**Summary report of Mean, Median & Mode**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **sl\_no** | **ssc\_p** | **hsc\_p** | **degree\_p** | **etest\_p** | **mba\_p** | **salary** |
| Mean | 108 | 67.3034 | 66.33316 | 66.370186 | 72.100558 | 62.278186 | 288655.4054 |
| Median | 108 | 67 | 65 | 66 | 71 | 62 | 265000 |
| Mode | 1 | 62 | 63 | 65 | 60 | 56.7 | 300000 |

* The average percentages across all categories are relatively close, with the employability test having the highest mean (72.10%) and MBA percentages being the lowest (62.28%).
* Median values are also closely aligned with the mean, indicating a fairly symmetric distribution.
* The mode for salary suggests that 300,000 is the most common salary in the dataset.

**1. Mean (Average):**

* The mean gives us the average values for each category.
* **ssc\_p (67.30%)** and **hsc\_p (66.33%)** are close, indicating that students performed similarly at both secondary and higher secondary levels.
* **degree\_p (66.37%)** is very close to the SSC and HSC percentages, suggesting consistent academic performance throughout schooling and college.
* **etest\_p (72.10%)** is the highest mean, showing students generally scored higher in employability tests compared to academic results.
* **mba\_p (62.28%)** has the lowest mean, indicating a slight drop in performance at the MBA level compared to earlier stages.
* **salary (288,655.41)** represents the average salary for the group, which is somewhat consistent with the educational performance metrics.

**2. Median (Middle Value):**

* The median provides a value that represents the middle of the data.
* For **ssc\_p (67%)**, **hsc\_p (65%)**, and **degree\_p (66%)**, the median values closely match the mean, indicating a balanced distribution of scores.
* **etest\_p (71%)** is slightly lower than its mean, suggesting there may be a few higher scores skewing the average up.
* **mba\_p (62%)** is nearly identical to the mean, which implies the MBA scores are quite uniformly distributed.
* **salary (265,000)** is lower than the mean salary, suggesting that a few high salaries are pulling the average up, with more people earning below the mean.

**3. Mode (Most Frequent Value):**

* The mode identifies the most frequently occurring values.
* For **ssc\_p (62%)**, **hsc\_p (63%)**, and **degree\_p (65%)**, the mode is lower than the mean and median, indicating that more students scored in the lower range, though the overall distribution of scores is wide.
* **etest\_p (60%)** being lower than its mean and median highlights that a good portion of the students scored lower on employability tests, even though the average score is relatively high.
* **mba\_p (56.7%)** as the mode shows that quite a few students struggled at the MBA level, with this score appearing more frequently despite the higher average.
* **salary (300,000)** being the mode suggests this is the most commonly offered salary, though the median and mean indicate a range of salaries, including some lower and higher offers.

**Key Observations:**

* The **employability test (etest\_p)** scores show the highest overall performance, suggesting students are well-prepared for tests geared toward practical or job-related skills, even though many scored lower.
* **MBA performance** (mba\_p) is the weakest overall, both in terms of mean and mode, indicating this stage was more challenging for students.
* **Salary distribution** is skewed, with a few higher salaries driving up the mean. The most frequent salary of 300,000 suggests a common threshold, but many students are earning less than this.

**Potential Insights:**

* **Consistency in Academic Performance:** Students generally performed consistently across SSC, HSC, and their degree.
* **Practical Test Proficiency:** A higher mean for employability tests indicates that students may be more adept at practical assessments than traditional academic tests.
* **Salary Discrepancy:** The gap between the median and mean salary suggests salary distribution isn't uniform, with some students likely landing higher-paying jobs that elevate the overall average.