**Factor Analysis**

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| **Notes** |  |  |
| Output Created |  | 05-SEP-2025 03:05:27 |
| Comments |  |  |
| Input | Data | C:\Users\DanhSakai\Desktop\SPSSFileDatav1.sav |
| Active Dataset | DataSet1 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 129 |
| Missing Value Handling | Definition of Missing | MISSING=EXCLUDE: User-defined missing values are treated as missing. |
| Cases Used | LISTWISE: Statistics are based on cases with no missing values for any variable used. |
| Syntax |  | FACTOR /VARIABLES HT1 HT2 HT3 TB1 TB2 TB3 PC1 PC2 PC3 KH1 KH2 KH3 NS1 NS2 NS3 LCV1 LCV2 LCV3 TCT1 TCT2 TCT3 HQVH1 HQVH2 HQVH3 /MISSING LISTWISE /ANALYSIS HT1 HT2 HT3 TB1 TB2 TB3 PC1 PC2 PC3 KH1 KH2 KH3 NS1 NS2 NS3 LCV1 LCV2 LCV3 TCT1 TCT2 TCT3 HQVH1 HQVH2 HQVH3 /PRINT INITIAL KMO EXTRACTION ROTATION /FORMAT SORT BLANK(0.4) /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA KAISER ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION. |
| Resources | Processor Time | 00:00:00.00 |
| Elapsed Time | 00:00:00.00 |
| Maximum Memory Required | 68848 (67.234K) bytes |

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| **KMO and Bartlett's Test** |  |  |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |  | .908 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1588.646 |
| df | 276 |
| Sig. | <.001 |

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| **Communalities** |  |  |
|  | Initial | Extraction |
| HT1 | 1.000 | .512 |
| HT2 | 1.000 | .601 |
| HT3 | 1.000 | .565 |
| TB1 | 1.000 | .624 |
| TB2 | 1.000 | .575 |
| TB3 | 1.000 | .614 |
| PC1 | 1.000 | .634 |
| PC2 | 1.000 | .603 |
| PC3 | 1.000 | .657 |
| KH1 | 1.000 | .460 |
| KH2 | 1.000 | .678 |
| KH3 | 1.000 | .651 |
| NS1 | 1.000 | .589 |
| NS2 | 1.000 | .644 |
| NS3 | 1.000 | .628 |
| LCV1 | 1.000 | .660 |
| LCV2 | 1.000 | .482 |
| LCV3 | 1.000 | .568 |
| TCT1 | 1.000 | .621 |
| TCT2 | 1.000 | .498 |
| TCT3 | 1.000 | .645 |
| HQVH1 | 1.000 | .539 |
| HQVH2 | 1.000 | .549 |
| HQVH3 | 1.000 | .568 |

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| Extraction Method: Principal Component Analysis. |  |  |

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| **Total Variance Explained** |  |  |  |  |  |  |
| Component | Initial Eigenvalues |  |  | Extraction Sums of Squared Loadings |  |  |
| Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 9.627 | 40.114 | 40.114 | 9.627 | 40.114 | 40.114 |
| 2 | 2.117 | 8.822 | 48.936 | 2.117 | 8.822 | 48.936 |
| 3 | 1.324 | 5.516 | 54.452 | 1.324 | 5.516 | 54.452 |
| 4 | 1.097 | 4.570 | 59.023 | 1.097 | 4.570 | 59.023 |
| 5 | .988 | 4.116 | 63.138 |  |  |  |
| 6 | .852 | 3.549 | 66.687 |  |  |  |
| 7 | .842 | 3.509 | 70.196 |  |  |  |
| 8 | .793 | 3.305 | 73.501 |  |  |  |
| 9 | .721 | 3.002 | 76.504 |  |  |  |
| 10 | .651 | 2.714 | 79.218 |  |  |  |
| 11 | .617 | 2.573 | 81.791 |  |  |  |
| 12 | .539 | 2.245 | 84.035 |  |  |  |
| 13 | .498 | 2.074 | 86.110 |  |  |  |
| 14 | .460 | 1.919 | 88.028 |  |  |  |
| 15 | .415 | 1.728 | 89.756 |  |  |  |
| 16 | .384 | 1.600 | 91.356 |  |  |  |
| 17 | .354 | 1.475 | 92.831 |  |  |  |
| 18 | .313 | 1.306 | 94.137 |  |  |  |
| 19 | .279 | 1.164 | 95.301 |  |  |  |
| 20 | .274 | 1.144 | 96.445 |  |  |  |
| 21 | .247 | 1.030 | 97.474 |  |  |  |
| 22 | .225 | .938 | 98.413 |  |  |  |
| 23 | .202 | .842 | 99.254 |  |  |  |
| 24 | .179 | .746 | 100.000 |  |  |  |

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| **Total Variance Explained** |  |  |  |
| Component | Rotation Sums of Squared Loadings |  |  |
| Total | % of Variance | Cumulative % |
| 1 | 4.122 | 17.175 | 17.175 |
| 2 | 4.063 | 16.927 | 34.103 |
| 3 | 3.654 | 15.224 | 49.326 |
| 4 | 2.327 | 9.696 | 59.023 |
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| Extraction Method: Principal Component Analysis. |  |  |  |

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| **Component Matrix**a |  |  |  |  |
|  | Component |  |  |  |
| 1 | 2 | 3 | 4 |
| NS2 | .794 |  |  |  |
| KH2 | .789 |  |  |  |
| KH3 | .787 |  |  |  |
| LCV1 | .773 |  |  |  |
| HQVH2 | .707 |  |  |  |
| NS1 | .697 |  |  |  |
| HQVH1 | .695 |  |  |  |
| PC3 | .692 |  |  |  |
| TCT3 | .684 |  |  |  |
| HT3 | .671 |  |  |  |
| TCT2 | .651 |  |  |  |
| LCV2 | .647 |  |  |  |
| HQVH3 | .638 |  |  |  |
| NS3 | .635 |  |  | -.449 |
| KH1 | .631 |  |  |  |
| LCV3 | .574 |  |  |  |
| PC2 | .561 | -.508 |  |  |
| TB2 | .559 |  | .460 |  |
| HT2 | .556 |  |  |  |
| PC1 | .539 | -.506 |  |  |
| TCT1 | .456 | .600 |  |  |
| TB3 | .417 | .511 | .403 |  |
| HT1 | .460 | -.484 |  |  |
| TB1 |  |  | .618 |  |

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| Extraction Method: Principal Component Analysis.a |  |  |  |  |
| a. 4 components extracted. |  |  |  |  |

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| **Rotated Component Matrix**a |  |  |  |  |
|  | Component |  |  |  |
| 1 | 2 | 3 | 4 |
| HQVH3 | .690 |  |  |  |
| TCT3 | .663 |  | .440 |  |
| KH2 | .634 |  |  |  |
| HT2 | .580 | .502 |  |  |
| TCT2 | .542 |  |  |  |
| HQVH2 | .541 |  | .437 |  |
| KH1 | .507 |  |  |  |
| LCV2 | .485 |  | .457 |  |
| PC1 |  | .770 |  |  |
| HT1 |  | .696 |  |  |
| PC2 |  | .658 |  |  |
| PC3 |  | .654 | .434 |  |
| NS1 |  | .632 |  |  |
| HT3 |  | .607 |  |  |
| NS3 |  |  | .727 |  |
| LCV3 |  |  | .688 |  |
| LCV1 | .415 |  | .596 |  |
| KH3 | .410 | .404 | .549 |  |
| HQVH1 |  |  | .470 |  |
| NS2 | .415 |  | .436 |  |
| TB3 |  |  |  | .693 |
| TB1 |  |  |  | .680 |
| TB2 |  |  |  | .602 |
| TCT1 | .496 |  |  | .502 |

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| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a |  |  |  |  |
| a. Rotation converged in 10 iterations. |  |  |  |  |

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| **Component Transformation Matrix** |  |  |  |  |
| Component | 1 | 2 | 3 | 4 |
| 1 | .589 | .517 | .534 | .316 |
| 2 | .180 | -.809 | .309 | .467 |
| 3 | -.389 | .267 | -.317 | .823 |
| 4 | .685 | -.081 | -.720 | .073 |

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| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. |  |  |  |  |