**PSO VS PSO+ABC**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 7.0313 | 1 | 0.00801 |

**INDICATOR 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.5 | 1 | 0.4795 |

**INDICATOR 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.5 | 1 | 0.4795 |

**INDICATOR 3:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.5 | 1 | 0.4795 |

**INDICATOR 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 1.125 | 1 | 0.28884 |

**INDICATOR 5:**

**TLBO VS TLBO+ABC**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 8 | 1 | 0.00468 |

**INDICATOR 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 6.125 | 1 | 0.0133 |

**INDICATOR 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.5 | 1 | 0.4795 |

**INDICATOR 3:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 2 | 1 | 0.1573 |

**INDICATOR 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 1.125 | 1 | 0.28884 |

**INDICATOR 5:**

**MBO VS MBO+ABC**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 1.15313 | 1 | 0.21592 |

**INDICATOR 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.125 | 1 | 0.72367 |

**INDICATOR 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.5 | 1 | 0.4795 |

**INDICATOR 3:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.125 | 1 | 0.72367 |

**INDICATOR 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 3.125 | 1 | 0.0771 |

**INDICATOR 5:**

**AOA VS AOA+ABC**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 1.125 | 1 | 0.28884 |

**INDICATOR 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0 | 1 | 1 |

**INDICATOR 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.125 | 1 | 0.72367 |

**INDICATOR 3:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0.125 | 1 | 0.72367 |

**INDICATOR 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| n | χ2 | df | P |
| 32 | 0 | 1 | 1 |

**INDICATOR 5:**