

LEVEL 4 ASSESSMENT SPECIFICATION

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“How I can use the DIKW and CRAAP frameworks to confirm or refute my collected Academic GRIT test result (Primary Data) compared to the UWTSD GRIT Result (secondary Data) based on the work of Angela Duckworth TED Talk lecture”.

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Introduction

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- 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.

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Academic Grit

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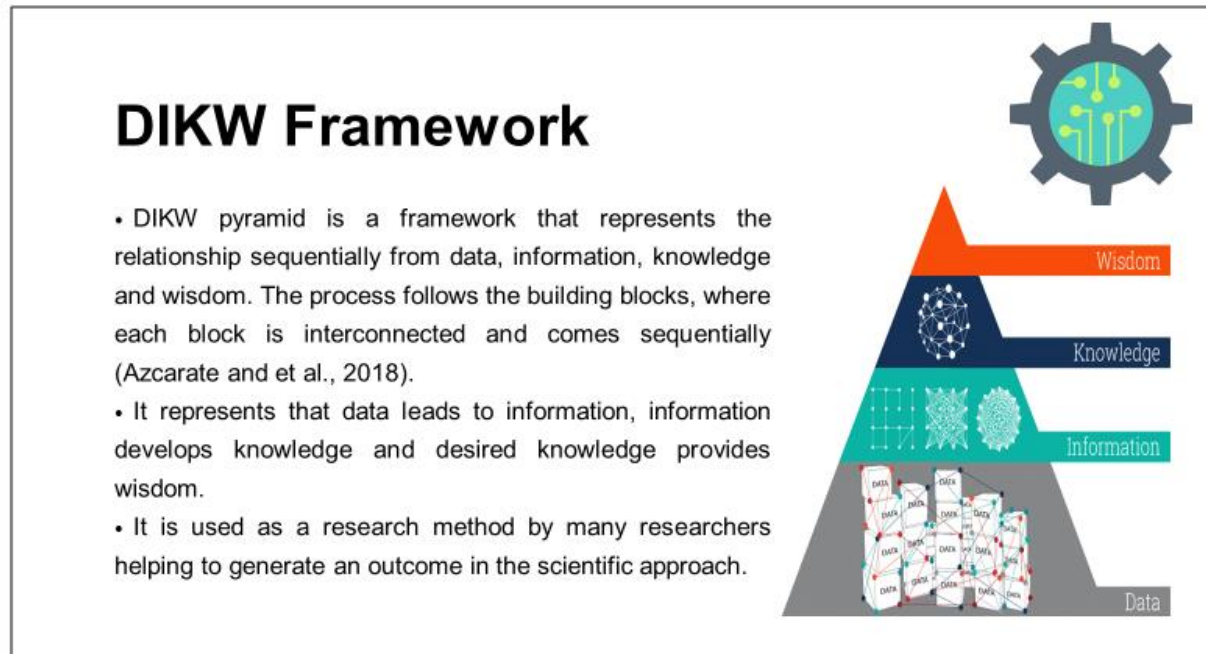


- Academic grit represents personal and individual abilities essential to achieve long term objectives. Academic grit depends on different aspects including dedication, desire bravery and persistence. The tests of Academic Grit help to assess a person's level of commitment, enthusiasm and hard work (Van 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.

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. Besides, the capability of achieving long term objectives is considered in academic grit. In the academic environment, it helps to capture the determination level and competencies (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. The score provides the scope of improving or changing the degree of determination if it is lower. However, as it was standard for me, represented my ability to work to accomplish my goal.

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. It represents that data leads to information, information develops knowledge and desired knowledge provides wisdom (Azcarate and et al., 2018). Using the pyramid approach, many research investigations have been conducted in a well-organised fashion. It is used as a research method by many researchers helping to generate an outcome in the scientific approach. Using the pyramid framework of DIKW, the research can rate available data as per developed knowledge and wisdom.

CRAAP Frameworks

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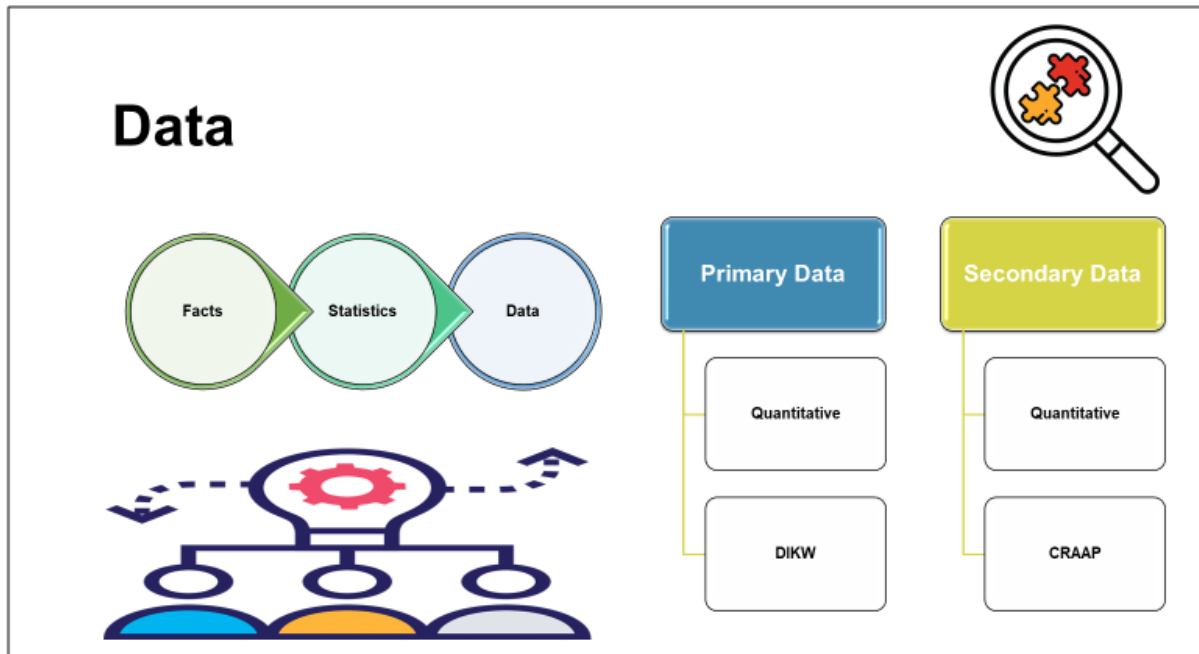
- CRAAP Framework is a test used to check the accuracy of data or information used in the research based on Currency, Relevance, Authority, Accuracy and Purpose. It helps evaluate the contents of the research specifically the internet sources (Putra and Subiyakto, 2016).
- At last, the purpose focuses 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?

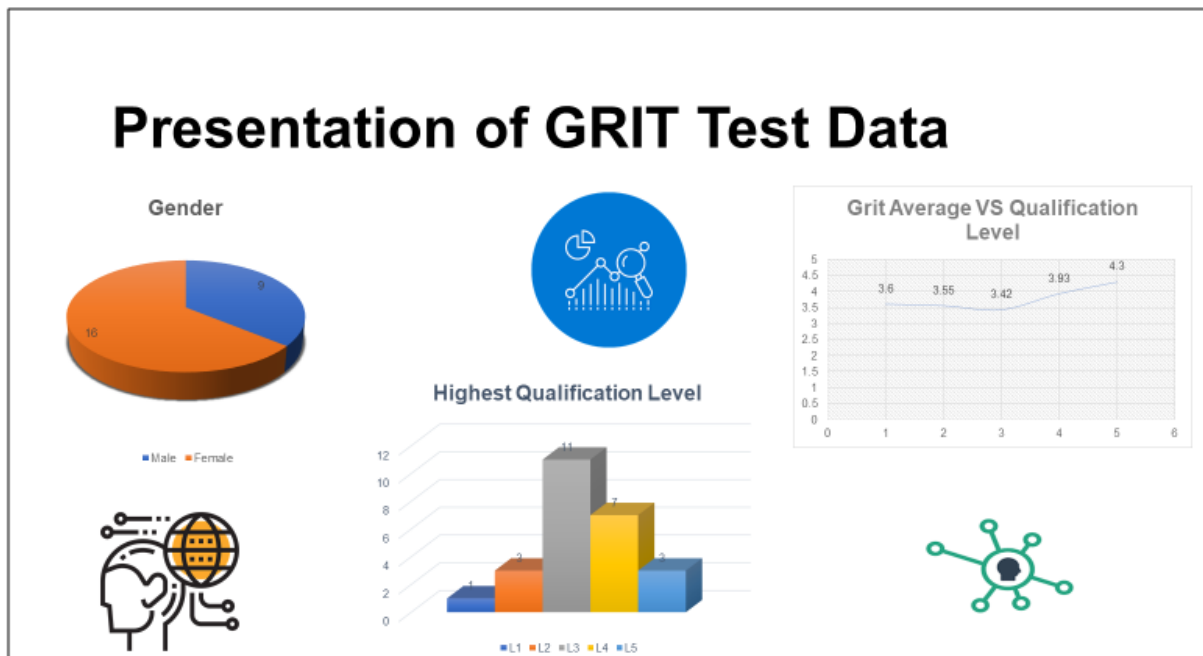
CRAAP Framework is a test used to check the accuracy of data or information used in the research based on Currency, Relevance, Authority, Accuracy and Purpose. It helps evaluate the contents of the research specifically the internet sources (Putra and Subiyakto, 2016). Currency evaluates the timeliness of the information or considers whether the information is current. Relevance considers whether the data can answer the desired outcome. Accuracy represents the correctness of the information or backup by evidence. Authority identifies the authors and qualifications of the authors. 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.

Data



Data represent the statistics or facts, signs or symbols, amounts or personality and others groups used in research or investigations. Data can be divided into a qualitative and quantitative form where qualitative data considers non-numerical data and quantitative considers numerical data. The use of both types of data helps to generate an effective outcome. However, in statistical calculations, the use of quantitative data is widespread. In the case of collecting data, two types of data collection methods are used as primary research and secondary research (Bawa and Caganova, 2018). The primary data has been collected using a survey where secondary data was collected from the UWTSD website or online. The primary data has been evaluated using the DIKW framework and secondary data evaluated using the CRAAP method. The collected data have been compared and contrasted using different types of statistical charts. In that case pie charts, bar charts, column charts, scatter diagrams have been used to represent the information and knowledge.

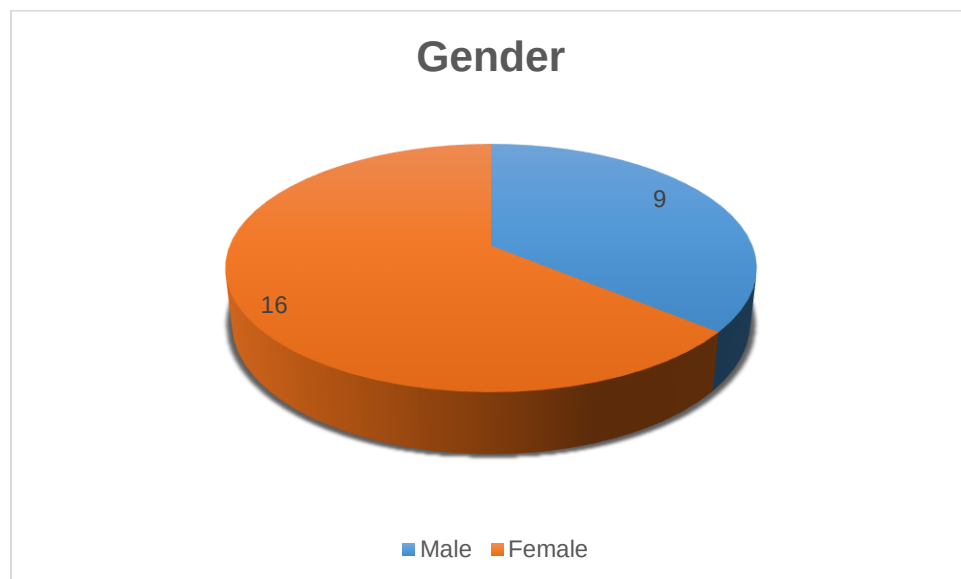
Presentation of GRIT Test Data



In the representation of Academic Grit Test data; graphs and charts have been used to illustrate the primary sources. However, the data has been presented using descriptive statistical analysis.

Gender

From 25 samples used, of which academic Grit results have been used, where 16 of them are female and 09 of them are male. So, there are 36% male respondents' data compared to 64% female respondents' data from random sample collection.



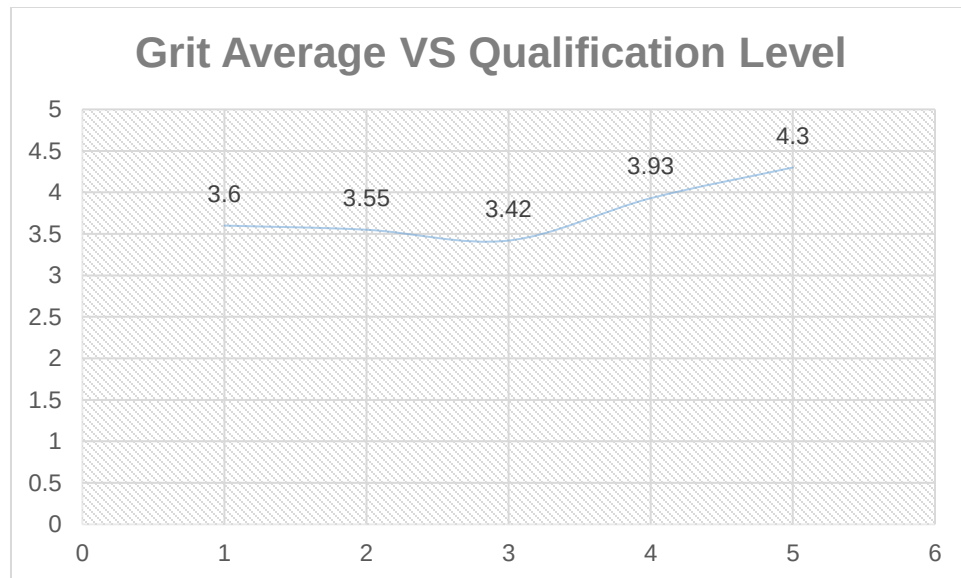
Qualification Level of Respondents

The qualification of the study has been classified from Level 01 to Level 05. From the respondent's academic grit score, it has been visualised that a person only remains in Level 01. However, 3 respondents have crossed Level 2 qualification whereas 11 have crossed Level 03. Besides, 07 respondents have been found from Level 04 and 3 have been found from Level 05. So, the majority of the data came from the highest qualification level.



Grit Average and Level of Qualification

The comparison of the qualification level of the respondents and their average grit score has been analysed using statistical tools. In level 01, it has been found that the average grit score is 3.6 out of 5. Besides, level 02 has 3.55 and level 03 consists of a 3.42 average grit score. The level 04 grit score is 3.93 out of 5 which is very much close to standard. Besides, level 05 average grit score is 4.3 out of 5.



Information

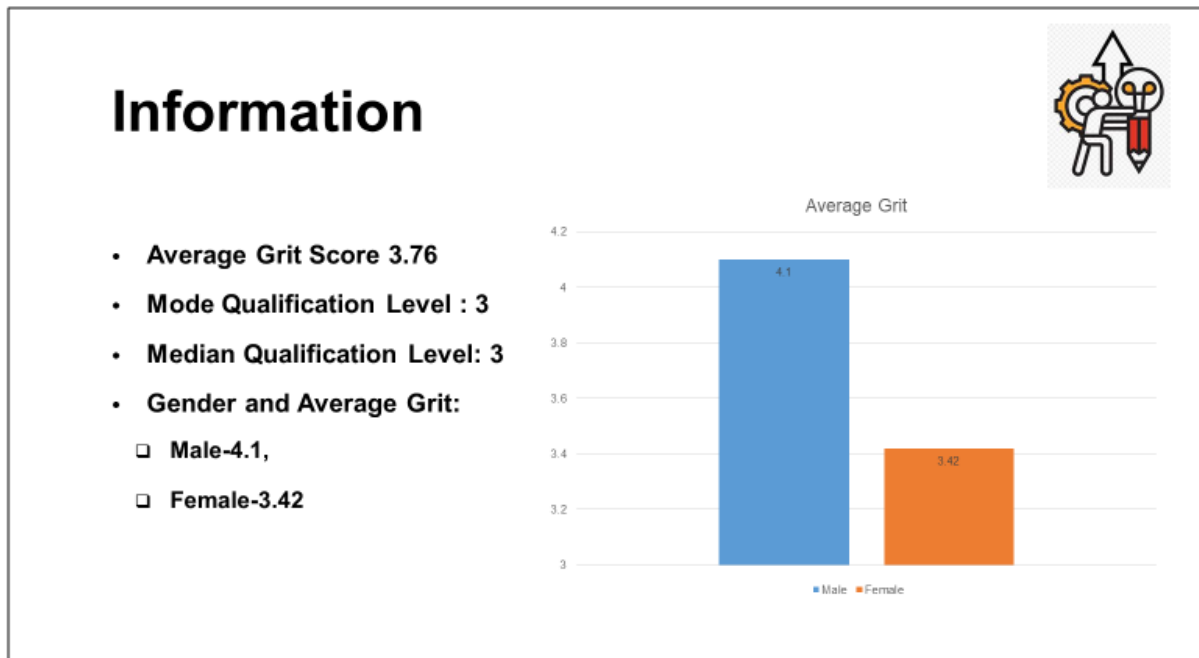
Information



- 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 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. The utilisation of accurate information leads to an increase the knowledge, wisdom and qualifications. The information provides or presents the data in a more precise and standard way so that anyone can understand what's going on which is not possible based on tons of unorganised data (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.



Average Grit Score

As the academic grit score is a rating range from 1 to 5, the sample average academic grit score has been found 3.76. The average grit score of 3.76 represented an average or moderate rating on a 5-point scale. So, the information represents that 25 people have average grit scope of 3.76 which is moderate.

Mode of Qualification Level

The mode represents the highest number of times the sample has specific data or similar data. In that case, qualification level 3 has 11 respondents which are the highest in number. So, the mode of the qualification level with 11 participants is level 3.

Median of Qualification Level

Median is the middle value of overall data where the median value lies in level 3 of the qualification level. It represents that the middle value of 25 respondents or most of the respondents lies in qualification level 3.

Gender and Average Grit

The gender-based classification of the grit score provides an understanding of the level of grit score among males and females. The male respondents have been found to average grit score of 4.1 which is standard or good. However, female participants have an average grit score of 3.42 which is very lower than average or moderate.

Knowledge

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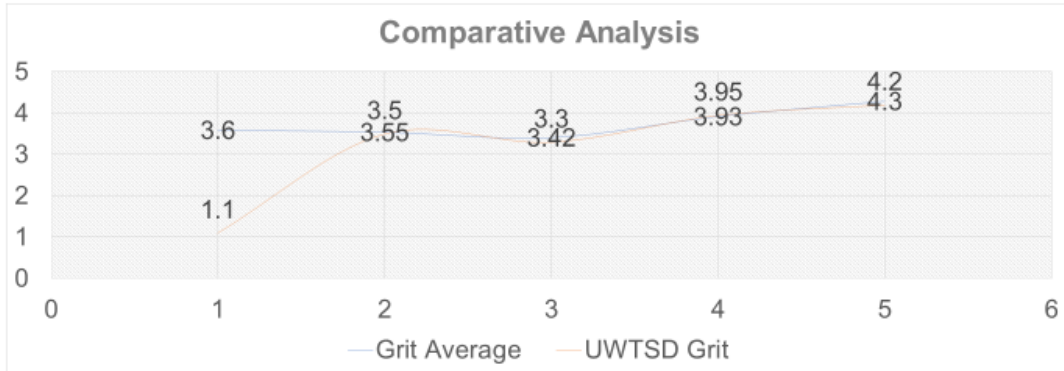


- ❖ Knowledge can be represented as expertise, information, familiarity in a subject or specialist area. It can be understood by the ability to apply the learned information or data in an organised way.
- ❖ The primary data has been converted into information using different statistical analyses. However, 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.

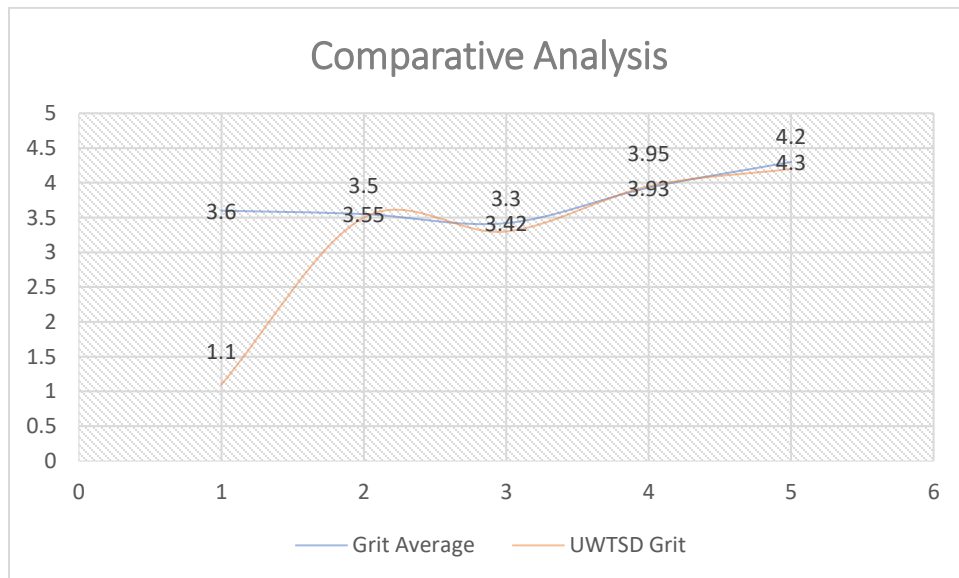
Knowledge can be represented as expertise, information, familiarity in a subject or specialist area. It can be understood by the ability to apply the learned information or data in an organised way. However, in academic and professional practices, managing proper knowledge is important. The process of collecting, organising, managing and disseminating knowledge is known as knowledge management. Appropriate knowledge management leads to the success of any profession as gain higher information, experience and expertise.

However, the information of Academic Grit Results has been compared with UWTSD Grit Results to add value to the knowledge base. 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.



The comparative analysis has been based on a scatter plot or diagram where grit average is the primary data and UWTSD grit average is the secondary data based on the level of qualification. Both types of data represent that based on the qualification level of learners, grit score improves. However, the academic grit average has a very close relationship with the different qualification level but UWTSD Grit average increases as the qualification increase. In the case of academic grit average, the score was between 3.6 to 4.3 were up and downs were visible. However, in UWTSD average score, grit score was 1.1 in Level 1 and 4.2 in Level 5. From the comparison, it can be understood and accepted as previous knowledge that as experiences increase, the grit

score should increase. 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

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.

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However, in practical life, a greater level of wisdom is expected from high-level professionals in any field such as business managers and executives. In every decision making, the wisdom of knowledge is vital to the success of that decision. In contracts, gathering wisdom is a process or cycle that evolves throughout the logical flow. As data has been collected which presented using different tools and techniques leading to information. Information provided organised data which have been used to gather knowledge on the grit data.

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Conclusion

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- 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.



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 hierarchically and logically. Besides, it helped to shape the raw data converted into wisdom which added value to the researcher. 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.

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