Unit 2 – Probability and Distributions

Type your Name Here

American InterContinental University

**Abstract**

This is a single paragraph, no indentation is required. The next page will be an abstract; “a brief, comprehensive summary of the contents of the article; it allows the readers to survey the contents of an article quickly” (Publication Manual, 2010). The length of this abstract should be 35-50 words (2-3 sentences). NOTE: the abstract must be on page 2 and the body of the paper will begin on page 3.

Memo

To:

From:

Date:

Subject:

Dear :

Provide a brief introduction (2-3 sentences) to the email you are writing to provide a preview of what will be covered.

**Overview of the data set**

Provide an overview for the current data set. What variables does it include? Which are qualitative, which are quantitative? What categories are used and why are they used?

**Use of statistics and probability in the real world**

Include a specific application or two of statistics in the real world. This is a great place for outside research.

**Distributions**

Write a brief introduction (1-2 sentences) about the information you can find in a distribution table. Why is this information useful to AIU?

Then complete the following distribution tables. *Please pay attention to whether you should present the results in terms of percentages or simple counts.*

**Gender**

|  |  |
| --- | --- |
| Gender | Percentage |
| Females |  |
| Males |  |

**Tenure by Gender**

*Please note that you do NOT have to convert these into percentages. You may leave them in a count format.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Under 2 years | 2-5 Years | Over 5 years |
| Male |  |  |  |
| Female |  |  |  |

**Department**

|  |  |
| --- | --- |
| Department | Percentage |
| Information Technology |  |
| Human Resources |  |
| Administration |  |

**Average Extrinsic Value by Gender**

|  |  |
| --- | --- |
| Gender | Mean Extrinsic Value |
| Male |  |
| Female |  |

**Probabilities**

Write a brief 1-2 sentence introduction about which probabilities you will calculate and why the information is useful for AIU.

Then complete the following table. *Please remember to always use the TOTAL number of respondents for your denominator when calculating each probability.*

|  |  |  |
| --- | --- | --- |
| Classification | Count | Probability |
| Age 16-21 |  |  |
| Job satisfaction less than or equal to 5.2 |  |  |
| Female in HR |  |  |
| Salaried employee with an intrinsic level greater than or equal to 5.0 |  |  |

**Conclusion**

Write a brief conclusion that sums up the importance of the information contained in this email. Sum it all up for the reader in a few sentences in the same way you would do in a professional environment!

Sincerely,

Your name

Your title

**References**

NOTE: The reference list starts on a new page after your conclusion.

For help with formatting citations and references using rules outlined in the APA Manual’s 6th Edition, please check out the AIU APA guide located under the Interactive Learning section on the left side of the course.

Examples:

American Psychological Association [APA]. (2010) *Publication manual of the American*

*Psychological association* (6th ed.). Washington, DC: Author.

Association of Legal Writing Directors (ALWD) (2005). *ALWD citation manual: A professional*

*system of citation* (3rd ed.). New York: Aspen Publishers.