DIAGNOSTIC ASSESSMENT OF SERVICE DELIVERY HEALTH IN SOUTH AFRICA: A SYSTEMATIC LITERATURE REVIEW

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ARTICLE INFO	ABSTRACT
	Access to cost-effective, high-quality and speedy public services is a legitimate requirement and expectation of all South Africans. However, despite massive increases in successive budgets and grants to the public sector, the economy continues to witness frequent unrest that is typically tagged as being about 'service delivery'. To deal effectively with this conundrum, an evidence-driven, goal-oriented diagnosis of the health of service delivery in South Africa is required. This is even more important as service delivery deficits and backlogs have continued to grow and widen since democratisation. It is therefore pertinent that a diagnostic tool with a sound and rigid theoretical foundation, and rigorously evaluated against key performance metrics, be developed as part of efforts to close service delivery gaps. This paper explores the necessary criteria for a diagnostic tool to contribute effectively in closing service delivery gaps in South Africa.

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OPSOMMING

Toegang tot koste effektiewe, hoë gehalte en vinnige publieke dienste is 'n geldige vereiste en 'n verwagting van alle Suid-Afrikaners. Ten spyte van massiewe toenames in opeenvolgende begrotings en toelaes aan die publieke sektor, word die ekonomie steeds blootgestel aan gereëlde onrus wat tipies aan swak dienslewering toegeskryf word. Om effektief met hierdie strikvraag te werk te gaan is 'n doelgerigte diagnose van die toestand van dienslewering in Suid-Afrika benodig. Dit is selfs belangriker soos dienslewering tekortkominge en agterstande toegeneem en versprei het sedert demokrasie in Suid-Afrika. Dit is daarom belangrik dat 'n diagnostiese instrument met 'n stewige teoretiese fondament ontwikkel en deeglik getoets word teen sleutel vertonings-maatstawwe in 'n poging om dienslewering tekortkominge aan te spreek. Hierdie artikel ondersoek die nodige kriteria vir so 'n diagnostiese instrument om sodoende noemenswaardig by te dra tot die verbetering van dienslewering in Suid-Afrika.

1 INTRODUCTION

As far back as 1997, in recognition of the need to run an effective and efficient public service, the South African government adopted the *White Paper on Transforming Public Service Delivery* (WPTPSD), generally referred to as the *Batho Pele* [1] White Paper. Although this policy clearly outlines the processes, procedures, behaviours, and systems required to deliver cost-effective, high-quality public service, Mdlongwa [2] argues that the public service still struggles with the basics. That is, it is unable to map out, standardise, optimise, assess, and monitor its services to ensure consistently speedy, affordable, and high-quality services. Although his argument is not supported by any scientific methods, a study by the Public Service Commission (PSC) [3] supports his claim to a considerable extent. The PSC study, which tries to understand how well *Batho Pele* policy has been adopted and implemented by national and provincial governments, indicates that many public officers and users of public services do not even know about the policy. Several examples are given

in the PSC study [3]: (1) At the Department of Home Affairs, 99% of users of public services do not know of any efforts by the department to promote openness and transparency; (2) 90% are unaware of *value for money* efforts; and (3) 86% don't know about any *redress* mechanisms. On a positive note, 61% praised the department's efforts on information dissemination [3].

However, this review by the PSC was a discrete event without any clearly defined metrics for each area interrogated in the questionnaire. The review was similar to the General Household Survey (GHS) [4] of Statistics South Africa (StatsSA), which assessed the state of public services such as education, housing, and related services such as electricity/water supply and sanitation. Drawing conclusions that drive government policy and decision-making on the basis of traditional statistical surveys such as these is problematic, incomplete, and non-sustainable, since Tirivangasi and Mugambiwa [5] contend that, notwithstanding the studies, service delivery gaps continue to be a problem, leading to protests that paint a negative picture of South Africa both locally and internationally.

While it may be argued that there are other driving forces in the configuration of these protests, such as the prevailing economic and political situations and the triple challenge of poverty, inequality, and unemployment, a diagnostic assessment of the health of service delivery is required to determine the extent of its contribution to the unrest, among other things. Thus this paper explores, through a systematic literature review (SLR), the criteria for such diagnosis to be effective and efficient.

1.1 Background

Having adopted its policy on service delivery improvements, government has set up and designated a few *oversight* departments to monitor its programmes, projects, and services. These include the Public Service Commission (PSC) [6, 7], the Department of Public Service and Administration (DPSA) [8, 9], the Department of Planning, Monitoring and Evaluation (DPME) [10], and a Chapter 9 institution, the Office of the Auditor General [11]. Backed by relevant laws and many national policy frameworks, these oversight institutions adopt many tools and performance assessment methodologies to carry out their various mandates. The DPME, for instance, is backed by the National Evaluation Policy Framework, the Medium Term Strategic Framework, the National Evaluation System, etc. Regarding service delivery, a notable and creditable effort by the department is the Frontline Service Delivery Monitoring (FSDM) programme, developed to monitor the quality or performance of service delivery at specific points of service (PoS). The programme entails using standard questionnaires like those of the PSC and StatsSA to survey certain service delivery qualitative parameters.

Apart from the wastefulness of these overlaps, duplications, and repetitions by government organs, a review of the tools and surveys reveals that they are not theoretically grounded, scientifically evaluated, or proven to lead to any improvements in service delivery. A change of paradigm, an innovative approach, and a different way of diagnosis are therefore needed, given the magnitude and socio-economic impact of these service delivery disturbances.

## 1.2 Problem validation and statement

Service delivery unrest has become commonplace in South Africa. While over the years government has put in place many strategic plans, policy frameworks, programmes, and systems to assess and monitor service delivery performance with the aim of improving it, unrest, arising from service delivery gaps, continues [7, 12]. Although some authors have proposed certain ways by which government might solve this problem, we believe that any solution without a proper diagnosis is short-sighted — i.e., a diagnostic tool that is well-defined, rigorously tested, and theoretically grounded is required before any sustainable solutions can be developed and applied. We agree with Makanyeza [13] that one of the ways to improve service delivery is to have a way to assess and monitor its health.

Tirivangasi and Mugambiwa [5] estimated that up to one thousand incidents of service-related unrest took place in one month during 2014, while the Institute for Security Studies (ISS) [14] reviewed 2,880 cases of public unrest between 2013 and 2015, about 34 per cent of which it ascribed to service delivery issues. On the content of this 34 per cent, Runciman *et al*. [15] identified issues such as electricity and water and sanitation, while ISS included housing, health, and education. Figure 1 presents Runciman *et al*.'s [15] inferences.
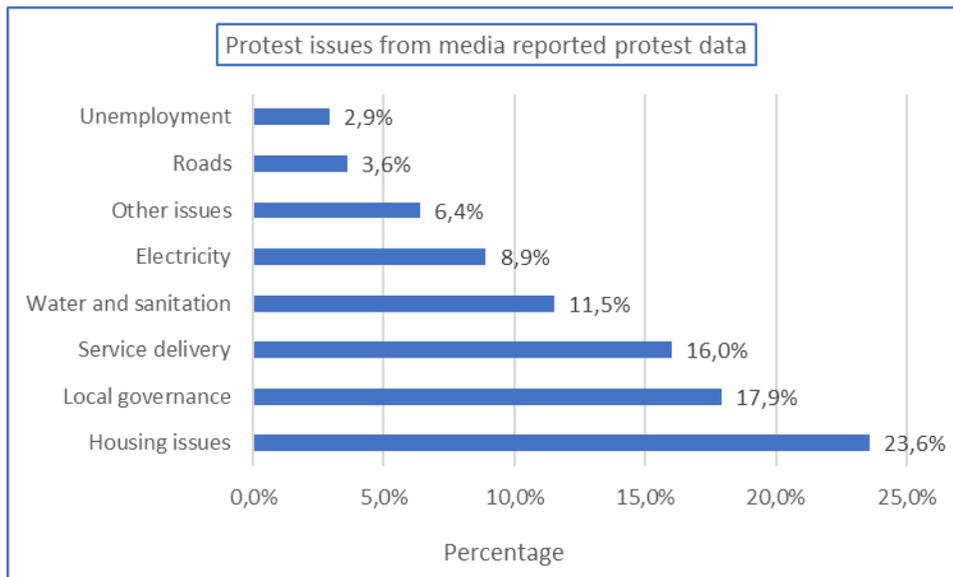
Figure 1: Reasons for protest. Source: Runciman *et al*. [15]

A further analysis by Ruciman *et al*. [15] reveals who these protests are targeted at. As shown in Figure 2, only one per cent (1%) is targeted at private entities, which strengthens the notion that government needs to have a way to diagnose the health of service delivery that can inform corrective actions, learning, and continuous improvement.
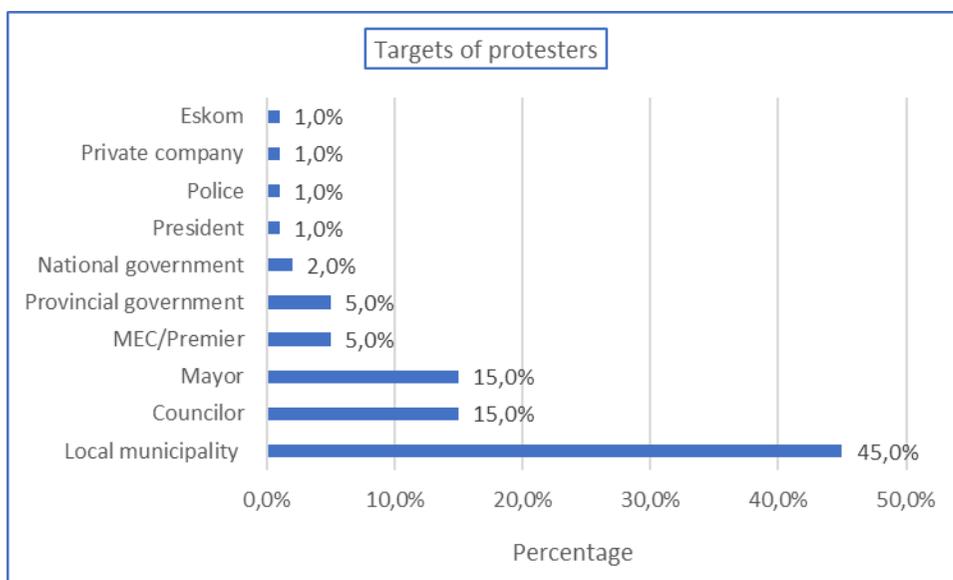
Figure 2: Targets of protesters. Source: Runciman *et al*. [15]

Because of the crippling effect that service delivery gaps and associated disturbances have on our society, government and many authors have focused attention on how the issues might be resolved. It is interesting, however, that only a few studies have focused on assessing the health of service delivery in a scientific way. Of the few assessment tools available — typically, traditional questionnaires — the diagnostic metrics have not been well defined — i.e., there is no evidence of how diagnostic metrics are developed. Their theoretical basis and methodology are absent, and the validation processes that were used before accepting the metrics are missing. Yet this type of rigour is desirable for a problem of this magnitude.

Shaidi [16], Alexander [17], Thompson [18], Nleya [19], and Mdlongwa [2] all investigated the causes of service delivery failures without developing any tools or metrics to assess service delivery health on an on-going basis. Makanyeza [13], who conducted a survey that indicated that the regular assessment and monitoring of service delivery health (as an early warning system to trigger corrective actions) is desirable, did not develop any methodology or measures to do the assessment. In the same way, Sibanda [20] advocated for the quality assessment of service delivery health using International Organization for Standardization (ISO) standards, international benchmarking, and balanced scorecards. However, she did not develop any quality metrics beyond a formula for calculating *perceived quality*.

A methodology is needed to understand what really matters in measuring and identifying qualifying key performance indicators that are appropriate to a particular service delivery context. In government, the FSDM assessment framework scores eight key performance areas (KPAs), but the metrics and ratings used are broad, vague, and subjective. One of the KPAs, for instance, is queue management and waiting times; but this KPA is not scored against any queueing model, standards, or baselines. The same applies to the remaining seven KPAs.

Taking an international perspective, the World Bank report [21] on accountability in South Africa's public services confirms that one of the major reasons for service delivery issues is inadequate assessment (including monitoring and feedback) of the health of service delivery. The reason for this, according to Pricewaterhouse Coopers [22], may be that the public sector does not easily lend itself to the kind of shareholder return metrics that the private sector is used to. There is therefore an urgent need to develop techniques and tools to assess the health of the public service in South Africa; but first, the criteria that such techniques and tools must satisfy to achieve the desired result should be clearly defined.

1.3 Research question and study objectives

A clear definition of the research question is necessary to guide the entire literature review process [23]. Based on the challenges defined above, the research question is:

What criteria must a diagnostic tool satisfy to effectively support the closing of service delivery gaps?

The SLR will explore the following three objectives:

- Objective 1: Identify diagnostic service performance assessment (DSPA) tools in general. Rationale: The existing literature may already offer knowledge about effective SDPA tools that may be applicable to the South African context.
- Objective 2: Discover criteria that may be considered for DSPA tools to be effective. Rationale: The existing literature may already provide initial criteria for selecting an appropriate DSPA tool for a particular context.

Because of the many public unrest incidents in South Africa, in which people demand better service delivery, the term 'service delivery' is now loosely (wrongly, carelessly, and erroneously) used by the press. For that reason, and given that the term is not universally defined, we acknowledge the South African context and vernacular, and define 'service delivery' as the *purveying of services (intangibles), goods (tangibles), and socio-economic dynamism (amenities, infrastructure, employment etc) by government and state-owned enterprises that enable the citizenry to live sustainably and to prosper*.

2   RESEARCH METHODOLOGY

This study explores and extracts useful criteria for a service performance diagnostic tool in general, and specifically within the service delivery domain, by systematically reviewing the literature. The review is guided to a considerable extent by the eight-step guide to conducting a systematic literature review by Okoli and Schabram [24]. According to them, a systematic literature review (SLR) is a systematic, structured, all-inclusive effort to critically assess, extract, and integrate empirical evidence that meets pre-defined eligibility criteria in a complete, scientifically rigorous, and reproducible way. Their definition is supported by Kwan [25] and Tranfield *et al.* [26]. To date, no systematic review of the relevant criteria for a service delivery diagnostic tool has been published. Given government expenditure on service delivery, and the continued deficit with its

consequential impact, it is timely that a considered effort be made to put together in a systematic way all works published around the subject. This study does exactly that by reviewing all published works in relevant academic journal databases and in some secondary information repositories. Table 1 outlines the steps followed in conducting the review.

Table 1: Review steps and definitions (The eight steps are adapted from Okoli and Schabram [24], but the interpretation is article-specific)

	Steps from Okoli & Schabram [24]	Interpretation for this article
1	Purpose of the literature review	Specify the purpose and intention of the study.
2	Protocol and training	Stipulate the boundary of the study, conditions, and procedure, to ensure consistency during the review.
3	Searching for the literature	Execute defined search criteria for both electronic and physical materials included. Specify the extent of the study (knowledge repositories that were included) and keywords that were used.
4	Practical screen	Apply inclusion criteria to filter all materials acquired during search.
5	Quality appraisal	Apply exclusion criteria to eliminate materials based on lower-than-acceptable quality.
6	Data extraction	Systematically extract relevant information from all included materials.
7	Synthesis of studies	Combine information from all included studies, and synthesise/ summarise the information based on qualitative and quantitative methods.
8	Writing the review	Report on the findings of the study to enable reproducibility.

The review's objectives are stated in Section 1.3 above. Although used mostly in the medical field, the **P**referred **R**eporting **I**tems for **S**ystematic Reviews and **M**eta-**A**nalysis (PRISMA) [27] checklist guided this review protocol. Table 2 summarises the protocol, elaborating on the execution of Steps 2 and 3 in Table 1.

Table 2: Review protocol

	Items	Description
1	Protocol	PRISMA guidelines
2	Eligibility criteria	Years 1987 to 2017. This is to capture adequately all service delivery performance publications before and after the White Paper on service delivery improvement (*Batho Pele*) had been adopted by government in 1997.
3	Information sources	Google Scholar, ProQuest, Scopus, Science Direct, Emerald Insight, some physical reference libraries, and general internet search.
4	Search strategy and keywords	First search for existing systematic literature reviews in the subject area, test searches using combinations of keywords, and consultation with subject matter experts and domain experts. The keywords are specified in Section 3.
5	Document management system (DMS)	Microsoft SharePoint, backed by Microsoft SQL Server, is used as DMS for the search. Version control capable content libraries are created not only to store information, but also to keep event/ activities log and date/time stamps.
6	Additional data and analysis	Secondary data are sourced from international political bodies (e.g., the World Bank), public entities, state-owned companies, provincial governments, etc.

Table 3 shows the search scope and inclusion/exclusion criteria, elaborating on the execution of Steps 4 and 5 in Table 1.

For the execution of Steps 6 and 7 in Table 1, we used ATLAS.ti to extract data from the knowledge repositories and table the results in accordance with the three main objectives of the study.

Table 3: Practical screening and quality evaluation

Selection basis	Inclusion criteria	Exclusion criteria / rationale
Geographic coverage	Global	None
Language	English	Non-English (except if translations can be obtained). Rationale: the study will focus on literature that is accessible.
Timing	Year 1987 and beyond	Articles published before 1987. Rationale: see Table 2.
Cost	Services subscribed to by the University of Pretoria (UP) and those available via inter-library arrangements.	Databases not subscribed to by the UP. Rationale: individual subscriptions to access are costly.
Scope of interest	Materials covering exact or related diagnostic/performance assessment tools in general; such tools used in the public service delivery domain; and criteria that the tools must satisfy to be considered effective.	Same as inclusion criteria, but in non-democratic societies. Rationale: the purpose of the study is to identify possible DSDA tools for the South African context — i.e., a democratic society.
Quality of publications	All peer-reviewed records or approved government policy documents that are unclassified.	Blogs, web sites, and commercial prints whose credibility cannot be easily ascertained. Rationale: it must be clear that the publication was reviewed by a knowledgeable individual, or else the results may not be credible. This is further explained in Section 3.2.

3   RESULTS

A total of 2377 publications were found, of which only 64 were evaluated for eligibility. Out of the eligible 64, only 29 made it to the final inclusion stage. However, not one of the included materials deals with the focus of this research: *A systematic literature review of the criteria that a diagnostic tool must satisfy to be considered effective in closing service delivery gaps*. Although there is a plethora of published works on (public) service delivery in general, there is a dearth of investigations into the criteria that an assessment tool must possess for it to diminish service delivery deficits.

Figures 3 and 4 and Table 4 outline the initial counts of publications from some well-known databases, from inception to data extraction. Boolean logical operators were used to link the search terms in a way that ensures focus.

The search criteria required to address Objectives 1 and 2 of the study are:

["diagnostic tools" NOT ("health" OR "hospital")] AND "for assessing public service delivery".

Synonym phrases for "diagnostic tools" are also considered: "survey tools", "survey mechanisms", "survey models", "survey methodologies", "survey frameworks", "survey systems", "survey approaches", etc.

Some databases and search engines vary in the way that words and phrases are nested, but the inclusion and exclusion logic (the use of Boolean operators) remains generally the same. The challenge is that, to obtain the qualifying criteria of a service delivery assessment tool, the tool must have been empirically tested, evaluated, and validated by its developers (or others) for certain performance criteria. This is lacking in all but seven of the diagnostic/ survey tools covered, 13 of which focus on public services, four on the general service industry, and two on the manufacturing sector (included because of their closeness to service quality and performance assessments). Although there are many related service quality assessment tools (e.g., the ESQ model [28], the antecedents & mediator model [29], the INTSERVQUAL model [30], the DEA model [31], the IT-based model [32], etc.), SERVQUAL [33] meets the initial eligibility criteria for inclusion — first, because in addition to general quality metrics, it measures service performances; second, because it is widely applied in the public sector; and finally, because most other service assessment tools discovered are a variation or adaptation of SERVQUAL. It is deemed to be the most widely applied, followed by PETS and QSDS [34] of the World Bank Research Group. SERVQUAL, which has been modified/customised to form other assessment tools, serves as a diagnostic methodology to uncover

wide areas of an organisation's quality and performance deficits. It has been applied extensively in many services sectors: public service delivery [35-43], public transportation [44-49], public and private healthcare [50-55], information systems [56-60], education [61-66], and hospitality [67-72]; and in many countries of the world: South Africa [44, 66, 73-75], Bangladesh [72], India [69, 71], Croatia [70], the United States and the United Kingdom [76], Thailand [64], Russia [63], Ghana [48, 49, 51], Malaysia [41], Egypt [37], and Cyprus [36], to mention only a few.
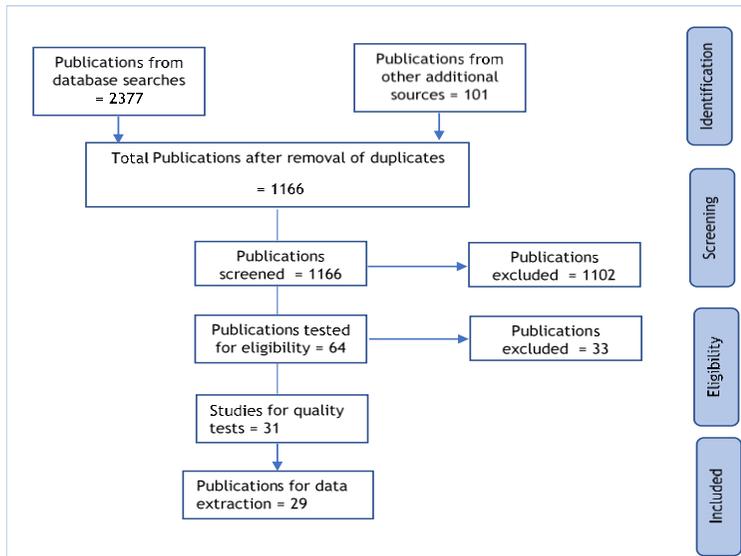
Figure 3: Search outcome

To ensure that the search strategy delivers quality outcomes for study objectives 1 to 3, a complementary search, using the snowballing procedure outlined by Wohlin [77], was adopted. This led to multiple iterations and the exclusion of 1135 publications, streamlining the final publications for data extraction.
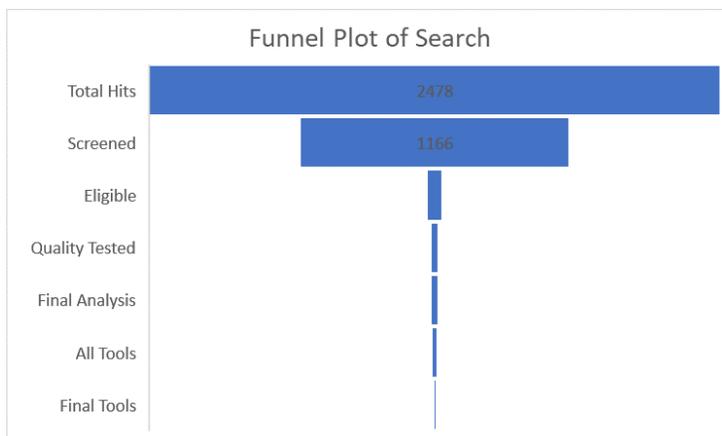
Figure 4: Search outcome visualisation

Table 4 outlines the search hits by databases, duplicate counts, and the number considered to be relevant in the context of this study.

<div align="center">**Table 4: Information sources and hits**</div>

Source	Number of hits	Duplicates	Number relevant
Google Scholar	4	2	2
ProQuest	30	9	1
Scopus	78	34	1
Science Direct	592	201	1
Emerald Insight	367	112	6
Taylor and Francis	1306	899	2
Others*	101	55	16
Total	2478	1312	29

*The World Bank, World Health Organization, UNICEF, USAID, government departments, and other journals.

In summary, literature sources have been excluded (or included) based on the criteria defined in Table 2 (eligibility criteria) and Table 3 (timing, scope, etc.) and in Section 3.2 (quality assessment for tools eligibility).

3.1 Spread and attributes of tools

Table 5 gives an indication of the distribution and spread of the tools included, addressing Objective 1 of this study, and clustering the tools according to their methodological core (i.e., quantitative, qualitative, or both).

<div align="center">**Table 5: Spread and attributes of service delivery diagnostic tools**</div>

Tool	Year published	Country of application	Methodological core	Sector	Reference
FSDM	2015	South Africa	Qual	Public	[78]
DEA	2016	South Africa	Quant	Public	[79]
Citydex	2009	South Africa	Quant	Public	[80]
SERVICOM	2006	Nigeria	Quant	Public	[81]
SERVQUAL	1988, 1991, 1994	United States	Qual	Public & others	[33, 82, 83]
PETS & QSDS	2002	United States	Both	Public & others	[34]
D-Tree	2007	United States	Qual	Manufacturing	[84]
Livingstone	2004	United States	Quant	Services	[85]
ESTP	2007	United Kingdom	Qual	Public	[86]
SARA	2013	Switzerland	Qual	Public	[87]
SERVPERF-M	2000	Australia	Quant	Public & others	[88]
ASPIRE	2016	Australia	Qual	Public & others	[89]
PJM	2015	Austria	Qual	Services	[90]
EGPE	2015	China	Qual	Public	[91]
SCPAT	2011	Thailand	Quant	Services	[92]
CSDA & SDAF	2016	Multiple	Qual	Public	[93]
BSC & GEE	2011	Afghanistan	Qual	Public	[94]
MP	2010	Malaysia	Quant	Manufacturing	[95]
CEMATT	2013	Romania	Quant	Services	[96]

3.2 Quality assessment for tools' eligibility

In this section we highlight the additional quality assessment criteria that were identified to select eligible tools for the study context. A tool was only short-listed if it met all the quality criteria. We applied the following quality assessment criteria:

1. *Has the tool been tested in real life?* Rationale: we make the assumption that tools that have been used by practitioners will have been refined, increasing their usability.
2. *Has the tool been evaluated against key performance metrics?* Rationale: we assume that the process of evaluation would have helped to improve the performance of the tool before it was used to assess the health of service delivery.
3. *Are the performance metrics clearly defined?* Rationale: ambiguous performance metrics will have a negative effect on the reliability of the measurement outcome.
4. *Is the evaluation outcome documented?* Rationale: authors occasionally allude to evaluations they have conducted without publishing the full outcome. Transparent evaluation outcomes are vital.

5. *Are independent persons (not only the tools developers) involved in the tool's evaluation?*
Rationale: the criterion should eliminate potential bias in the evaluation of the tool.

Seven eligible tools meet the above five quality criteria: ESTP (extended service template process) [86], ASPIRE (**a**rea for evaluation, **s**et goals, **p**erformance indicators, **i**nformation sources, **r**eport results, **e**valuate) [89], BSC and GEE (balanced score card and generalised estimating equation) [94], CSDA (city service delivery assessment) [93], PJM (performance journey mapping) [90], EGPE (external government performance evaluation) [91], and the MP (manufacturing performance) tool [95].

3.3 Evaluation criteria for effective tools

For Objective 2 of this study, we intended to discover criteria that DSPA tools must satisfy to be considered effective. Table 6 provides a summary of the criteria that we extracted from the literature.

Table 6: Evaluation criteria for DSPA tools

| Evaluation criterion, identified as a theme in the literature	References where theme occurs
Criteria related to the tool-as-a-construct	
Independence — Administering personnel must be independent and free of financial inducement.	[91] [94]
Relevance — The evaluation project must be practically significant and reflect important public issues.The tool must possess metrics relevant to the outcome of interest.	[91] [89]
Validity — The tool measures what it is supposed to: it possesses fitting and adequate metrics to measure service delivery health.	[91] [95]
Reliability — Tool must be consistent when used to measure (service delivery performance) repeatedly, with results that are fairly comparable.	[91]
Comprehensibility — Outcome provided by the tool must be easily digested and understood by its users. Graphs and tables can be used to facilitate public comprehension.	[86] [89] [90] [91] [94] [95]
Comparability — The tool, its methodology, and its results must be such that it can be compared with similar tools.	[90]
Objectiveness — Subjective metrics should be avoided.	[90] [93] [94]
Predictive ability — It must be able to estimate or project what service delivery performance would look like in the near future, based on historical and current data.	[86] [93]
Diagnostic ability — Tool must identify specific issues about specific peformance areas affecting service delivery.	[86]
Balance — Tool must cover all relevant areas.	[90]
Conflicts avoidance — Metrics used by the tool must not conflict with one another.	[90] [93]
Engagement — Involve stakeholders in the design and development of the tools.	[93]
Focus — Only deal with what is important.	[89] [93]
Ease of use — To learn and operate the assessment tool should be easy, flexible to interact with, and uncomplicated.	[89] [90] [95]
Usefulness — The tool meets its objective. That is, it can effectively and efficiently measure service delivery health and produce valid results.	[89] [90] [95]
Criteria for post-diagnosis practices	
Responsibility — The assessed/evaluated entity should take ownership.	[90]
Impactful — How well the tool's outcome and results lead to improved service delivery.	[91] [93] [95]
Improvement — Must not only assess, but also lead to improved service delivery.	[86] [89] [90] [94] [95]

4   DISCUSSION

In accordance with Objective 1 of the study, we identified 19 DSPA tools that may be useful for service delivery assessment. Furthermore, we identified five quality assessment criteria to reduce the list of identified DSPA tools as possible alternatives to consider in the South African context.

Addressing Objective 2, we extracted a list of 18 criteria from the literature that could serve as a starting point to compare the seven DSPA tools. The 18 criteria were clustered into two main

categories: (1) Criteria related to a tool as a construct; and (2) criteria for post-diagnosis practices. The rationale for the categories is that some criteria relate to the built-in construction of the software tool, whereas others do not pertain to software construction, but rather to methodological practices that are associated with service delivery assessment. It is possible to perform a further prioritisation of the 18 criteria, based on the number of citations — e.g., Table 6 indicates that the most subscribed criterion is 'comprehensibility' (the outcome or results of DSPA tools must be easily understood, simple, and uncomplicated) — followed by 'improvement' (must not only assess, but also lead to improved service delivery).

An easy explanation would be that, typically, diagnostic tools are too complicated for the average user, and they are often not proven to lead to improved service delivery. Yet we propose that the criteria should rather be expanded and prioritised via a participative process, involving participants who know the particular service delivery context. Figure 5 presents a conceptual design of a decision-making process that incorporates the 18 criteria as a starting point for selecting a suitable DSPA tool.
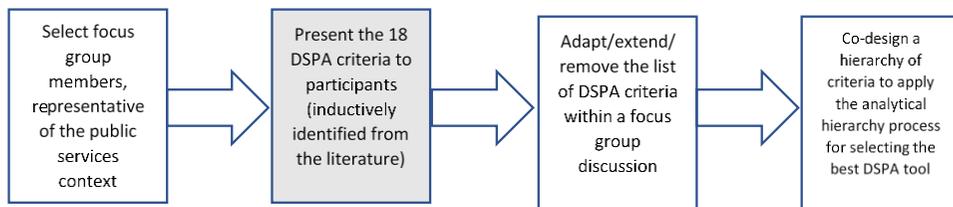
Figure 5: Decision-making Process that Incorporates the 18 criteria

5 CONCLUSION AND RECOMMENDATIONS

Despite the acknowledged service delivery surveys/assessments in South Africa, service delivery deficits and related unrest continue unabated [5]. Given the magnitude of this deficiency and its socio-economic impact, a *new* way/technique of diagnosis, grounded in relevant theories, evaluated for appropriate performance metrics, and tested for fitness of purpose, is urgently needed. To contribute to meeting this need, this study explored the literature in a systematic way to uncover any work by authors and researchers on that topic. A total of 2377 publications were identified during a broad search driven by the criteria defined in Section 3. Applying further eligibility criteria (Table 2) and inclusion/exclusion criteria (Table 3), only 29 made it to the final analysis stage. Notwithstanding these 29 papers, it is interesting to note that none dealt with the focus of this study. In the final analysis, and in line with the study objectives (Section 1.3), eight DSPA tools criteria were extracted. We propose that the eight criteria should be expanded and prioritised via a participative process, involving participants who know the particular service delivery context.

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