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Introduction



- Digital skills and competencies have been adding value to professionals providing important knowledge. Modern professional roles and responsibilities are required to implement different digital skills and competencies(Cho, 2021).
- Research provides greater knowledge in digital skills and competencies using different tools such as the DIKW framework, CRAAP tests and others.
- These tools have been used to confirm own academic GRIT test results which are primarily collected data in opposite of UWTSD Grit results based on secondary data.

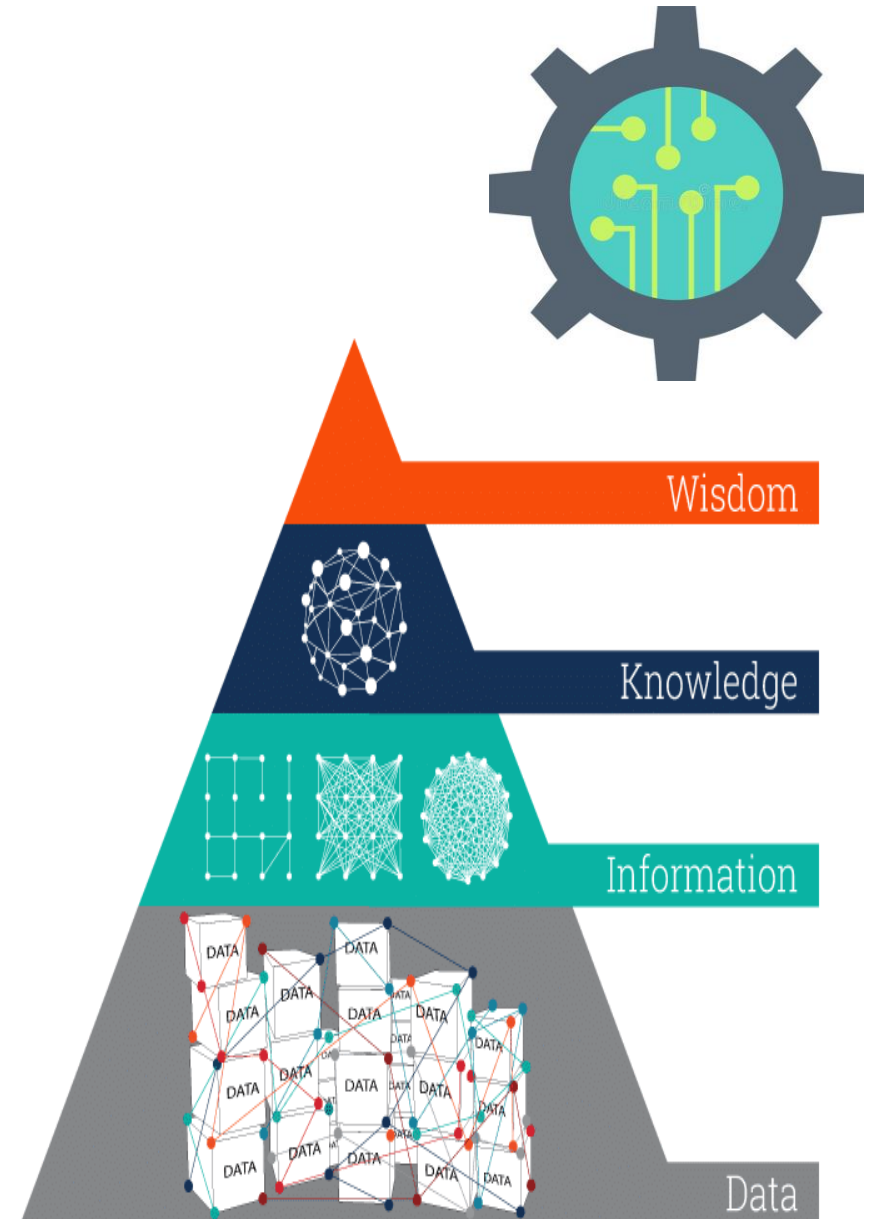
Academic Grit



- Academic grit represents personal and individual abilities essential to achieve long term objectives. Academic grit depends on different aspects including dedication, desire bravery and persistence. The tests of Academic Grit help to assess a person's level of commitment, enthusiasm and hard work (Van Meter, 2020).
- However, my academic grit is 4.2 out of 5 based on the Duckworth grit score. The method provides a five-point scale score where the highest point is 2 and the lowest point is 1. Holding a score of 4.2 represents that I am highly determined to fulfil my long-term objectives.

DIKW Framework

- DIKW pyramid is a framework that represents the relationship sequentially from data, information, knowledge and wisdom. The process follows the building blocks, where each block is interconnected and comes sequentially (Azcarate and et al., 2018).
- It represents that data leads to information, information develops knowledge and desired knowledge provides wisdom.
- It is used as a research method by many researchers helping to generate an outcome in the scientific approach.



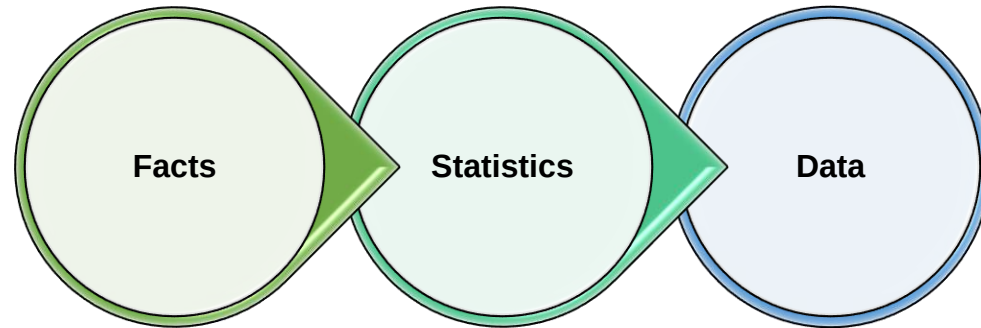
CRAAP Frameworks

- CRAAP Framework is a test used to check the accuracy of data or information used in the research based on Currency, Relevance, Authority, Accuracy and Purpose. It helps evaluate the contents of the research specifically the internet sources (Putra and Subiyakto, 2016).
- At last, the purpose focuses on the author's intention in the research or data. The framework can be used to evaluate the data of UWTSD GRIT Results.



Currency	Is the information current?
Relevance	Does the information answer your question?
Accuracy	Is the information supported by evidence?
Authority	Who is the author & what are their qualifications?
Purpose	Are the authors intentions clear?

Data



Primary Data

Quantitative

DIKW

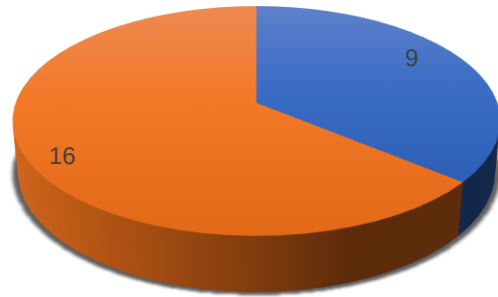
Secondary Data

Quantitative

CRAAP

Presentation of GRIT Test Data

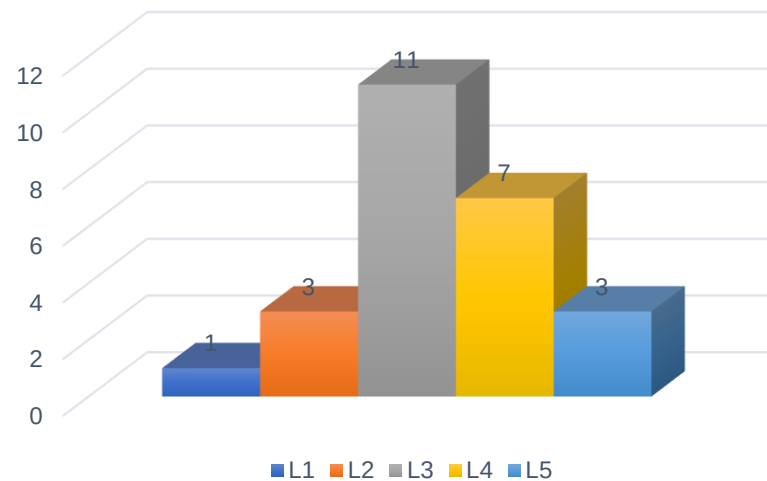
Gender



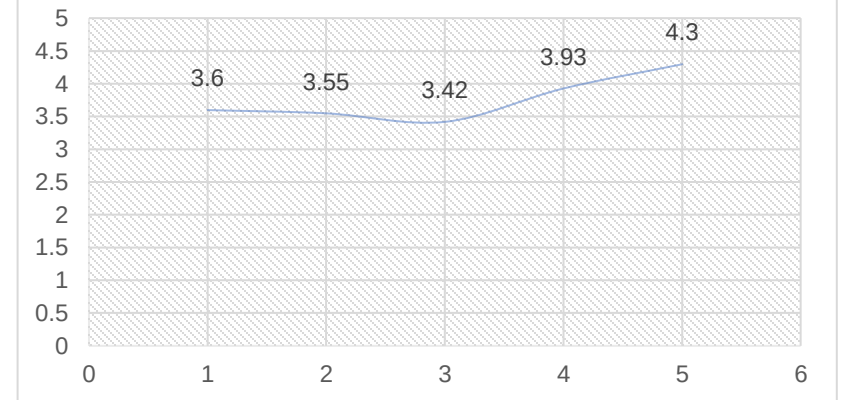
■ Male ■ Female



Highest Qualification Level



Grit Average VS Qualification Level



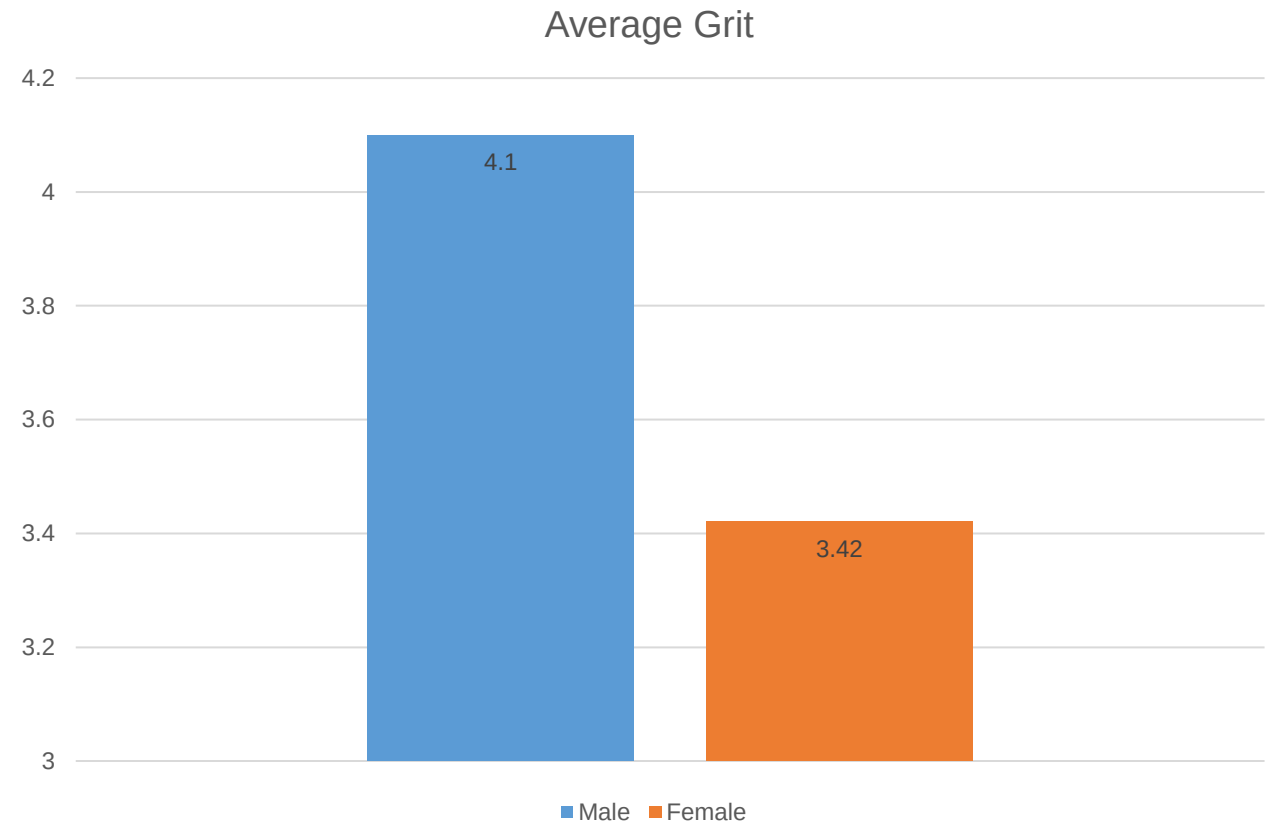
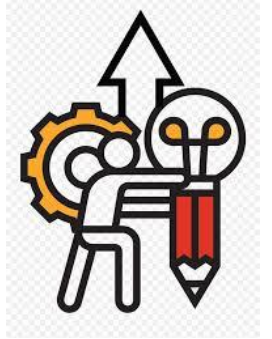


Information

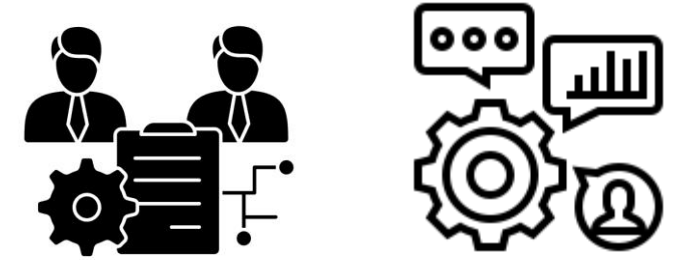
- Information is the processed or analysed data or organised facts that provide context or overview of any issues. The collection of data from diverse sources leads to information by analysis, evaluation and other means as needed (Karolin and Nair, 2021).
- However, the primarily collected data of academic grit results have been presented using different types of charts. The accuracy and reliability of the data have been maintained using simple random sampling. Besides, the information provided relevance of the data to represent a specific fact.
- In the research, the average of academic grit data and its representation of UWTSD grit data are tried to find out.

Information

- **Average Grit Score 3.76**
- **Mode Qualification Level : 3**
- **Median Qualification Level: 3**
- **Gender and Average Grit:**
 - ❑ **Male-4.1,**
 - ❑ **Female-3.42**

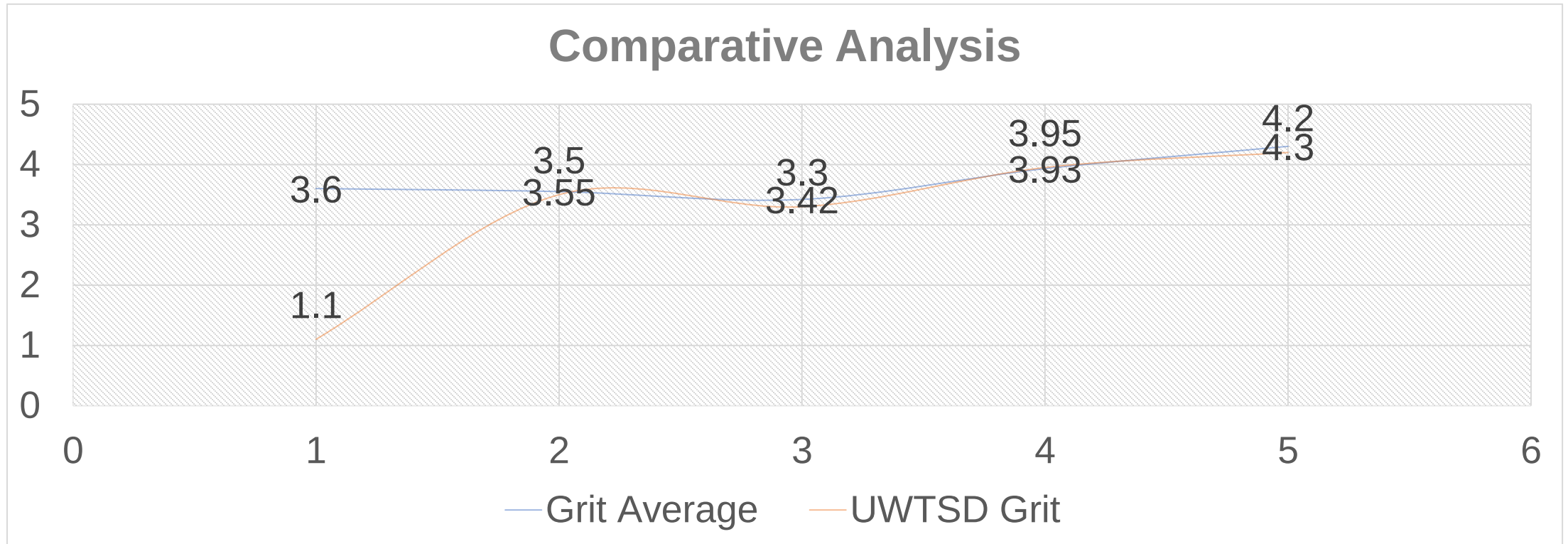
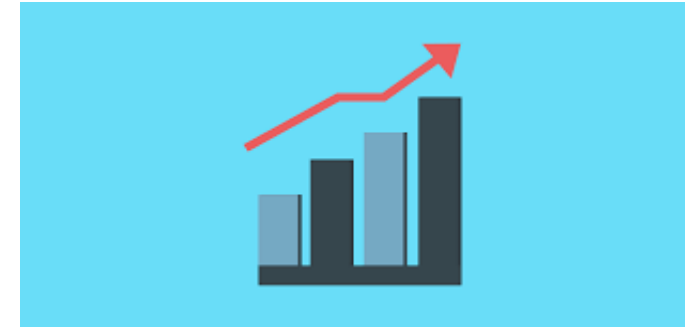


Knowledge



- ❖ Knowledge can be represented as expertise, information, familiarity in a subject or specialist area. It can be understood by the ability to apply the learned information or data in an organised way.
- ❖ The primary data has been converted into information using different statistical analyses. However, the secondary data is gathered from published online sources or websites of the University of Wales- Trinity Saint David.
- ❖ Comparing the primary and secondary will aid to understand the subject matter. Besides, the entire process of grid test and its effectiveness from different sources can be obtained and compared. Using the secondary sources used the CRAAP Test which found the reliability and validity of the collected data.

Knowledge



So, accepting the secondary data over the primary data as primary data showed no differentiative relationship of grit score and level of experiences which is not feasible.

Wisdom



- The perceived level of knowledge development leads to wisdom in a certain field. Wisdom can be represented as the ability to control excessive knowledge and information that helps to increase experiences and understanding about different subject matters. A higher level of wisdom leads to solving problems or issues related to subject matters (Koshimizu, Kojima and Okuno, 2020).
- The primary analysed data has been compared with secondary data which shows that secondary data is much more related and have relevance to the research issue. So, it provided the wisdom of knowing that primary data may not be as highly accurate as secondary data through secondary data collected indirectly. The experiences or qualification level should have a positive relationship with grid test outcome which is more precisely matched with secondary data. This knowledge base provides the wisdom of choice to the professional and adds value.

Conclusion

- The researcher should be aware and acquire an understanding of various tools and techniques which improve the digital skills, competencies and abilities.
- The use of the DIKW framework helped to understand the issue in the hierarchy and logical way. CRAAP test was used to evaluate the secondary sources and different statistical tools used to analyse the collected data.
- However, these skills have a higher scope of development which is valuable in the professional sector.



References

- Azcarate, S., de Araújo Gomes, A., Muñoz de la Peña, A. and Goicoechea, H., 2018. Modeling second-order data for classification issues: Data characteristics, algorithms, processing procedures and applications. *TrAC Trends in Analytical Chemistry*, 107, pp.151-168.
- Bawa, M. and Caganova, D., 2018. Selecting Network Protocols for Internet of Things Based Upon Innovation and Knowledge Management. *Journal of Telecommunications System & Management*, 07(02).
- Cho, H., 2021. The Relationship between Students' Grit for Task Performance in Physical Education Class, Academic Engagement and Academic Effort. *Korean Journal of Sports Science*, 30(4), pp.649-664.
- Frické, M., 2019. The Knowledge Pyramid: the DIKW Hierarchy. *KNOWLEDGE ORGANIZATION*, 46(1), pp.33-46.
- Karolin, A. and Nair, N., 2021. Static and Dynamic Data Collection and Data Mining for Small Business Domain Knowledge. *SSRN Electronic Journal*,.
- Koshimizu, H., Kojima, R. and Okuno, Y., 2020. Future possibilities for artificial intelligence in the practical management of hypertension. *Hypertension Research*, 43(12), pp.1327-1337.
- Putra, S. and Subiyakto, A., 2016. Measurement of the information system project success of the higher education institutions in Indonesia: a pilot study. *International Journal of Business Information Systems*, 23(2), p.229.
- Van Meter, H., 2020. Revising the DIKW Pyramid and the Real Relationship Between Data, Information, Knowledge and Wisdom. *Law, Technology and Humans*, 2(2), pp.69-80.