A logo for a university

Description automatically generated

**ASSIGNMENT COVER SHEET**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PROGRAMME | : | Masters in Business Analytics | | |
| SUBJECT CODE AND TITLE | : | BAA5023 - Business Research Method | | |
| ASSIGNMENT TITLE | : | Critically Analytical Essay (Quantitative) | | |
|  |  |  | | |
| LECTURER | : | Dr. Aaron Aw Teik Hong | ASSIGNMENT DUE DATE: | 12th of April 2024 |

STUDENT’S DECLARATION

1. I hereby declare that this assignment is based on my own work except where acknowledgement of sources is made.
2. I also declare that this work has not been previously submitted or concurrently submitted for any other courses in Sunway University/College or other institutions.

[ Submit “Turn-it-in” report (please tick √): Yes \_\_√\_\_ No \_\_\_\_\_]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NO. | NAME | STUDENT ID NO. | SIGNATURE | DATE |
| 1. | Harresh Ragunathan | 19076090 | HARRESH | 11th of April 2024 |

E-mail Address / Addresses (according to the order of names above):

|  |  |
| --- | --- |
| 1. 19076090@imail.sunway.edu.my | 4. |
| 2. | 5. |
| 3. | 6. |

APPROVAL FOR LATE SUBMISSION OF ASSIGNMENT (If applicable)

IF extension is granted, what is the revised due date? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Lecturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| Marker’s Comments: |

Marks and / or Grade Awarded: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ADDENDUM**

**USE OF ARTIFICAL INTELLIGENCE (A.I.) DECLARATION**

Students are allowed to use AI to support completion of assessments. However, students are reminded to do so ethically and transparently. This is so that (a) submissions can be fairly and accurately marked; and (b) feedback can be provided on the content that reflects student ability, in order to help with future submissions. Students are also reminded that in accordance with the University’s Academic Malpractice Policy, Item 4.11.2, “*… the representation of work: written, visual, practical or otherwise, of any other person, including another student or* ***anonymous web-based material*** *[emphasis added], or any institution, as the candidate’s own*” is considered malpractice.

**Declaration**

[ √ ] I / We used the following A.I. tools to produce content in this submission:

|  |  |  |  |
| --- | --- | --- | --- |
| **Tool** | **Purpose** | **Prompts** | **Sections where AI output was used / Outcome(s) in the submission** |
| *ChatGPT* | * *Used to brainstorm ideas during preliminary stages of the assignment* * *Used to summarize journals to identify key points* |  | *N/A* |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

*Note: Add additional rows if necessary.*

**OR**

[ ] I / We did not use any A.I. tools to produce any of the content in this submission.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NO. | NAME | STUDENT ID NO. | SIGNATURE | DATE |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  |  |

E-mail Address / Addresses (according to the order of names above):

|  |  |
| --- | --- |
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

**INDIVIDUAL ASSIGNMENT**

**CRITICALLY ANALYTICAL ESSAY (QUANTITATIVE)**

# Research Approach

The following study was conducted through video recordings of group music therapy sessions and the researchers evaluated eight participants with mental health conditions using the Group Environmental Scale and the Individual Behavior Observation Categorization Scale, which both provide quantifiable data (Schneidman, 2020). Hence, this study utilizes the quantitative research approach, as the data collected from the respective standardized scales are quantifiable data that may be statistically analyzed and interpreted. Additionally, the combination standardized scales provide necessary information for strategic decisions based on general considerations (Linek & Tochtermann, 2011). Analysis on the data provided by the standardized scales is done by performing various statistical tests, such as F-test, which is an analysis of variance for a given set of data (Lix et al., 1996). Furthermore, this study follows a longitudinal design, where the researchers observe participants over a nine-month period and evaluate them at different time periods as a method to gain meaning over time (Haertel & Means, 2003). With the use of this approach, the researchers may examine changes of variables over time, which in return allows them to provide insights of the long-term effects of group music therapy.

# Research Paradigms

The research paradigms applied in this study are pragmatism and constructivism. Pragmatism may be defined as a “way of thinking about method choice, based on the demonstrated utility and consequences of method in use” (Michell, 2003). In other words, the researchers utilize methods that are reliable and effective based on historical data/outcomes (Morgan, 2014). However, it also emphasizes practicality and the use of multiple methods to understand phenomena. In this study, the researchers use two standardized scales, Group Environmental Scale and the Individual Behavior Observation Categorization Scale, to enhance the validity of their findings. In terms of the practicality of this study, pragmatism is demonstrated by the focus on assessing the effect of group music therapy on real world outcomes such as social skills and expression of emotional states. As a result of examining these outcomes, this study gains value as it provides insights on the practical outcomes of group music therapy for individuals with mental health issues through the use of quantitative analysis methods. Additionally, this study demonstrates the researchers’ ability to adapt their research design, specifically how they analyze the videos. The researchers’ approach in analyzing may be different for each video as each session has unique characteristics.

On the other hand, constructivism is paradigm that views “social reality as subjective and co-constructed through human experiences”; in other words, a social construct (Chandra & Shang, 2017). Constructivism is “used for the thought that information build by pupils for their own, every individual create understanding as they gain knowledge independently and in a social content” (Bhutto & Chhapra, 2013). In this study, the researchers explore the participants’ experience in the group music therapy sessions through analysis of the videos. The aim of this analysis is to understand how the participants interpret their interactions in the therapy group over time. As a result, the researchers are able to explore the subjective experiences of each participant and how they develop meaning from their involvement in the therapy sessions. Additionally, this study uses constructivism as a way to demonstrate the examination of participants’ development of their social skills. This study aims to understand how individuals actively contribute to the development of their social skills in the group music therapy session through observing the participants’ activity.

# Strengths of the Research Approaches

This study has many strengths that enhance the validity and credibility of their findings. First of all, the use of a longitudinal design in their data collection allows them to examine the effects of group music therapy on participants over a nine-month period. The use of a longitudinal design allows the researchers to observe changes in different variables and outcomes, such as social skills and group cohesion, over a longer period of time. As a result, a longitudinal design provides further insights of the long-term effects of group music therapy in the long run.

With the implementation of two different standardized scales, Group Environmental Scale and the Individual Behavior Observation Categorization Scale, the researchers are able to gain information regarding social skill development, expression of emotional states, and group cohesion. The use of multiple scales ensures the robustness of the data collection, further enhancing the credibility and validity of the findings.

Lastly, the researchers’ use of the pragmatism research paradigm allows the researchers to adapt their research approach depending on specific contexts. Flexibility is a commonly known feature of pragmatism, and it allows researchers to make adjustments to adapt to real-world applications of the methods and results (Allemang et al., 2022). This study demonstrates this with the use of collecting data in the form of videos, which is generally considered qualitative data, but quantify the data with the use of the standardized scales. This flexibility provides a comprehensive understanding of the results found.

# Weaknesses of the Research Approaches

Although this study has its strengths, it also possesses a few weaknesses regarding their research approaches. First of all, the sample size is relatively small, as it only consists of eight individuals with mental health issues. As a result, this small sample size could limit the generalizations made from the results. Since the sample size is small, the study lacks a wider scope and hence, a larger sample size would enhance the study’s findings statistically, and in turn, enhancing the validity of the study.

Similarly to having a small sample size, this study lacks diversity of participants within the sample size. This study does not state the information regarding the demographic of the sample size such as gender, age, and cultural background. As a result, this limits the generalizations made from the results due to overlooking the potential differences between participants.

Lastly, the use of constructivism as a research paradigm could result in subjectivity. Constructivism as a paradigm views social reality as subjective, the researchers may face difficulties as epistemological and ontological claims may be challenging to separate (Olssen, 1995). In this study, the interpretations of the participants’ experiences in the group music therapy sessions made by the researchers may be influenced by their own biases and perspectives. As a result, this affects the validity and credibility of their results.

# Recommendations for Future Research

This study may be improved in the future by increasing the sample size and making it more diverse. In order to have a diverse sample size, the researchers may recruit participants of different ages and genders, different cultural backgrounds, and different mental health issues. Along with having a larger sample size, these changes will improve the study’s validity and credibility in the future as the large and diverse sample size gauges a wider scope. As a result, making it easier to make generalizations based on the results.

Although the use of a longitudinal design with a time period of nine-months was effective, a longer time period would even further enhance the study’s validity and credibility. This will allow the study to provide more insights on the long-term effects of group music therapy such as social skills development and group cohesion. Additionally, a longer follow-up period could allow the researchers to assess the participants’ progress after conducting the study, such as identifying any signs of relapse.

Lastly, this study can be improved in the future by replicating this study on a completely different demographic and setting. This could assist in validating their results and allow them to make better generalizations.

# References

Allemang, B., Sitter, K., & Dimitropoulos, G. (2022). Pragmatism as a paradigm for patient-oriented research. In *Health Expectations* (Vol. 25, Issue 1, pp. 38–47). John Wiley and Sons Inc. https://doi.org/10.1111/hex.13384

Bhutto, S., & Chhapra, I. U. (2013). Educational Research on “Constructivism” - An Exploratory View. *International Journal of Scientific and Research Publications*.

Chandra, Y., & Shang, L. (2017). An RQDA-based constructivist methodology for qualitative research. *Qualitative Market Research*, *20*(1), 90–112. https://doi.org/10.1108/QMR-02-2016-0014

Haertel, G. D., & Means, B. (2003). *EVALUATING EDUCATIONAL TECHNOLOGY Effective Research Designs for Improving Learning*.

Linek, S. B., & Tochtermann, K. (2011). Assessment of usability benchmarks: Combining standardized scales with specific questions. *International Journal of Emerging Technologies in Learning*, *6*(4), 56–64. https://doi.org/10.3991/ijet.v6i4.1832

Lix, L. M., Keselman, J. C., & Keselman, H. J. (1996). Consequences of assumption violations revisited: A quantitative review of alternatives to the one-way analysis of variance F tests. *Review of Educational Research*, *66*(4), 579–619. https://www.proquest.com/scholarly-journals/consequences-assumption-violations-revisited/docview/214112814/se-2?accountid=147680

Michell, J. (2003). Pragmatism, Positivism and the Quantitative Imperative. *Theory & Psychology*, *13*(1), 45–52. https://doi.org/10.1177/0959354303013001761

Morgan, D. L. (2014). Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*, *20*(8), 1045–1053. https://doi.org/10.1177/1077800413513733

Olssen, M. (1995). The epistemology of constructivism. In *ACCESS: CONTEMPORARY ISSUES IN EDUCATION* (Vol. 13, Issue 2).

Schneidman, A. (2020). *Group Music Therapy for People Living with Mental Health Conditions in the Community-A Quantitative Micro-Analysis Processes Group Music Therapy for People Living with Mental Health Conditions in the Community-A Quantitative Micro-Analysis Process*.

# Appendix

A paper with text on it

Description automatically generated