

Differentiating Between Population and Target Population in Research Studies

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The importance of differentiating between the population and target population in research cannot be overemphasised as these provide a backbone of any research study. Research methods of any postgraduate study entail a description of a population of interest from which the target population and the sample are derived. A clear distinction between these concepts is essential for research studies, but it also extends to academic and business writing. Casteel & Bridier (2021) [1] provided a schematic diagram describing populations and samples of doctoral student researchers depicted in figure 1 below. Asiamah, Nestor et al. (2017) [2] emphasised specifying the general, target and accessible populations in a qualitative study. Martínez-Mesa (2014) [3] defines a population as the group of individuals restricted to a geographical region (neighbourhood, city, state, country, continent etc.) or certain institutions (hospitals, schools, health centres etc.), that is, a set of individuals that have at

least one characteristic in common. Alvi described a target population, saying that: "a target population refers to all the members who meet the criteria specified for a research investigation" (Alvi, 2016) [4]. The author further attest that the target population corresponds to a portion of the population about which one intends to conclude, thus part of the population whose characteristics are an interest to the investigator. A target population needs to be exclusive enough to avoid having participants who do & represent the study needs which will misrepresent the population of interest (Casteel & Bridier, 2021) [1]. The authors further emphasise that the target population must be a complete subset of the population of interest – members of the target population must also be described by the boundaries of the population of interest (Casteel & Bridier, 2021) [1].

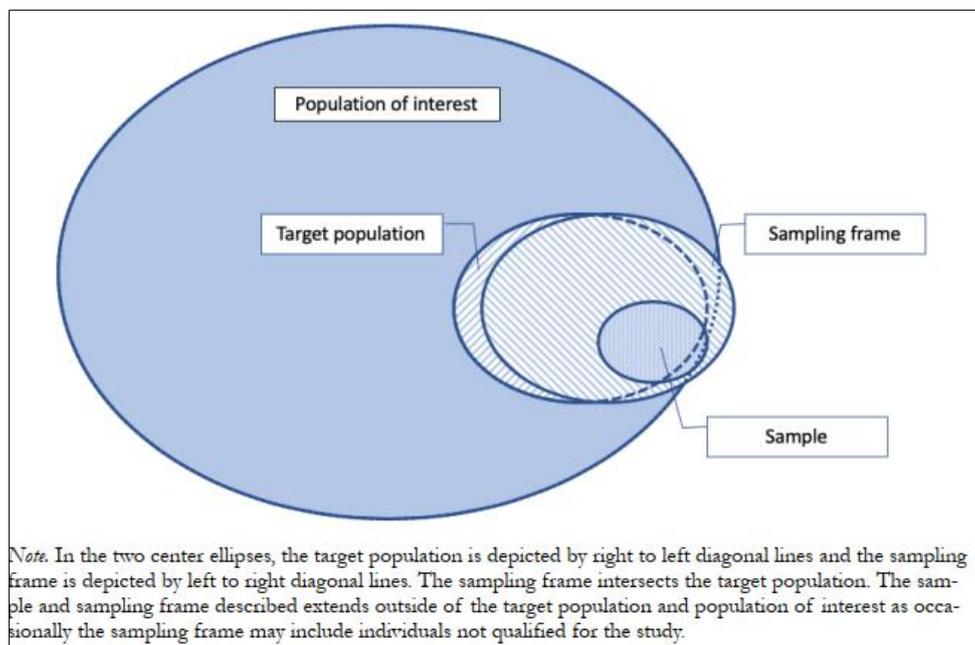


Figure 1: Describing Populations and Samples in Doctoral Student Research
Source: Casteel & Bridier (2021) [1]

MEDICAL SCHEME POPULATION

Medical schemes, also called health insurance companies operating in the private health sector in South Africa, are non-profit organisations governed by a board of trustees and must be registered with the Council for Medical Schemes (CMS). The Council for Medical Schemes is a Section 3A entity established in the Medical Schemes Act and a regulator of medical schemes (No. 131 of 1998) (MSA). There are two types of medical schemes, open and restricted medical schemes. Open membership schemes must accept anyone who wants to become a member [5]. Restricted membership schemes can restrict who may

become a member, and they are typically employer or union based [5].

The medical scheme population is accounted for by a total of 8.9 million beneficiaries¹ (main members and their dependents) who are enrolled with 76 medical schemes registered with the Council for Medical Schemes, and the target population will be the main members of schemes and will exclude both adult and child dependents (CMS, 2021) [6]. Figure 2 below provides a schematic diagram of the medical scheme's population and the target population.

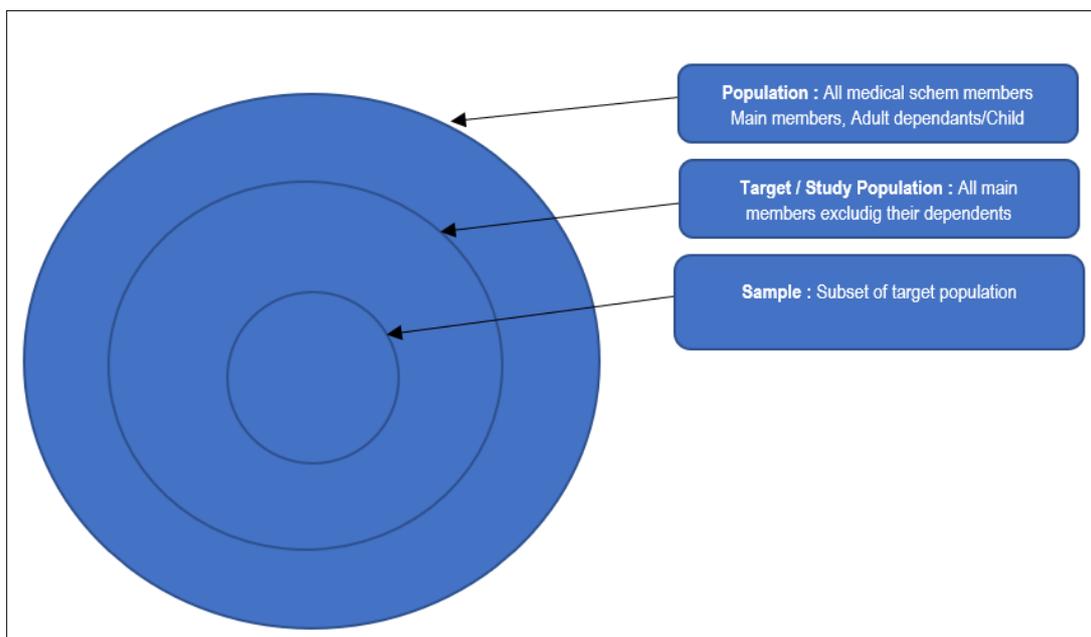


Figure 2: Differentiating between Population, Target/study population and sample- medical scheme example

MEDICAL SCHEME TARGET POPULATION

EXAMPLE

A straightforward medical scheme target population for research is the 4.1 million main members enrolled in the 76 medical schemes that are registered with the Council for Medical Schemes (CMS, 2021). The inclusion criteria could also be expanded further to other attributes such as:

- Main members: Premium paying members
- Demographic characteristics of members (Age, gender, sector etc.)
- Utilisation patterns: members who have utilised services over the past three months
- Clinical information/ diagnosis: Members who are diagnosed with a specific condition and others

CONCLUSION

This article emphasises the importance of clearly distinguishing between the population and the target population. If this distinction is not made at the onset, there are potential risks that the sample derived from the target population might not be representative of the population, thus impacting the generalisability of the study. This could further impact the interpretation of the findings and the research's practical and theoretical recommendations.

REFERENCES

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¹ Beneficiary" means a member or a person admitted as a dependant of a member

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