Rationale & Critical Analaysis

A rationale is a set of reasons or a logical basis that explains to your reader why your research question or study is needed to contribute to the relevant field of study. There are three groups of limitations that you can use to critique existing literature:

1. Methodological limitations of previous research

- Did it fail to measure the phenomena in question?
- Did it base its measures on incorrect conceptualization of the key problem or variables?
- Did it not meet operationalizing the key concepts?
- Did it use a problematic research design?
- Was the sample size too small to make inferences?
- Are the results reliable and accurate?

2. Contextual limitations of previous research

- Do recent changes in the actual phenomena require new measures? In other words, are previous studies still relevant?
- Is the previous research acceptable, but does not examine the phenomena in a particular context? If this is the case, you must also show why we cannot simply assume theories developed in one place are not applicable in another.

3. Conceptual limitations of previous research

Are the previous findings too bound up in a specific ideology or theoretical framework?

The fact that something has <u>never been done before</u> is a poor rationale by itself and is never useful for research. <u>Convince your reader</u> (see this resource https://www.phrasebank.manchester.ac.uk/ for language phrases) that your study is significant/important by engaging critically with the existing literature and identifying the research gaps adequately. Your rationale should be written towards the end of your literature review, leading into the aims and objectives of your research study. It is usually a paragraph (research proposal, journal article) or a 1-2 paragraphs (thesis).

The Rationale should consider the following factors:

Location:

• Give context to the reader about whether the research has an impact on the region or is more theoretical.



Positionality/Perspective:

- What does the research aim to achieve?
- What is the perspective/lens of the researcher? [social sciences research]
- How will the study be reported?

Beneficiaries:

Which group/organization/industry can benefit from the research being conducted?

Example 1

Currently, miRNAs have been suggested as serum biomarkers (Di Leva et al., 2014) for predicting prognosis and diagnosis in cancer. Additionally, the development of novel and more targeted anti-cancer therapies by exploiting the involvement of miRNAs in cancer is also promising. Two possible scenarios can be forecasted in the near future where miRNAs can be used as treatment to target oncogenes or drugs can be developed to target those miRNAs which affect tumour suppressor genes. As mentioned earlier, recent evidence suggests that HIV proteins and miRNAs may have a direct role in the development of HIV-associated malignancies such as DLBCL and BL. In light of the findings linking HIV-1 and cellular miRNA modulation, it is predicted that one of the mechanisms of lymphoma development and/or progression in HIV positive individuals is via the modulation of miRNAs in B-lymphocytes. This hypothesis will be tested in the current study and is described in the sections which follow.

Example 2

Across the literature a variety of 'identity dispositions' (characteristics), beliefs, and practices have been identified as important to the development of a mature authorial identity. These include, the ability to negotiate between new and existing literacy practices (Gee, 1989); critical/authorial thinking (Ivanic and Camps, 2001; Bird, 2013; Cheung et al., 2018); valuing writing (Cheung et al., 2018); knowledge of appropriate social and discourse practices (Archer, 2010; Cheung et al., 2018); a clear sense of audience (Pemberton, 1994); the ability to determine rhetorical, or authorial, goals (Pemberton 1994; Cheung et al., 2018); valuing the practice of writing (Cheung et al., 2018); and confidence (Pemberton, 1994: Cheung et al., 2018). To develop this kind of mature authorial identity, students need an understanding of the context within which they are writing, the structures and functions of the genres they are reading and writing, the ability to think critically about the content they are reading and writing. and an appreciation of the process through which their writing may be produced.

This longitudinal process of identity development requires both time and opportunity to allow new learning to be actively incorporated into established frames of reference and practice (Mezirow, 1997). As such we need to create spaces within educational contexts that allow for identity work to occur by directly engaging students as active participants in directing their learning journey. Students' beliefs about their own writing play an important role in authorial identity development (Maguire et al., 2013), and research indicates that students who are given the opportunities to express their own beliefs and ideas, become more motivated and confident in their writing (Bird 2013). Writing thus offers both a process though which to develop identity, and a product through which to express it.

Reference: Samuel, M. A. 2017. The Research Wheel. 3rd Edition University of KwaZulu-Natal, School of Education. Examples adapted from: Goolam Hoosen, T. Masters thesis, 2017. and Muna, N. SSM Project Proposal, 2023.

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