

MEDIATION BY USING METHODS OF DATA ANALYSIS

Purpose

The purpose of this analysis (hypothetical data) is to highlight the usefulness of grouping the 25 mediation proposals contained in the DAM software into those that compose the negative, neutral and positive responses to the proposed mediation process questions.

The result of this grouping facilitates the mediator to place the individual assessment of the moment in the overall evaluation which will determine the margins of finding a desired settlement.

Statistical method of Semiometry

Semiometry⁽⁵⁾ is a statistical method of analysis that attempts to decode the intangible content of proposition words used by individuals or groups of individuals.

It is a qualitative methodology that aims to measure the desires and needs of individuals by analyzing the system of implicit values underlying the words they use.

Semiometry as a mediation tool can be a compass for building a successful negotiation, taking into account the emerging emotion of different layers of people in society which use the same social dictionary.

Often, media planning is based on social and demographic data. So, when they aim for example in preferences between the ages of 19 and 35, they mainly fail because people do not buy a product because they have that age but because their life orientation their behavior which depends on the background for what is personally important to them.

The semiometric questionnaire

The semiometric questionnaire is not intended to obtain opinions from questions that are presented in the form of proposals but to give values in words depending on the pleasant or unpleasant feeling of their invocation in order to emerged the basic structure of the society as a whole.

Why is Semiometry used in a Mediation Data Analysis?

As you know, the impressions that apply to two different people, for example, between "Bad Sentiment", "Moderate Sentiment" and "Good Sentiment," are most likely to be completely different. In particular, the feeling of two adversaries for the same question can not in any way be the same as regards the distinction between "Bad", "Moderate" and "Good" emotional loading of each question, because it is formed by different factors for each individual. Such a factor is of course the different degree of effect of the question, how it perceives the law of its case.

Consequently, the subjectivity of scoring a question from an individual is inevitable, so the **proximity - similarity** of two people who answer the same question with the same value is desired and not **a priori** given ⁽⁴⁾.

This question is asked to investigate by the mediator, using the DAM software with the analyzes it offers.

The form of the questionnaire is as follows: Each sentence corresponds to a word that represents the conceptual content of the proposal. Each word corresponds to a scale of seven graduations rated from -3 to +3, where the sign (-) refers to an unpleasant sensation caused by the word, while the sign (+) refers to a delightful feeling.

Then for data processing, this scale. is replaced by an equivalent scale scaled from 1 to 7, where -3 of the original corresponds apparently to the value 1 of the new scale, and +3 to 7. Matching PROPOSITION-WRITER-DEGREE is necessary, because it is not possible for classical mathematical functions to process logical propositions as

Each word used corresponds to a specific proposal the mediator knows EXCLUSIVELY. After receiving the answers of both respondents, he analyzes the content of the questionnaire created.

Following the analysis of the proposals and the results produced, the mediator composes the psychography of the two adversaries, which will be a compass on how to handle the mediation process at the planned meeting of the two parties in order to reach a convergence of views, in advance, the strengths and weaknesses of the case being handled.

Note: In any other mediation case, the mediator can use his own questions (in a number exactly 25), with the corresponding words that emerge from each proposal's sentiment so that 3-D software is useful for every mediation case.

We group the keywords into four (4) categories, which we name during the evaluation process. Each category includes a different number of words, in our example: A class includes 8 words, B 5, C 7 and D 5 words.

In our example, the four categories were named as follows:

A = Relationship with the other side

B = Mediation procedure

C = Judicial resolution

D = Emotional charge

Indicatively, for a case of financial dispute, the mediator may use the following sentences and the corresponding keywords for each category of the four categories.

The matching of categories- proposition -words – values is presented in the table below

Table 1: The format of the semiometric questionnaire

| | PROSTATEURS | WORDS | VALUES | | | | | | |
|----|--|---------------|--------|----|----|---|---|---|---|
| A1 | What do you think about the cooperation so far with the other side | Optimism | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A2 | To what degree of difficulty do you face as undesirable development of your dispute with the other side | Defeatism | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A3 | How much do you think the stress to resolve the dispute will affect finding a solution with the other side | Anxiety | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A4 | How important a problem is your discontinued cooperation with the other side | Problem | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A5 | To what extent do the indications you have on the other hand come to settle the dispute in a compromise | Amalgamation | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A6 | To what extent do you think the other side might be right? | Deem | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A7 | Do not forget that the parties do not come to the Mediation as equal parts. How much do you think you are in power over the other side | Mediation | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| A8 | To what extent is there a communication channel with the other side | Communication | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| B1 | What is the mediation process | Procedure | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| B2 | To what extent do you think this difference can be resolved out of court | Reasons | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| B3 | You intend to propose a compromise to the other side | Compromise | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| B4 | To what extent do you accept that the mediation process is about, resulting in less stress than a legal dispute | Amity | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| B5 | To what extent do you measure the likelihood of success, with the help of the mediator, the difference with your opponent | Success | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C1 | How do you deal with the psychological tension of litigation | Relax | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C2 | If you end up solving your litigation in court, you think you will be justified | Justification | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C3 | How do you deal with the financial cost of a long-term court proceedings? | Cost | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C4 | To what extent do you have confidence in the court's judgment | Confidence | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C5 | It is known that people tend to be lenient. You rate yourself more than 1 (= Not too) 7 (= Very) | lenient | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C6 | How do you handle the litigation with the other party to a trial with an arbitrator | Records | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| C7 | From your well-known cases that have been solved in court, to what extent do you believe they have been fully justified? | Adm | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| D1 | How important you consider this difference to the other side | Significance | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| D2 | How do you deal with the impact of a long-term process on your family and personal relationships | Relationship | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| D3 | To a greater extent, there is an emotional factor behind your difference with the other side | Emotion | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| D4 | How do you feel that you give yourself the opportunity to talk face to face with the other side | Opportunity | 1 | -2 | -3 | 0 | 1 | 2 | 3 |
| D5 | To what extent is this dispute due to a reasonable disagreement on the other side? | From | 1 | -2 | -3 | 0 | 1 | 2 | 3 |

Presentation of the data

In this example, 580 cases will be used, 290 of which will be part A and 290 part B.

The table of data to be used for the analyzes with the values attributed to the representative words of the 25 questions is presented in Table 2.

Table 2: Part of the original data table

| IND | W1 | W2 | W3 | W4 | W5 | W6 | W7 | W8 | W9 | W10 | W11 | W12 | W13 | W14 | W15 | W16 | W17 | W18 | W19 | W20 | W21 | W22 | W23 | W24 | W25 |
|-----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| I1 | 2 | 0 | 1 | 2 | 1 | -1 | 0 | 1 | 0 | 1 | 2 | 1 | 1 | 0 | -2 | 0 | 1 | -1 | 1 | 0 | 1 | -2 | 0 | 2 | -1 |
| I2 | 0 | 0 | -1 | 1 | 2 | 2 | -2 | 1 | -1 | 1 | 1 | 0 | 2 | 0 | -1 | -1 | 1 | 0 | 2 | 0 | 0 | -1 | 2 | -2 | 0 |
| I3 | 0 | 0 | -1 | 0 | -1 | -2 | -1 | 2 | -1 | 0 | -1 | 0 | -1 | 1 | -1 | -2 | 2 | 0 | 0 | -1 | 2 | 1 | 2 | -1 | 0 |
| I4 | 3 | -1 | -1 | -1 | -1 | -2 | -1 | -1 | -2 | 2 | 1 | -2 | -1 | -1 | -1 | -1 | 0 | -2 | 2 | -2 | -1 | -1 | 3 | -2 | -2 |
| I5 | 0 | -1 | 1 | 0 | -1 | -1 | 0 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | -1 | -1 | 1 | -1 | 2 | 0 | 0 | 0 | 1 | 1 | 0 |
| I6 | 1 | 0 | -2 | 1 | -1 | 1 | -1 | 2 | 0 | 0 | -1 | 0 | -1 | 1 | -1 | -2 | -1 | -1 | 2 | 1 | 2 | -1 | 0 | -2 | 1 |
| I7 | 2 | -1 | 1 | 1 | 2 | 2 | -1 | 0 | 1 | 2 | 2 | -1 | 3 | 1 | -1 | -1 | -2 | -2 | 0 | -1 | 0 | -1 | 2 | -2 | -1 |
| I8 | 3 | -1 | -2 | 2 | -1 | 2 | -1 | 2 | -1 | 0 | -1 | 3 | -1 | 0 | -1 | -2 | 1 | -2 | -1 | 0 | 1 | 0 | 3 | -2 | -2 |
| I9 | 1 | -1 | 0 | 2 | -1 | 1 | -1 | 2 | -1 | 2 | -1 | -1 | -1 | 1 | -2 | 0 | 0 | 0 | 0 | 0 | -1 | -2 | 2 | -1 | -1 |
| I10 | 1 | 0 | -1 | 0 | 0 | 3 | 0 | -1 | -2 | 1 | 1 | 3 | -1 | 0 | 0 | -1 | 0 | -1 | 2 | -2 | -1 | 0 | 3 | -2 | -1 |

The data table to be used for the post-transformation analyzes to be subjected to the initial values attributed to the representative words of the 25 questions is shown in Table 2a.

Table 2a: Part of the transformed data table

| IND | W1 | W2 | W3 | W4 | W5 | W6 | W7 | W8 | W9 | W10 | W11 | W12 | W13 | W14 | W15 | W16 | W17 | W18 | W19 | W20 | W21 | W22 | W23 | W24 | W25 |
|-----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| I1 | 6 | 4 | 5 | 6 | 5 | 3 | 4 | 5 | 4 | 5 | 6 | 5 | 5 | 4 | 2 | 4 | 5 | 3 | 5 | 4 | 5 | 2 | 4 | 6 | 3 |
| I2 | 4 | 4 | 3 | 5 | 6 | 6 | 2 | 5 | 3 | 5 | 5 | 4 | 6 | 4 | 3 | 3 | 5 | 4 | 6 | 4 | 4 | 3 | 6 | 2 | 4 |
| I3 | 4 | 4 | 3 | 4 | 3 | 2 | 1 | 6 | 3 | 4 | 3 | 4 | 3 | 5 | 1 | 2 | 6 | 4 | 4 | 1 | 6 | 5 | 6 | 3 | 4 |
| I4 | 7 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 6 | 5 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 6 | 2 | 3 | 3 | 7 | 2 | 2 |
| I5 | 4 | 3 | 5 | 4 | 3 | 1 | 4 | 5 | 6 | 6 | 5 | 7 | 5 | 5 | 1 | 3 | 5 | 1 | 6 | 4 | 4 | 4 | 5 | 5 | 4 |
| I6 | 5 | 4 | 2 | 5 | 3 | 5 | 3 | 6 | 4 | 4 | 3 | 4 | 3 | 5 | 3 | 2 | 1 | 3 | 6 | 5 | 6 | 3 | 4 | 2 | 5 |
| I7 | 6 | 3 | 5 | 5 | 6 | 6 | 3 | 4 | 5 | 6 | 6 | 3 | 7 | 5 | 1 | 3 | 2 | 2 | 4 | 3 | 4 | 3 | 6 | 2 | 3 |
| I8 | 7 | 3 | 2 | 6 | 3 | 6 | 1 | 6 | 3 | 4 | 3 | 7 | 3 | 4 | 3 | 2 | 5 | 2 | 1 | 4 | 5 | 4 | 7 | 2 | 2 |
| I9 | 5 | 3 | 4 | 6 | 3 | 5 | 3 | 6 | 3 | 6 | 3 | 3 | 3 | 5 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 6 | 1 | 1 |
| I10 | 5 | 4 | 3 | 4 | 4 | 7 | 4 | 3 | 2 | 5 | 5 | 7 | 3 | 4 | 4 | 3 | 4 | 1 | 6 | 2 | 3 | 4 | 7 | 2 | 1 |
| I11 | 4 | 3 | 4 | 6 | 3 | 5 | 2 | 3 | 2 | 5 | 3 | 1 | 7 | 3 | 4 | 2 | 5 | 2 | 2 | 2 | 5 | 4 | 2 | 2 | 4 |

Table 3: Table of coincidences based on the data in Table 2a

| ind | --1-- | --2-- | --3-- | --4-- | --5-- | --6-- | --7-- |
|-----|-------|-------|-------|-------|-------|-------|-------|
| W1 | 3 | 5 | 12 | 169 | 127 | 174 | 90 |
| W2 | 10 | 10 | 132 | 220 | 130 | 56 | 22 |
| W3 | 8 | 12 | 167 | 230 | 134 | 23 | 6 |
| W4 | 9 | 11 | 160 | 154 | 146 | 98 | 2 |
| W5 | 3 | 7 | 107 | 118 | 160 | 119 | 66 |
| W6 | 6 | 9 | 6 | 0 | 215 | 131 | 213 |
| W7 | 17 | 116 | 95 | 226 | 126 | 0 | 0 |
| W8 | 3 | 8 | 126 | 161 | 169 | 103 | 10 |
| W9 | 12 | 44 | 152 | 189 | 124 | 48 | 11 |
| W10 | 5 | 5 | 106 | 166 | 157 | 118 | 23 |
| W11 | 3 | 7 | 126 | 173 | 166 | 43 | 62 |
| W12 | 8 | 8 | 86 | 138 | 130 | 81 | 129 |
| W13 | 4 | 5 | 123 | 126 | 168 | 44 | 110 |
| W14 | 1 | 4 | 78 | 171 | 164 | 105 | 57 |
| W15 | 82 | 165 | 172 | 139 | 9 | 7 | 6 |
| W16 | 7 | 73 | 218 | 138 | 104 | 28 | 12 |
| W17 | 7 | 13 | 15 | 202 | 171 | 162 | 10 |
| W18 | 91 | 77 | 207 | 182 | 11 | 8 | 4 |
| W19 | 3 | 3 | 10 | 249 | 109 | 192 | 14 |
| W20 | 3 | 12 | 90 | 206 | 132 | 72 | 65 |
| W21 | 6 | 8 | 100 | 132 | 133 | 124 | 77 |
| W22 | 5 | 112 | 206 | 140 | 104 | 8 | 5 |
| W23 | 5 | 9 | 15 | 159 | 159 | 114 | 119 |
| W24 | 49 | 90 | 144 | 147 | 100 | 45 | 5 |
| W25 | 19 | 51 | 107 | 189 | 108 | 67 | 39 |

Note: The keyword OPINION (W1) of 580 people was rated by 6 out of 174 people

STATISTICAL PROCESSING OF DATA

Based on the data in Table 3, the data in Table 4 are derived

Table 4: Statistical parameters of the values in Table 3

| VALUES | --1-- | --2-- | --3-- | --4-- | --5-- | --6-- | --7-- | TOTAL |
|---------|-------|-------|-------|--------|--------|-------|-------|-------|
| SUM | 369 | 864 | 2760 | 4124 | 3256 | 1970 | 1157 | 14500 |
| AVERAGE | 14,76 | 34,56 | 110,4 | 164,96 | 130,24 | 78,8 | 46,28 | 580 |
| Percent | 2,54 | 5,96 | 19,03 | 28,44 | 22,46 | 13,59 | 7,98 | 100 |

Note: The value eg 369 is the sum of the frequencies of the score "1" for the total of 25 words. The value of 14.76 was derived from quotient 369/25. The interpretation of each average is as follows: Of the 580 respondents, 14.76 rated the total of the words with 1, 34.56 with 2, and so on while 46.28, ie 7.98%, used grade 7.

Wishing to find out possible differences between the answers of respondents from the Part A and those of Part B, Table 5, which presents the scores of 25 words, as derived from the answers of the A and B respondents (1A, ,7A and B1,...B7), is based on the original table 3

Table 5: Breakdown of responses between respondents from Part One and Part B

| Ind | 1A | 2A | 3A | 4A | 5A | 6A | 7A | 1B | 2B | 3B | 4B | 5B | 6B | 7B |
|-----|----|----|-----|-----|-----|----|-----|----|----|-----|-----|----|----|-----|
| W1 | 1 | 3 | 6 | 80 | 67 | 87 | 46 | 2 | 2 | 6 | 89 | 60 | 87 | 44 |
| W2 | 4 | 4 | 71 | 99 | 73 | 26 | 13 | 6 | 6 | 61 | 121 | 57 | 30 | 9 |
| W3 | 3 | 4 | 98 | 115 | 57 | 11 | 2 | 5 | 8 | 69 | 115 | 77 | 12 | 4 |
| W4 | 3 | 6 | 87 | 74 | 70 | 50 | 0 | 6 | 5 | 73 | 80 | 76 | 48 | 2 |
| W5 | 2 | 4 | 57 | 63 | 75 | 50 | 39 | 1 | 3 | 50 | 55 | 85 | 69 | 27 |
| W6 | 2 | 3 | 2 | 0 | 116 | 59 | 108 | 4 | 6 | 4 | 0 | 99 | 72 | 105 |
| W7 | 10 | 64 | 43 | 109 | 64 | 0 | 0 | 7 | 52 | 52 | 117 | 62 | 0 | 0 |
| W8 | 1 | 6 | 61 | 89 | 76 | 53 | 4 | 2 | 2 | 65 | 72 | 93 | 50 | 6 |
| W9 | 4 | 18 | 66 | 96 | 72 | 26 | 8 | 8 | 26 | 86 | 93 | 52 | 22 | 3 |
| W10 | 3 | 1 | 50 | 80 | 80 | 62 | 14 | 2 | 4 | 56 | 86 | 77 | 56 | 9 |
| W11 | 3 | 4 | 63 | 83 | 91 | 22 | 24 | 0 | 3 | 63 | 90 | 75 | 21 | 38 |
| W12 | 5 | 4 | 48 | 63 | 66 | 41 | 63 | 3 | 4 | 38 | 75 | 64 | 40 | 66 |
| W13 | 2 | 2 | 70 | 60 | 83 | 21 | 52 | 2 | 3 | 53 | 66 | 85 | 23 | 58 |
| W14 | 1 | 2 | 41 | 85 | 80 | 46 | 35 | 0 | 2 | 37 | 86 | 84 | 59 | 22 |
| W15 | 34 | 92 | 91 | 63 | 5 | 0 | 5 | 48 | 73 | 81 | 76 | 4 | 7 | 1 |
| W16 | 4 | 34 | 102 | 70 | 64 | 13 | 3 | 3 | 39 | 116 | 68 | 40 | 15 | 9 |
| W17 | 1 | 9 | 8 | 100 | 89 | 82 | 1 | 6 | 4 | 7 | 102 | 82 | 80 | 9 |
| W18 | 39 | 37 | 104 | 101 | 1 | 6 | 2 | 52 | 40 | 103 | 81 | 10 | 2 | 2 |
| W19 | 2 | 1 | 4 | 129 | 56 | 94 | 4 | 1 | 2 | 6 | 120 | 53 | 98 | 10 |
| W20 | 3 | 4 | 43 | 106 | 69 | 31 | 34 | 0 | 8 | 47 | 100 | 63 | 41 | 31 |
| W21 | 3 | 3 | 55 | 64 | 65 | 60 | 40 | 3 | 5 | 45 | 68 | 68 | 64 | 37 |
| W22 | 2 | 60 | 110 | 60 | 53 | 2 | 3 | 3 | 52 | 96 | 80 | 51 | 6 | 2 |
| W23 | 4 | 3 | 6 | 95 | 70 | 59 | 53 | 1 | 6 | 9 | 64 | 89 | 55 | 66 |
| W24 | 23 | 47 | 69 | 84 | 47 | 20 | 0 | 26 | 43 | 75 | 63 | 53 | 25 | 5 |
| W25 | 11 | 26 | 57 | 90 | 56 | 30 | 20 | 8 | 25 | 50 | 99 | 52 | 37 | 19 |

Based on the data in Table 5, the figures in Table 6 are shown

Table 6: Statistical parameters of the values in Table 4

| WORDS | W1 | W2 | W3 | W4 | W5 | W6 | W7 | W8 | W9 | W1 | W1 | W1 | W1 | W1 | W1 | W1 | W1 | W1 | W2 | W2 | W2 | W2 | W2 | W2 | |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| GR1 | 5,3 | 4,3 | 3,9 | 4,2 | 4,8 | 5,9 | 3,5 | 4,4 | 4,1 | 4,6 | 4,4 | 4,9 | 4,7 | 4,8 | 2,8 | 3,7 | 4,8 | 3 | 5 | 4,6 | 4,8 | 3,4 | 3,1 | 3,5 | 4,1 |
| GR2 | 5,2 | 4,2 | 4 | 4,3 | 4,8 | 5,8 | 3,6 | 4,5 | 3,8 | 4,5 | 4,6 | 5 | 4,8 | 4,8 | 2,8 | 3,6 | 4,8 | 2,9 | 4,9 | 4,6 | 4,8 | 3,5 | 3,3 | 3,6 | 4,2 |
| Average | 5,2 | 4,2 | 4 | 4,2 | 4,8 | 5,9 | 3,6 | 4,4 | 4 | 4,6 | 4,5 | 5 | 4,8 | 4,8 | 2,8 | 3,7 | 4,8 | 3 | 4,9 | 4,6 | 4,8 | 3,5 | 3,2 | 3,5 | 4,2 |
| Standar Deviation | 1,2 | 1,2 | 1 | 1,2 | 1,3 | 1,2 | 1,1 | 1,1 | 1,2 | 1,2 | 1,3 | 1,5 | 1,4 | 1,2 | 1,2 | 1,2 | 1,1 | 1,2 | 1 | 1,3 | 1,4 | 1,1 | 1,3 | 1,4 | 1,4 |

Where GR1 the participants in group A (Part A) and GR2 of group B (Part B).

Validity of responses

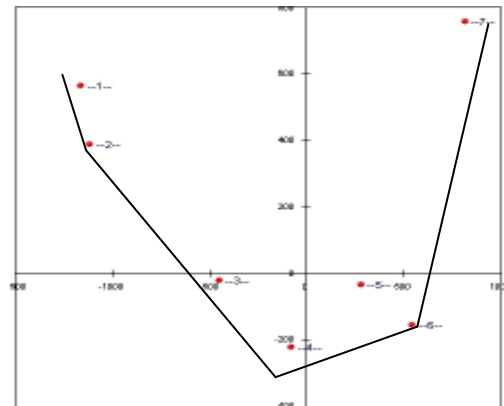
The processing of Table 3 with the Factorial Analysis of Correspondences⁽¹⁾ gives the following results:

Table 7: Histogram of characteristic eigenvalues

| Total inertia: 0,12470 | | | |
|------------------------|-----------|------------------|-------|
| Axis | Inertia | % Interpretation | Sum |
| 1 | 0,2583639 | 59,71 | 59,71 |
| 2 | 0,0808082 | 18,68 | 78,39 |
| 3 | 0,0479585 | 11,08 | 89,47 |

The first two axes, ie the factorial level 1x2, interpret 78.39% of the information, which is very satisfactory for extrapolations.

- ✓ The factorial plan 1x2



The factorial plan 1x2 shows that the seven scores of the scoring scale that determine the feelings that the specific keywords produce for the respondents, present the Guttman effect. That is to say the succession of values 1 to 7 on a curved line, certifies the rational behaviour of respondents as to how the keywords are scored.

Table 7 shows that the first three factorial axes interpret 89.47% of the total information derived from Table 3⁽²⁾. Consequently the study and conclusions from the study of Table 2 are revealing the intensity of the emotion they cause 25 people asked questions.

We then separate the data in Table 1 into two tables. Table 8 shows the rankings in the 25 questions of the respondents from the Part A, while Table 8a answers the respondents from the Part B.

| Table 8: Part A | | | | | | | | Table 8a: Part B | | | | | | | |
|-----------------|----|----|----|------|-----|-----|-----|------------------|----|----|----|------|-----|-----|-----|
| Ind | W1 | W2 | W3 | .... | W23 | W24 | W25 | ind | W1 | W2 | W3 | .... | W23 | W24 | W25 |
| I1 | 6 | 4 | 5 | .... | 4 | 6 | 3 | I291 | 5 | 3 | 3 | .... | 4 | 5 | 5 |
| I2 | 4 | 4 | 3 | .... | 6 | 2 | 4 | I292 | 6 | 4 | 5 | .... | 7 | 3 | 3 |
| I3 | 4 | 4 | 3 | .... | 6 | 3 | 4 | I293 | 5 | 6 | 5 | .... | 4 | 1 | 1 |
| I4 | 7 | 3 | 3 | .... | 7 | 2 | 2 | I294 | 4 | 4 | 3 | .... | 7 | 3 | 4 |
| I5 | 4 | 3 | 5 | .... | 5 | 5 | 4 | I295 | 6 | 4 | 5 | .... | 7 | 3 | 3 |
| . | . | . | . | | . | . | . | . | . | . | . | | . | . | . |
| . | . | . | . | | . | . | . | . | . | . | . | | . | . | . |
| . | . | . | . | | . | . | . | . | . | . | . | | . | . | . |
| I288 | 6 | 3 | 4 | .... | 5 | 6 | 6 | I578 | 5 | 4 | 4 | .... | 5 | 4 | 5 |
| I289 | 4 | 4 | 3 | .... | 6 | 2 | 4 | I579 | 2 | 5 | 5 | .... | 6 | 5 | 4 |
| I290 | 4 | 3 | 1 | .... | 4 | 4 | 4 | I580 | 6 | 5 | 5 | .... | 6 | 5 | 3 |

By separately analyzing Tables 8 and 8a by the KARAP⁽³⁾ method, the rankings of the respondents' profiles associated with the 25 words

Table 11: Distribution of the profiles of Part A and Part B closest to the profile of each of the 25 sentence words

| WORD | TOTAL | % | | Part A | | Part B | % |
|--------------|------------|------------|--|------------|------------|------------|------------|
| W1 | 38 | 6,55 | | 35 | 12,07 | 3 | 1,03 |
| W2 | 26 | 4,48 | | 11 | 3,79 | 15 | 5,17 |
| W3 | 39 | 6,72 | | 15 | 5,17 | 24 | 8,28 |
| W4 | 11 | 1,90 | | 2 | 0,69 | 9 | 3,10 |
| W5 | 20 | 3,45 | | 6 | 2,07 | 14 | 4,83 |
| W6 | 69 | 11,90 | | 37 | 12,76 | 32 | 11,03 |
| W7 | 0 | 0,00 | | 0 | 0,00 | 0 | 0,00 |
| W8 | 17 | 2,93 | | 6 | 2,07 | 11 | 3,79 |
| W9 | 11 | 1,90 | | 1 | 0,34 | 10 | 3,45 |
| W10 | 24 | 4,14 | | 9 | 3,10 | 15 | 5,17 |
| W11 | 16 | 2,76 | | 6 | 2,07 | 10 | 3,45 |
| W12 | 13 | 2,24 | | 2 | 0,69 | 11 | 3,79 |
| W13 | 19 | 3,28 | | 14 | 4,83 | 5 | 1,72 |
| W14 | 20 | 3,45 | | 14 | 4,83 | 6 | 2,07 |
| W15 | 6 | 1,03 | | 3 | 1,03 | 3 | 1,03 |
| W16 | 21 | 3,62 | | 13 | 4,48 | 8 | 2,76 |
| W17 | 48 | 8,28 | | 16 | 5,52 | 32 | 11,03 |
| W18 | 4 | 0,69 | | 2 | 0,69 | 2 | 0,69 |
| W19 | 63 | 10,86 | | 35 | 12,07 | 28 | 9,66 |
| W20 | 42 | 7,24 | | 36 | 12,41 | 6 | 2,07 |
| W21 | 20 | 3,45 | | 1 | 0,34 | 19 | 6,55 |
| W22 | 7 | 1,21 | | 3 | 1,03 | 4 | 1,38 |
| W23 | 42 | 7,24 | | 21 | 7,24 | 21 | 7,24 |
| W24 | 3 | 0,52 | | 2 | 0,69 | 1 | 0,34 |
| W25 | 1 | 0,17 | | 0 | 0,00 | 1 | 0,34 |
| TOTAL | 580 | 100 | | 290 | 100 | 290 | 100 |

Applying the VACOR⁽⁷⁾ sorting method to the data in Table 3 results in the grouping of the queries from which the 25-word sentence tree is derived. Then the classes with the specific characteristics of each will be identified, which will be the mapping of the participants in it. Then, using Table 11, the applicants and the respondents of each subgroup will be identified to provide a more general assessment that will determine the margins of finding the desired settlement based on the individual assessment of each new mediation.

Of course, the interpretation of groupings in this example can not be done with hypothetical data, just the process presented shows how subgroups are being created, what word suggestions and how many respondents participate in them.

Then grouped proposals will be the STANDARD EVALUATION MODULES, which will compile the individual assessment database for each future mediation.

At this point, it should be noted that the database needs to be renewed, increasing in number, until finally at least 2000 cases are reached, so that the deviations from the real image of a mediator can statistically have a 95% chance of being consistent with the results of the proposed procedure.

The tree of the classification⁽⁶⁾

The 25 word class K49 (diagram 1) is initially split into two classes, K48, and K46, while class K48 is split into two others by K6 and K47. These three classes are the initial breakdown of the psychology of 580 respondents.

These three classes will then be analyzed separately.

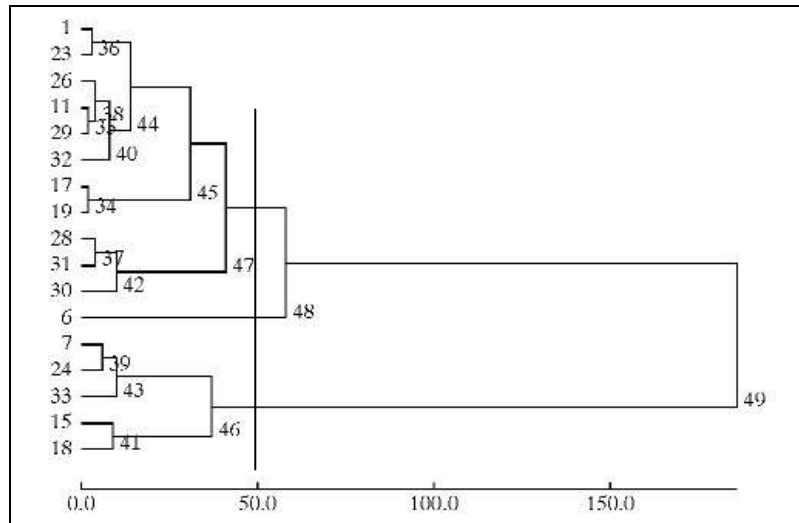


Diagram1: Decomposition of K49 into three classes: K47,K6, K46

Here is the split to five sub-groups created from the breakdown of K47 into three classes K42, K44 and K34 (considering the five classes of a possible solution to mediation), include the following sentences:

Table 12: Classification of 25 word-sentences in the 5 classes

| Κόμβος | 6 | 34 | 42 | 44 | 46 |
|--------------|----|-----|-----|-----|-----|
| A(I) | | 17 | 37 | 36 | 43 |
| B(I) | | 19 | 30 | 40 | 41 |
| Crowd | 1 | 2 | 7 | 9 | 6 |
| | W6 | W17 | W2 | W1 | W7 |
| | | W19 | W3 | W23 | W24 |
| | | | W9 | W5 | W16 |
| | | | W25 | W21 | W22 |
| | | | W4 | W11 | W15 |
| | | | W8 | W14 | W18 |
| | | | W10 | W20 | |
| | | | | W12 | |
| | | | | W13 | |

1. Class K6 consists of the Opinion (W6) and includes 69 respondents (37 from Part A and 32 from Part B respondents). The distribution of the value of this word by the 580 respondents is as follows:

| Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|-----------|-----|-----|-----|-----|------|------|------|-----|
| Frequency | 6 | 9 | 6 | 7 | 215 | 131 | 212 | 580 |
| Percent | 1.0 | 1.6 | 1.0 | 1.2 | 37.1 | 22.6 | 36.6 | 100 |

We observe that 96.3% of the values of this subgroup are made up of the high grades of 5,6,7 with a stronger value of 7. Thus the 69 respondents are characterized by this rating. It can therefore be argued that in the future if a respondent is ranked in this subgroup, the likelihood of mediation will be **HIGH**.

2. Class K34 consists of the two words (W17 and W19) and comprises 111 respondents (51 from Part A and 60 from Part B). The distribution of the values of the words is as follows:

| Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|-----------|-----|-----|-----|------|------|------|-----|------|
| Frequency | 10 | 16 | 25 | 451 | 280 | 354 | 24 | 1160 |
| Percent | 0.9 | 1.4 | 2.2 | 38.9 | 24.1 | 30.5 | 2.0 | 100 |

We observe that 93.5% of the values of this subgroup are made up of values 4,5,6 with a stronger value of 4. Thus the 111 respondents are characterized by this score. It can therefore be argued that in the future if a respondent is ranked in this subgroup, the likelihood of mediation being solved will be **GOOD**.

3. Class K44 consists of the 9 words (W1, W5, W11, W12, W13, W14, W20, W21, W14, W20, W21 and W23) and includes 230 respondents (135 from Part A and 95 from Part B) The distribution of the values of the words is as follows:

| Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|-----------|-----|-----|------|------|------|------|------|------|
| Frequency | 36 | 65 | 737 | 1392 | 1339 | 876 | 775 | 5220 |
| Percent | 0.7 | 1.2 | 14.1 | 26.7 | 25.7 | 16.8 | 14.8 | 100 |

We observe that 98.1% of the values of this subgroup consist of values 3,4,5,6,7 with a higher degree of 4. The 230 respondents are therefore characterized by this score. It can therefore be argued that in the future if a respondent is ranked in this subgroup, the likelihood of mediation will be **MEDIUM**. The differentiation of this class from K34 is due to the participation of values 3 and 7.

4. Class K42 consists of the 7 words (W2, W3, W4, W8, W9, W10 and W25) and includes 129 respondents (44 from Part A and 89 from Part B). The distribution of the values of the words is as follows:

| Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|-----------|-----|-----|------|------|------|------|-----|------|
| Frequency | 66 | 141 | 950 | 1309 | 968 | 513 | 113 | 4060 |
| Percent | 1.7 | 3.5 | 23.4 | 32.2 | 23.8 | 12.6 | 2.8 | 100 |

We observe that 92% of the values of this subgroup consist of grades 3,4,5,6 with a higher degree of 4. Thus the 129 respondents are characterized by this score. It can therefore be argued that in the future if a respondent is classified in this subgroup, the likelihood of mediation being solved will be **SMALL**. The differentiation of this class from class K44 is due to absence of value 7.

5. Finally, class K46 consists of the six words (W7, W15, W16, W18, W22, W24) and includes 41 respondents (23 from Part A and 18 from Part B). The distribution of the values of these words is as follows:

| Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|-----------|-----|------|------|------|------|-----|-----|------|
| Frequency | 251 | 633 | 1042 | 972 | 454 | 96 | 32 | 3480 |
| Percent | 7.3 | 18.2 | 29.9 | 27.9 | 13.0 | 2.8 | 0.9 | 100 |

We observe that 89% of the values of this subgroup are made up of values 2, 3, 4, 5 with intense value 3. Therefore, the 41 respondents are characterized by this score. It can therefore be argued that in the future if a respondent is classified in this subgroup, the likelihood of mediation being solved will be **LOW**. The differentiation of this class from class K42 is due to the participation of value 2 and the absence of value 6.

Identify 10 sections with the proposals they include for evaluation with the respective proposals of the parties

By expanding the breakdown of the nodes of the table 12 towards the base of the tree (diagram 1 basically the nodes K42={28,30,31}, K44={32,36,38}) we get the following structure which defines 10 modules of sentences.

So,

The average score of the 10 classes for all 580 respondents is shown in Table 13

Table 13: The average score of the words in the 10 classes for all respondents

| Class | 6 | 28 | 30 | 31 | 32 | 34 | 36 | 38 | 41 | 43 |
|---------|-------|-------|-------|-------|-------|-------|-------|------------|-------|-------|
| Crowd | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 5 | 2 | 4 |
| | W6 | W2 | W4 | W9 | W12 | W17 | W1 | W5 | W15 | W7 |
| | | W3 | W8 | W25 | W13 | W19 | W23 | W21 | W18 | W24 |
| | | | W10 | | | | | W11 | | W16 |
| | | | | | | | | W14 W20 | | W22 |
| AVERAGE | 5,842 | 4,087 | 4,408 | 4,053 | 4,849 | 4,830 | 5,207 | 4,694 | 2,873 | 3,556 |

The comparison is carried out with the statistical control procedure test of Friedman

Conclusions

1 The data in Table 11 determines the significance of the 25 words of each side, showing how each participant's proposal is addressed.

2. The initial breakdown of data into five classes identifies five different levels of dispute resolution of the two parties involved in mediation.

3. The further breakdown of the classes into 10 modules determines whether the scores of the grouped 25 words of the two parts in 10 units are consistent with the average values of the same 10 base units. The agreement indicates that the behavior of the respondents corresponds to the general perception of a group of people who have followed the negotiation path.

4. The use of data analysis methods with the various analyzes of 25 queries contributes:

i) To show emotions that obstruct the two parties

ii) Managing expectations by identifying the realism of the positions of the two parties

iii) Highlighting the real reasons for the dispute by identifying the points of disagreement between the two parties.

iv) The stability of the two parties' views

Also

v) It helps the Mediator to record the deal

vi) The results of the program are not practical as they form part of the principles and procedure agreed between the parties in advance and the Mediator.

vii) The answers to the 25 questions are anonymous by building a climate of confidentiality and confidentiality in the mediation process.

Lastly, the use of the information resulting from analyzes of the **Data Analysis for Mediation** software (www.diamesolabisi.gr) does not identify any acts or omissions that the mediator claims to be malicious by law.

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