THE METHOD OF DATA REDUCTION WITH THE USE OF SPSS IN ONLINE WEB EDUCATION SYSTEM

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Abstract

The web training framework opens those new period of the remoteness education, especially clinched alongside India, USA, Srilanka and other countries. A few on the online web education need aid began on huge numbers Europe, theoretical guidelines had further distinction than hard work, and hypothetical understanding. Conversely, there may be no involved realities about pupil's execution to utilize those web education innards. In this exploration paper, we assess the quality information starting with the Different school of different course, starting with different colleges of India. Every last bit information were gathered from those true courses beginning from the first, third also fifth semester of quite a while 2K12-2K13, 2K13-2K14, 2K14-2K15. The worth information would arranged over various dimensions, which could demonstrate the pupils' conduct. Those contemplate also produces different effects. This majority of the data is verwoerd convenient to manipulative the web education span. .

Keywords: Correlation Matrix, Total Variance, Component Plot in Rotated Space

1. INTRODUCTION

Element investigation will be a system for information diminishment. It can this by looking underlying imperceptible variables that would reflected in the watched variables. There need aid numerous distinctive routines that camwood be used to behavior an element dissection (such similarly as vital hub factor, greatest likelihood, summed up slightest squares, unweight any rate squares), there need aid also a significant number distinctive sorts for rotations that camwood be carried following those introductory extraction for factors, including orthogonal rotations, for example, such that varimax and equimax, which force those confinement that those elements can't make correlated, and angled rotations, for example, such that promax, which permit those factors with be associated for each other. You likewise necessity to figure out those number for elements that you need to extricate. Provided for those amount of component investigative systems and options, it may be not astonishing that separate examiners might compass verwoerd distinctive outcomes dissecting those same information set. However, the greater part investigators need aid searching for basic structure. Basic structure may be example of outcomes such and every variable loads exceedingly onto unrivaled one. Element investigation may be a procedure that obliges an expansive test size. Element investigation

may be in view of those association framework of the variables involved, and correlations typically necessity an extensive example size in the recent past they settle [2].

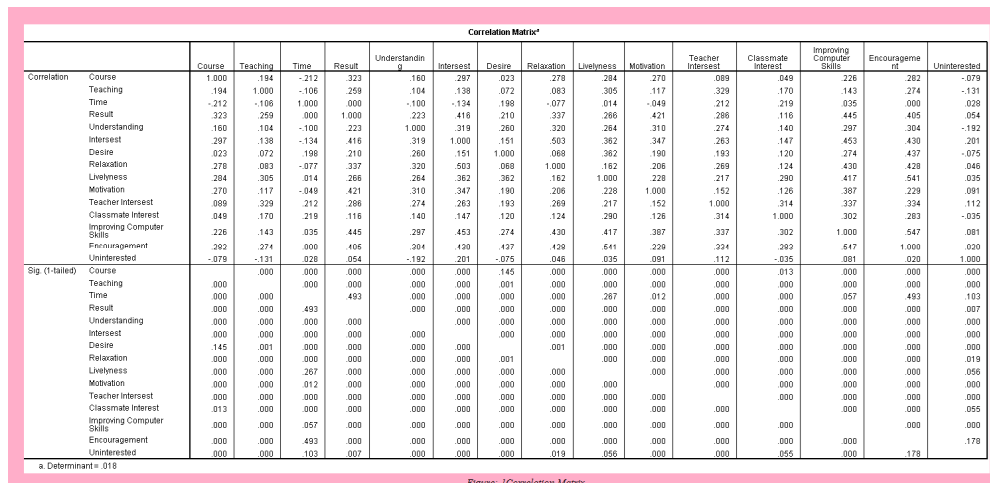
Information were gathered through an unacknowledged review instrument flying administered with 2200 learners about different courses starting with different institutes or schools. Respondents to this consider comprised from claiming 2080 (1143 guys and 937 females). The viable example extent might have been along these lines 2080 with a reaction rate from claiming 94. 55 percent. Table 3 indicates the turned part grid with the loadings that need aid concentrated also recognized pertinent of the constructs. Here we need aid intrigued with explore those motivations the reason web education framework may be really lesquerella utilization by the learner or individuals done India instead of the opposite nat.

| | | Frequency | Missing | Frequency+Missing | Percent | Valid Percent |
|----------------|--------|-----------|---------|-------------------|---------|---------------|
| 1 | Male | 1143 | 67 | 1210 | 51.95 | 55.00 |
| 2 | Female | 937 | 53 | 990 | 42.59 | 45.00 |
| Missing system | | 120 | | | 5.45 | |
| Total :- | | 2200 | 120 | 2200 | 100.00 | 100.00 |

Table 1: Descriptive statistics based on Gender.

A part of the variables separated similarly ceaselessly convincing fuse. Course, teaching, time, Result, Understanding, Interest, Desire, Relaxation, Liveliness, Motivation, instructor's testament Interest, cohort Interest, moving forward machine Skills, consolation and uninterested. Beginning for this, here it may be illustrated furthermore questionnaire will a pupils/peoples' viewpoint When a five side of the perspective scale, the spot 1 = unequivocally contrast that's only the tip of the iceberg 5 = unequivocally a graphic. The impacts beginning for the individual's questionnaire would show on the table those accompanying principle the individuals 2080 respondents used for 2200 in this research paper [1][4].

2. Correlation Matrix



Below figure demonstrates an abridged version of the R-matrix. The main half for this table holds the man relationship coefficient between the sum pairs about quotations the place likewise the bottom half holds the person tailed hugeness about these coefficients. We could utilization this association framework on weigh the example from claiming relationship. To begin with examine those noteworthiness values and search for any variable to which those larger part about qualities are more excellent over 0. 05. After that examine the connection coefficients themselves and search for excellent over 0. 9.

| | | Frequency | Missing | Frequency +Missing | Percent | Valid Percent |
|-----------------------|---------|-----------|---------|--------------------|---------|---------------|
| 1 | BE-I | 78 | 2 | 80 | 3.55 | 3.64 |
| 2 | BE-III | 75 | 5 | 80 | 3.41 | 3.64 |
| 3 | BE-V | 184 | 1 | 185 | 8.36 | 8.41 |
| 4 | Bsc-I | 82 | 18 | 100 | 3.73 | 4.55 |
| 5 | Msc-I | 88 | 12 | 100 | 4.00 | 4.55 |
| 6 | BA-I | 166 | 0 | 166 | 7.55 | 7.55 |
| 7 | BA-III | 120 | 0 | 120 | 5.45 | 5.45 |
| 8 | BCOM-I | 190 | 0 | 190 | 8.64 | 8.64 |
| 9 | MCOM-I | 86 | 14 | 100 | 3.91 | 4.55 |
| 10 | EC-I | 45 | 20 | 65 | 2.05 | 2.95 |
| 11 | BED-I | 80 | 0 | 80 | 3.64 | 3.64 |
| 12 | BED-III | 85 | 15 | 100 | 3.06 | 4.55 |
| 13 | MCA-I | 35 | 15 | 50 | 1.59 | 2.27 |
| 14 | BCA-I | 70 | 0 | 70 | 3.18 | 3.18 |
| 15 | BCA-III | 130 | 0 | 130 | 5.91 | 5.91 |
| 16 | BCA-V | 70 | 0 | 70 | 3.18 | 3.18 |
| 17 | DIP-I | 70 | 0 | 70 | 3.18 | 3.18 |
| 18 | ITI | 90 | 0 | 90 | 4.09 | 4.09 |
| 19 | GNU-I | 46 | 0 | 46 | 2.09 | 2.09 |
| 20 | GNU-III | 208 | 0 | 208 | 9.45 | 9.45 |
| 21 | GNU-V | 82 | 18 | 100 | 3.73 | 4.55 |
| Total | | 2080 | 120 | 2200 | 94.55 | 100 |
| Missing system | | 120 | | | 5.45 | |
| Total :- | | 2200 | 120 | 2200 | 100.00 | 100.00 |

Table 2: Descriptive statistics based on Education

3. Total Variance

| Component | Total Variance Explained | | | | | | | | |
|-----------|--------------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4.344 | 28.962 | 28.962 | 4.344 | 28.962 | 28.962 | 3.440 | 22.931 | 22.931 |
| 2 | 1.584 | 10.562 | 39.523 | 1.584 | 10.562 | 39.523 | 1.995 | 13.297 | 36.228 |
| 3 | 1.307 | 8.712 | 48.235 | 1.307 | 8.712 | 48.235 | 1.455 | 9.703 | 45.931 |
| 4 | 1.101 | 7.341 | 55.576 | 1.101 | 7.341 | 55.576 | 1.447 | 9.645 | 55.576 |
| 5 | .995 | 6.635 | 62.211 | | | | | | |
| 6 | .906 | 6.042 | 68.253 | | | | | | |
| 7 | .825 | 5.503 | 73.756 | | | | | | |
| 8 | .782 | 5.213 | 78.969 | | | | | | |
| 9 | .633 | 4.219 | 83.188 | | | | | | |
| 10 | .515 | 3.432 | 86.620 | | | | | | |
| 11 | .479 | 3.197 | 89.817 | | | | | | |
| 12 | .466 | 3.109 | 92.925 | | | | | | |
| 13 | .410 | 2.732 | 95.657 | | | | | | |
| 14 | .331 | 2.210 | 97.867 | | | | | | |
| 15 | .320 | 2.133 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

Figure 2 Total Variance

In the above figure displays entirely the factors extractable as of the study beside with their Eigen values, the percent of variance attributable towards every factor, and the cumulative variance of the factor and the earlier factors. Bill that the 1st factor accounts for 28.962% of the variance, the 2nd 10.562%, the 3rd 8.712%, the 4th 7.341% and the 5th 6.635[3]. All the remaining factors are not significant.

4. Component Plot in Rotated Space

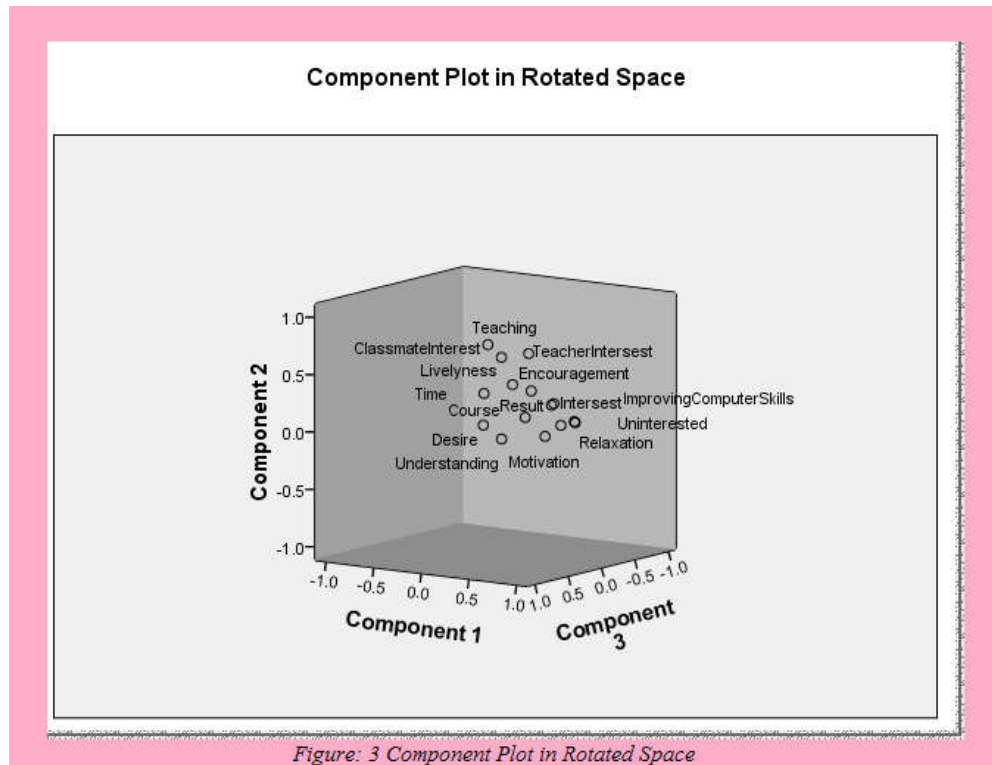


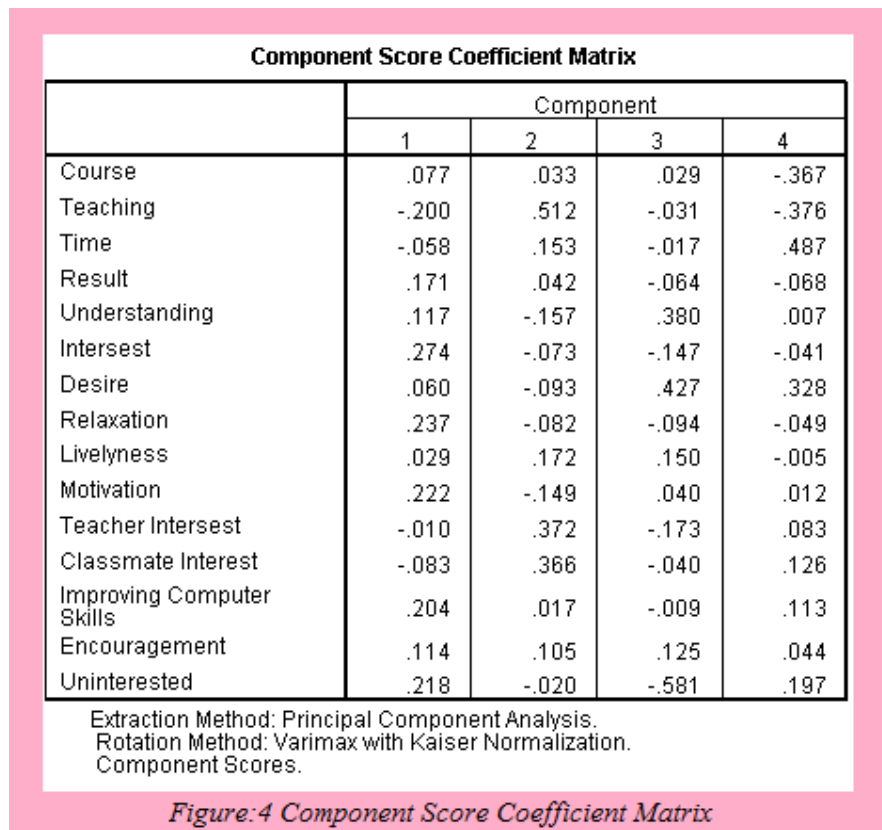
Figure 3 Component Plot in Rotated Space

A plot over indicates the things (variables) in the turned element space. Same time this image might not a chance to be especially helpful, the point when you get this chart in the SPSS output, you

could interactively turn it. This might support you will perceive how those things (variables) need aid sorted out in the regular element space [2].

5. Component Score Coefficient Matrix

In the Component Score Coefficient Matrix is the usual of weights used to compute the factor scores. To each instance and every component, those part score is registered eventually perusing multiplying the case's institutionalized variable qualities by perusing the component's score coefficients. The coming about three part score variables are illustrative of, could a chance to be utilized within put the ten first variables with a very less percentage reduction for majority of the data [5].



References

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