

Towards Conceptualising Business and Public Administration Research Augmented by Analysing the Physical Research Context, the Research Problem, and the Research Knowledge Gap

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Abstract: Before anything else, a sound research report or dissertation or thesis is its conceptualisation in which we spell out 'what' research we want to do and 'why'. Other than interrogation of the fundamentals – that is, the research title, research problem statement, research purpose statement, and research questions as well as where applicable the accompanying research hypotheses or research propositions- research conceptualisation requires a structured interrogation of literature to strengthen its case and the research focus. This literature interrogation should provide for a thorough analysis of the research physical context or setting, the research problem, and the research knowledge gap. There are several guides on research conceptualisation and literature interrogation meant to assist research students and novices. But guides do not work in all cases and situations because of different contexts and, therefore, leaving room for improvement and additional guides such as this paper. Using information compiled from examiners' reports of our research students and discussions with research students and colleagues, we propose a structured approach to research conceptualisation that is augmented by a thorough analysis of the research physical context or setting, the research problem, and the research knowledge gap. Though research conceptualisation resides in the 'introduction to the research' component of a research, ideally its interrogation is part of the 'conceptual framework' component - which we narrowly call the literature review. Therefore, as part of literature review, we should explicitly interrogate academic and non-academic literature on (i.) the physical context or setting where the research will take place and (ii.) the research problem. A thorough research problem analysis requires systems thinking and the theory of constraint to guide the interrogation of literature. These tools provide for going beyond the 'he said, she said' literature review write-ups that are evident in most student write-ups. Further, research conceptualisation is incomplete unless we explicitly interrogate empirical or primary research literature to expose the (iii.) research knowledge gap. When undertaking a research knowledge gap analysis, we should not only focus on the empirical research results and research findings. Instead, we should also interrogate research strategies, designs, procedure and methods that such studies applied so that we also start reflecting on which research procedure and methods we will apply to our research.

Keywords: Conceptual framework, Literature review, Research conceptualisation, Research knowledge gap analysis, Research problem analysis, Research physical context, Setting analysis

1. Introduction

Business and public administration research reports exhibit, among others, three shortcomings vis-à-vis research conceptualisation. First, literature on the physical research context or setting where the research will actually take place is insufficiently interrogated. Therefore, the pertaining research problems are inadequately contextualised within their physical research setting. Second, there is no explicit approach to interrogating literature on the research problem. This implies the discussion of the research problem hardly goes beyond 'she said, he said'. Third, the approach to interrogating past and

current literature on the research under study to identify the research knowledge gap is limited to findings and conclusions. As a result, we fail to use these studies to establish methodological options that we can employ for our respective research. Wotela (2017a) has argued that these shortcomings arise because as most learning institutions do not offer an explicit module on reviewing literature or conceptualising conceptual frameworks nor do they offer a full module on research writing. Further, in research and research writing, reading a lot (Mouton, 2001), summarising, and rewriting perspectives of others is necessary but insufficient. Therefore, research students and novices default to 'he-said, she-said'

write-ups. This frustrates supervisors and examiners who expect readable write-ups with a prescribed purpose as well as well organised and synthesised information.

Not all is lost. The debate on how not to conduct and write-up a literature review is conclusive (Mouton, 2001). However, the debate on how to conduct and write-up a literature review is still alive and, therefore, allowing us some space to contribute to this debate (Ravitch & Riggan, 2012). This paper proposes an explicit approach to conceptualising a business and public administration research – that is, the research title, research problem statement, research purpose statement, and research questions as well as where applicable the accompanying research hypotheses or research propositions. Further, it provides for an explicit and alternative approach to interrogating literature on (i.) the physical context or setting where the research will actually take place and (ii.) the research problem, and (iii.) the research knowledge gap to augment the initial research conceptualisation so that it is engraved in literature. More specifically, we propose that interrogating literature on the research problem requires one to apply systems thinking (Gharajedaghi, 2006) and the theory of constraint (Youngman, 2009) so that the product is structured, comprehensive, and critical. Further, when decoding or identifying the theoretical research knowledge gap after comprehending the research problem, one should also be cannibalising the research strategies, designs, procedure and methods that similar past and current research studies applied.

We hope the paper can guide research students and novices to go beyond 'he-said, she-said' kind of write-ups that have no head or tail. Though we emphasise the structured process, we are aware that eventually the product is subject to constructivism (Driscoll, 2000; Gredler, 2001; Siemens, 2005) that should intellectually dictate how the researcher should eventually pursue the research. Once again, we are targeting business administration and management research as well as public administration and management research. However, the proposed procedure can apply to research in the social sciences and humanities.

We begin with pointing out the six components of a research report and the seven elements of a conceptual framework (Section 2) before detailing the first three elements which are the focus of this paper.

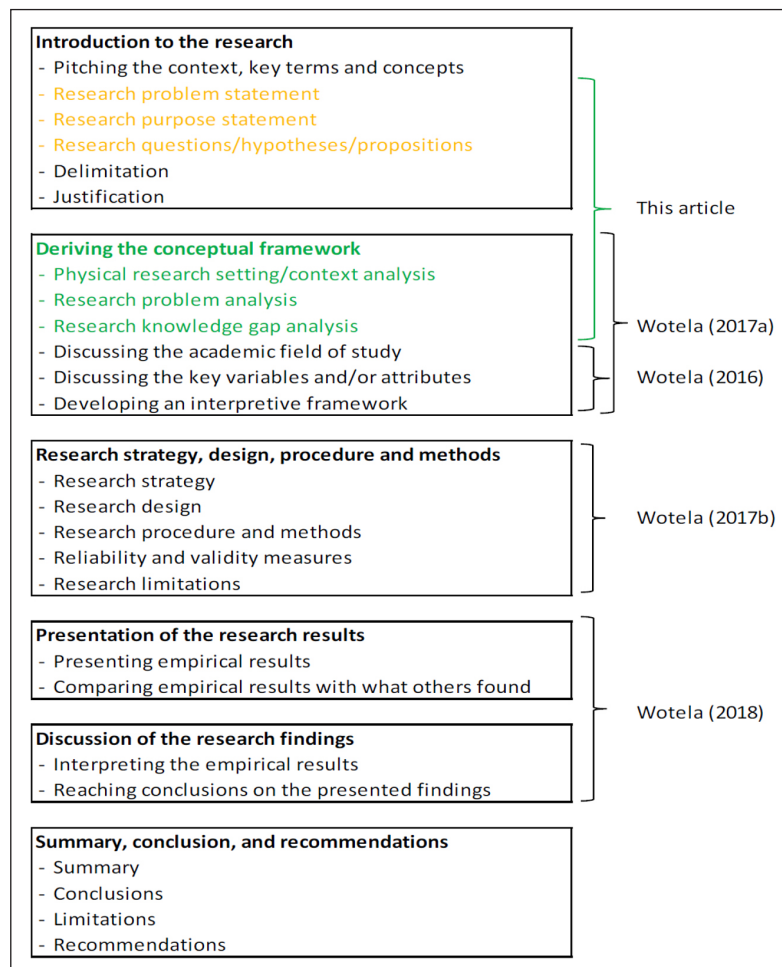
We devote Section 3 to the key considerations of conceptualising 'what' research one intends to do and 'why'. In Section 4, we point out the importance of interrogating literature on the physical research context or setting as well as how to approach such an interrogation. Section 5 summons systems thinking (Gharajedaghi, 2006) and the theory of constraint (Youngman, 2009) to propose a process of interrogating literature on the research problem. Lastly, in Section 6 we propose how one should identify and present the research knowledge gap of the research problem under study.

2. Main Components of a Research Report and Key Elements of the Conceptual Framework

Figure 1 on the following page shows six independent but interlinked components of a business and public administration research report - proposed by Wotela (2016, 2017a) - that is, (i.) the introduction to the research; (ii.) the conceptual framework; (iii.) the research strategy, design, procedure and methods; (iv.) the presentation of the research results; (v.) the discussion of the research findings; and (vi.) the summary, conclusion, and recommendations. Building on Ravitch and Riggan (2012), Maxwell (2013) as well as Kumar (2014); Wotela (2017a) has argued that we review literature (the process) to derive a conceptual framework (the product). Further, based on Badenhorst's (2007) work, Wotela (2016, 2017a) has proposed six subcomponents of the conceptual framework outlined in Figure 1. These are the physical research setting or context analysis, research problem analysis, research knowledge gap analysis, identifying and discussing the academic field of study, identifying and discussing the key attributes and or variables, identifying and discussing the interpretive framework.

In sum, Wotela (2017a) has argued that the main outcome of a literature review process is the 'conceptual framework' component that should ideally achieve three outcomes – namely; (i.) to understand the research problem within its physical context or setting, (ii.) to establish the research knowledge gap, and (iii.) to determine the interpretive framework. To augment Wotela's (2017a) paper on conceptualising conceptual frameworks in business and public administration research, Wotela (2016) has a paper solely focusing on the third outcome covering the fourth, fifth, and sixth subcomponents of the conceptual framework. Our paper focuses on the

Figure 1: Showing the Six Components of a Research Report and Subcomponents of the Conceptual Framework



Source: Author

first and second outcomes covering the first three subcomponents (of the six subcomponents) of a conceptual framework - that is, 'physical research setting or context analysis', 'research problem analysis', and 'research knowledge gap analysis'. The objective is to ensure that these subcomponents explicitly contribute to conceptualisation of research in business and public administration as well as discussions in the other subcomponents of the conceptual framework and other components of the research report. However, we need to initially conceptualise the intended research before we undertake these three subcomponents of the conceptual framework which in turn strengthens conceptualisation of the intended research.

3. Research Conceptualisation - 'What' Research to Pursue and 'Why'

Research conceptualisation resides in the 'introduction to the research' component. Overall, this

introductory component provides for articulating the 'what' research we intend to pursue and 'why'. Research conceptualisation comprises turning a research idea into a researchable process that should in turn end up in a research report, it be a thesis or a dissertation. Rather than a laborious activity, it is an intense reflection process that should allow us to clearly articulate what the intended research should focus on. Even though the research is applied or practical as is the case with most post-graduate business and public administration, research conceptualisation should be an academic process. Therefore, we propose and articulate three concurrent step to initially conceptualise a research - that is, (i.) thinking through the research we intend to pursue, (ii.) drafting and reflecting on the draft working research title, and (iii) drafting the working research problem statement, research purpose statement, and the research questions as well as where applicable the accompanying research hypotheses or research propositions. Recall that

Table 1: Showing the Seven Questions We Can Use To Reflect for Five Days or More on the Research We Intend To Pursue

	Day 1	Day 2	Day 3	Day 4	Day 5	Consensus
What is my research problem, opportunity, or question about?						
How do I know this research problem, opportunity, or question actually exists?						
Why is this research problem, opportunity, or question worth pursuing?						
What do I intend to account for the extent or the reasons underlying the research problem, opportunity, or question?						
What research procedure and methods do I intend to use for my research and why?						
What research results do I anticipate?						
How and to whom will my research results be of use?						

Source: Author

these are working drafts that we should continuously update as we interrogate literature meant to attend to the six subcomponents of a conceptual framework.

First of all, we should, intensely so, think through the research we want to pursue so that we do not waste time doing a research for weeks if not months or years only to realise that this is not the research we want to do. The first column of Table 1 shows the seven questions that we should answer for five days or more without the aid of any reference material (blue sky thinking) other than our brain, paper, and pen. Further, we should exercise honesty by not referring to our previous answers. At the end of the five days or more, we should then enter our responses onto the Microsoft Excel template of Table 1. Thereafter, we should compare the responses of each question over the five days or more. If the answers are the same on each of the five days or more then we can take that as a given and we should enter the answer as is in the column labelled 'consensus'. However, if the answers to a question differ over the five days or more, then we need to reflect further before reaching consensus on such a question. This simple but repetitive process helps us to intensely reflect on the research we intend to pursue. Reaching consensus with inner self is not definite but at the end of this exercise we should be one notch clearer about the research we intend to pursue at least on what it is about and what it might achieve.

The second step should be drafting and reflecting on the working research title. Again here we are of the view that the draft research title, no matter how

crude, should come early in the research process to pave the way and allow us to focus. However, it should be revised as we make progress with our research. Writing experts, such as Nancy Halligan, recommend that a title should have strong and active verbs as well as specific nouns - for example, 'evaluating post-apartheid corrective labour policies in South African tertiary institutions' or 'deriving traditional reproductive regimes to explain subnational fertility differentials in Zambia' or 'the leadership paradigm describing the South African Police Service: a case study of Gauteng'. Further, a research title should include the research issue - for example, '... post-apartheid corrective labour policies ...' or '... subnational fertility differentials ...' or 'the leadership paradigm ...'. It should also have the physical research setting or context - for example, '... South African tertiary institutions' or '... in Zambia' or '... the South African Police Service: a case of Gauteng'. Other editorial parameters include limiting the number of words to between 13 and 16 words. In all, the title should be succinct enough not to describe the topic but flag it. In some cases, it should not include the procedure and method as we have done in our first two examples.

In most cases, we draft our initial research title from literal definitions. Unfortunately, most literal definitions are different from academic meaning. For example, an English dictionary defines the word *emergent* as 'starting to exist or to become known' and yet in academia we also use this word to mean uncertainty. Therefore, we need to reconcile each word in the draft working research title to reflect its literal and academic meaning. Table 2 is a template that we can use to reflect on the draft working

Table 2: Showing a Template One Can Use To Reflect on the Research Title First Using an English Dictionary and then Academic Articles

First draft	Evaluating post-apartheid corrective labour policies in South African tertiary institutions	
Word in title	Meaning using English Dictionary	Meaning according to academic articles
Evaluating		
Post-apartheid		
Corrective		
Labour		
Policies		
South African		
Tertiary		
Institutions		
Second draft		
Final draft		

Source: Author

research title. The first row is reserved for the first draft (as illustrated). We should deposit each word in the draft research title into the first column of the table (as illustrated). We should then proceed to define each word in the first column using an English Dictionary. This exercise is literally a common sense way of comprehending the research we want to pursue. Regardless, there is a likelihood that we will edit our draft working research title after this interrogation which we should deposit in the second last row of the table labelled 'second draft'.

We move onto the third column of the table. Rather than using the English Dictionary, we scan latest academic literature that has described these words to grasp the 'implied' academic meaning. This is actually the beginning of reviewing academic literature preferably on the research we intend to pursue and, therefore, quite useful. Sourcing, selecting, and summarising such literature is involving and introduces the work that lies ahead. Specific to this exercise is that various academic authors coin various operational definitions of these words to suit their pursuit and, therefore, these words will be implicit. This implies fishing out the definitions of these words is not as easy. Further, this exercise identifies debatable academic words in our draft working research title that need further reflection. For example, the word 'impact' might imply a quantitative research strategy. Similarly, the word 'explore' might imply applying grounded theory. After populating the second and third columns, for each word we should review the English definition (second column) and then the academic description (third column) and ask, 'is this what I want to do

literally (second column) and academically (third column)?' Such reflection, if effective, provides for refining or even redrafting the working research title substantially. We should then write out the refined draft working research title in the slot labelled 'final draft'. We can repeat the exercise from any stage if in doubt or not happy with the final draft.

Lastly, we can now draft the working research problem statement, the research purpose statement, and the research questions as well as where applicable the accompanying research hypotheses or research propositions. Once again the words 'draft' and 'working' are explicit to imply that these research conceptualisation elements will change fundamentally as we progressively review literature to derive the conceptual framework of the intended research. In most cases, research conceptualisation is only finalised after deriving its conceptual framework or even after we conclude the research. For business and public administration and management research, the research problem should emanate from everyday observation and interaction with society. Intuitively, "research is always conceptualised around a problem" (Badenhorst, 2007:19) and, therefore, a research problem statement is an expression of this problem. As such it is a clear, well-thought out, and well-presented 400 word statement (or a page) of a problematic area worth pursuing through research.

Badenhorst (2007) recommends that the research problem statement should comprise a 'narration' of the research problem and all the six elements of a conceptual framework. As implied by Belcher

(2009), a narration of the research problem should comprise two parts - that is, the 'general' statement and the 'thesis' statement. A general statement is factual and hardly debatable. A cynical example is that 'the sun will rise tomorrow'. A more practical example is that 'the government has spent billions in an effort to create employment for the uneducated, unskilled, and unemployed citizens'. Regardless, we have to support such a statement with literature, academic or otherwise. Therefore, our example should read, 'according the 2014 Treasury Report, the Government has spent almost 28 billion in an effort to create employment for the uneducated, unskilled, and unemployed citizens'.

On the other hand, a thesis statement problematizes the situation by making it debatable (Belcher, 2009). Similarly, we need to support such a statement with literature, academic or otherwise. Therefore, our example might read as follows, 'according to the 2018 Treasury Report, the Government has spent almost 28 billion in an effort to create employment for the uneducated, unskilled, and unemployed citizens' - that is, the general statement. The thesis statement may then be, 'however, numerous evaluation reports, for example *Fictitious (2016)*, show that this effort is fruitless because the interventions have hardly made a dent in unemployment levels since 1994'. Clearly, the thesis statement will have supporters and antagonists. Therefore, a researcher's mission is to collect, collate, process, and analyse primary evidence to prove whether the thesis statement is true or not. We may also want to consider Leedy and Ormrod's (2010) valuable guidelines and checklist for developing a problem statement 'narration'.

Apart from the 'narration', the research problem statement should include summarised key aspects of the six subcomponents of a conceptual framework. This implies that developing a research problem statement is a process that involves intensive and extensive literature review and may take time to ground. Critical ingredients of the research problem statement include a highly summarised 'research problem analysis' and 'research knowledge gap analysis'. The former is a subcomponent of the conceptual framework that provides for interrogating literature, academic or otherwise, so that we fully comprehend the research problem under study. The latter provides for interrogating past and current studies to identify the theoretical knowledge gap on the research under study.

After drafting the working 'research problem 'narrative' statement', we should move onto articulating the 'research purpose statement'. This statement spells out the overall aim of the research by stating what we will do to address the research problem - that is, "the [main] goal for the research effort" (Leedy & Ormrod, 2010:56). Some institutions opt to present the 'research purpose statement' as the main objective and sub-objectives of the research. A 'research purpose statement' should explicitly state 'what' we intend to pursue, 'how' we intend to pursue it (Badenhorst, 2007), and the 'line-of-inquiry'. The 'how' part specifies the tool or model or framework that we employ to tackle the 'what' part of the research. For example, 'this research employs the leadership paradigm [*how*] to interrogate why the South African Police Service is ineffective [*what*]'. While the first requirement is present and common in most research write-ups, the 'how' part and the 'line-of-inquiry' is either missing or implicit if present. Sometimes we even mistake the research strategy, design, procedure and method to be the how part and yet this is not the requirement. The 'line-of-inquiry' - which most dated research methodology text capture as research design - is equally important and comprises five categories, namely, narration, description, explanation, interpretation, and exploration.

In addition, researchers should continuously ask, 'what is the purpose of my research? What is the purpose of each section and chapter in pursuing this research purpose? Inherently, the purpose statement should also capture the 'anticipated outcomes' (Badenhorst, 2007) and the delimitation of the research. The former is highly debatable because it implies we have determined the outcome before undertaking the empirical part of the research. The latter refers to what the research will cover and will not cover academically - and not methodologically. Lastly, we could consider using Leedy and Ormrod's (2010) approach that they provide on Pages 52 through 55 to refine our draft research purpose statement.

After drafting the research problem statement as well as the research purpose statement, we should then proceed to conceptualise the research questions. We should recall that the research title, the research problem statement, the research purpose statement, and the research questions are highly interlinked and we should present them as such. Research questions provide for manageable and

well-defined focused segments that we should answer to realise the research purpose and, therefore, address the research problem (Moon, 2007). The research questions determine, and benefit from, the empirical research data collection, collation, processing, and analysis. Therefore, "after collecting and analysing data, the researcher should ask: how do the data answer my research questions?" (Leedy & Ormrod, 2010:56). Whilst, the research purpose statement points out the outcomes of a research - that is, how a research will contribute to enhancing our knowledge - the research questions specify the outputs of a research, that is, what a research actually delivers.

We should not confuse these research questions (articulated in the 'introduction to the research' component as part of research conceptualisation) to those in the research data or information collection instrument (articulated in the 'research strategy, design, procedure and methods' component). The research questions, should technically live to the definition of a 'question', that is they should solicit a discussion and not monotonic answers, such as yes or no. Further, we should phrase research questions 'literary' in a logical sequence to provide a coherent outline for the entire research report in general and more specifically the empirical results section or chapter of the report. This means that research questions should provide an organising framework for, and correspond to, specific sections or chapters when we present the research results and discuss the research findings (Badenhorst, 2007). Actually, Badenhorst (2007) has provided a guide on Page 26 that we can use to evaluate draft research questions.

In addition to research questions, if we are pursuing a quantitative research strategy or a mixed research strategy then we should also formulate research hypotheses or research propositions as well. While "research questions [do not] offer any speculative answers..., intelligent [research hypotheses] are tentative..." answers to research questions (Leedy & Ormrod, 2010:56). Salkind (2013) provides a good description and examples of constructing research hypotheses, that is, 'null' (H0) hypotheses versus 'alternative or research' (H1) hypotheses as well as 'non-directional' hypotheses versus 'directional' hypotheses. Put simply, Research propositions are speculated scenarios of usually a non-existent reality. For example, an ideal research question would be, 'what factors hinder people from saving their income?' A tentative answer (directional hypothesis)

to this question would be, 'compared with low income earners, higher income earners save a larger proportion of their income'. The non-directional hypothesis would suggest that 'there is a difference in the proportion of income saved by lower income earners and higher income earners' while the null hypothesis would suggest that 'there is no difference in the proportion of income saved by higher income earners and lower income earners'. A proposition would be 'if low income earners had high incomes, they would save larger proportions of their income'.

We also propose that rather than replacing the research questions with the research hypotheses or research propositions, we should present them alongside the research questions. Therefore, in a quantitative or mixed research strategy, we should present (i.) the research questions, (ii.) the null hypotheses, and (iii.) the research or alternative hypotheses which could be either directional or non-directional. Similarly, in some mixed research strategy, we should present (i.) the research question and (ii.) the research proposition. In such cases, we are expected to answer the research questions by testing the research hypotheses or proving/disproving the research propositions. Sometimes undertaking the empirical research part, that is, research data or information collection, collation, processing, analysis, and interpretation might not afford us a chance to test all the hypotheses or prove/disapprove all the research propositions due to data or information or other methodological limitations. However, this does not mean we should not answer all the research questions even if it means using the qualitative research strategy.

Further, a research employing a qualitative research strategy can use basic descriptive statistics but this does not make such a research a mixed research strategy or a quantitative research strategy. A research is a mixed research strategy or a quantitative research strategy if, and only if, it poses and answers research questions alongside proposing and testing research hypotheses. Similarly, a researcher employing a quantitative research strategy can apply some thematic and content analysis when presenting the research results or discussing the findings but this does not make the research a mixed research strategy.

In sum, research conceptualisation – that is, the research title, research problem statement, and research purpose statement as well as research

questions and where applicable the accompanying research hypotheses and propositions – pointing out 'what' research we intend to pursue and 'why' sets the outputs through research questions and where applicable the accompanying research hypotheses and propositions. It also sets the outcomes or objectives of the research through the research purpose statement and to a certain extent the research problem statement. More importantly, we should use research conceptualisation to locate the relevant and important literature that we should be interrogating to augment research conceptualisation. Such a structured approach allows us to remain focused on the research aim, outcomes, and outputs. The next sections attend to the first three, of six, literature interrogation that we require to strengthen research conceptualisation and contribute towards deriving the conceptual framework of the research under study.

4. Physical Research Context or Setting Analysis

Kelly (2007) has argued that the African continent should learn to swim with sharks in the globalisation ocean. However, before then, the continent should learn how to swim in the first place. Invariably, we should learn to contextualise our development interventions and, therefore, our research and development. Unless we can understand business and public administration and management research in the context of its physical setting or context, our academic narratives will not be locally relevant no matter how solid. This means that we should understand the physical research setting or context (first subcomponent of the conceptual framework) with a view to contextualise the interrogation of the research problem (second subcomponent of the conceptual framework). We can also use this understanding to contextualise the remaining subcomponents of the conceptual framework as well as the other components of the research report. A detailed understanding of the physical research setting or context provides for decision-making in a research process such as what literature, arguments, and narratives are applicable to our research. It also provides information that is crucial when undertaking the empirical part of the research such as deciding on the target population. Similarly, this interrogation helps us focus on what is important to our research.

In common English usage, the term context has two perspectives. The first perspective refers to

the non-tangible ideological space in which something is or should be understood. For example, one can understand human fertility from a biological perspective or a sociological perspective or an anthropological perspective. We refer to this as the academic context (fourth subcomponent of the conceptual framework). The second perspective refers to the physical space or environment where something resides or happens. We refer to this as the physical context. By extension, the physical research context or setting is where the research will take place. For example, we can study financial markets in Africa meaning that the physical research setting or context is the African continent and, therefore, we should understand the African continent before anything else. Further, we can extend this research to all developing countries or restrict it to one country. Regardless, this means understanding developing countries or that single country before anything else. This is important because the same research problem we want to study manifests differently in different physical environments. Put differently, different environments have different problems. Therefore, to fully appreciate a research problem we have to appreciate the physical research context or setting.

Interrogating this subcomponent entails sourcing, summarising, and synthesising literature to write-up on important aspects of the physical research context and those aspects that connects it to the research problem. Therefore, we should interrogate academic and non-academic literature on (i.) the history of the physical research context, (ii.) the description of the physical research context, and (iii.) the attributes of the physical research context relevant, or connecting it, to the research problem under study. For example, if we are studying subnational fertility differentials in Zambia then we should interrogate literature on (i.) the history of Zambia pointing out key aspects of its development trajectory, (ii.) the description of Zambia preferably using a map to point out its notable or distinguishing features, and (iii.) subnational regions within Zambia since the research is on subnational fertility differentials. Similarly, if we want to study performance management in the South African Reserve Bank then we should interrogate literature on the history of the South African Reserve Bank, its description (using an organogram) as well as its mandate, and management arrangements. Interrogation of the physical research context should be sufficient enough to provide a foundation on which we

interrogate literature to understand the research problem under study as well as the other sub-components of the conceptual framework and other components of the research report.

5. Research Problem Analysis

With detailed knowledge on the physical research setting or context, we can now proceed to undertake a research problem analysis (second subcomponent of the conceptual framework). A research problem analysis implies using literature academic or otherwise to show that a research problem of interest exists and then pointing out its dynamics. However, rather than just putting literature together (he-said, she-said), we need to (i.) point out the key factors of the problem under study. Thereafter, (ii.) categorise the factors into symptoms, root-causes, and consequences. We can then (iii.) undertake a trend analysis of symptoms to establish, over time, how the problem under study manifests itself. Eventually, we can (iv.) use the problem tree and the theory-of-constraints to link and plot the factors so that we show their cause-effect relationship. Though logic is a key ingredient at the beginning of this exercise, the final trend and the cause-effect plot should have support from academic and non-academic literature.

The comment, 'this research is too broad ...' notable in most business and public administration research reports is certain when we pitch a research at symptomatic level or try to pursue several root causes of the research problem under study in one research undertaking. Therefore, we propose that we should anchor our respective research on the root causes of the problem under study rather than on its symptoms and certainly not on its consequences. Further, we should strive to narrow down our research to utmost two root causes because a good research is one that is not too broad to be comprehensive, detailed, and critical. Therefore, a research problem analysis is important because it allows us to document root causes of the problem under study before we decide on which one(s) we should pursue in our research. Further, an interrogation of consequences of the research problem under study provides justification for undertaking the research especially if such a status quo might lead to an undesirable outcome.

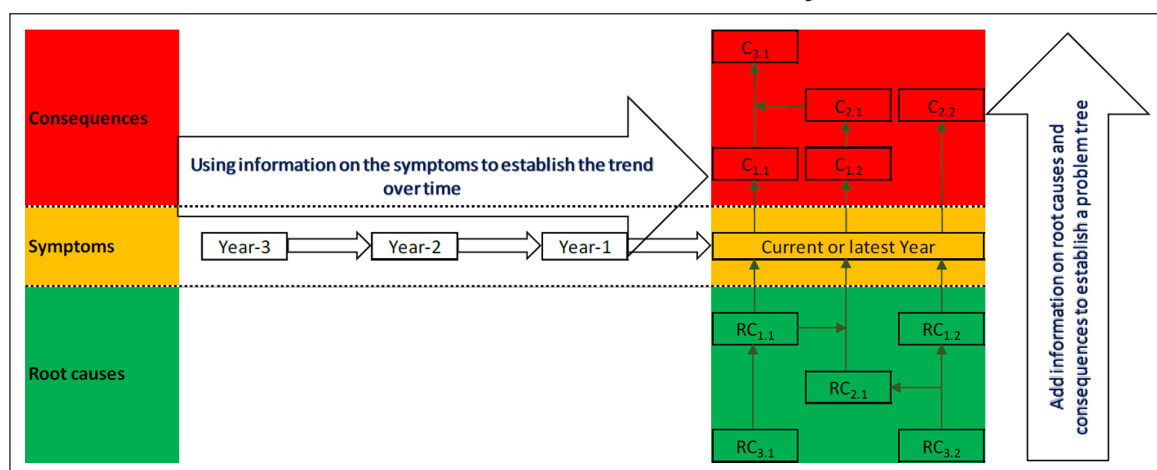
If the research is an evaluation of an intervention, then we should document the intervention

including its programmes, projects, and business lines. For example, if we are evaluating the post-apartheid corrective labour policy in South African tertiary institutions, then we need to detail its history including why such a policy was necessary, its programmes and projects, as well as its implementation. We may also tabulate its results-chain (impact, outcomes, outputs, activities, and inputs) as well as its results-framework (indicators, baseline values, target-values, assumptions, and risks).

We need to review systems methodology (Gharajedaghi, 2006), trend analysis, the problem tree (Norad, 1999), and the theory of constraint (Youngman, 2009) before undertaking a research problem analysis. These tools and soft skills allow us to grasp problem symptoms, root causes, neutral effects, and consequences as well as how these factors interlink as realistically as possible so that we do not over simplify reality. Ideally, we appreciate problems including research problems, if we interrogate them within their totality or the whole. Therefore, apart from understanding the context that defines the unique environment in which the research problem is situated, we should also appreciate the structure or components of the research problem and how these are interlinked (Gharajedaghi, 2006). After identifying these components or factors, we can use the simple steps provided in Norad (1999) to develop a problem tree that links the symptoms, the root causes, and the consequences. To integrate complexity inherent in reality, we should use Youngman's (2009) theory of constraint to include and link neutral effects to the problem tree. If need be, we can also apply trend analysis. In the context of research, we can describe trend analysis as examining how symptoms of a research problem have manifested "... over time, and how [they are] ... likely to develop in the future" (The Organisation for Economic Co-operation and Development, ND). In sum, these tools and skills allow us to interrogate key questions including but not limited to – 'what is the problem?', 'how widespread is the problem?', 'how acute is the problem?', and 'what causes this problem?' – in our research problem analysis.

Figure 2 on the following page shows a generic template we can use to undertake a research problem analysis. The first step is systems thinking (brainstorming) to identify factors affecting, and affected by, the problem under study. At this point, rather than literature, it is the experience we have in business

Figure 2: Showing a Generic Template We Can Use to Undertake a Research Problem Analysis



Source: Author

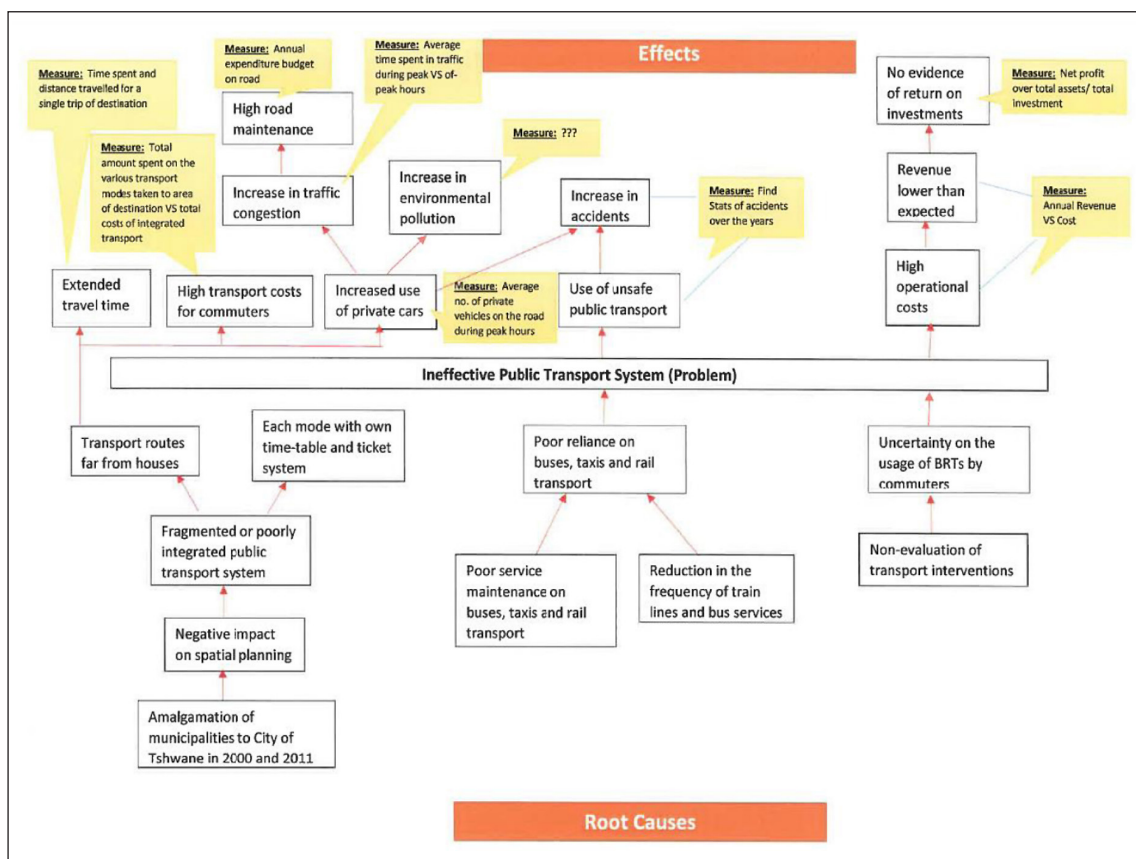
and public administration that counts. Ideally, we should separate the factors into symptoms, root causes, neutral effects, and consequences. Second, we should then apply trend analysis to determine symptomatically how the problem has evolved over time and how it manifests itself. This should focus on the symptoms rather than the root causes or the consequences. Literature allowing, we should pick up the trends of the symptoms of the problem under study as far back as possible. Third, after determining that the problem under study does exist, we should then apply the problem tree and the theory-of-constraints to construct a problem tree – that is, logically linking the root causes including the neutral effects and the consequences to the symptoms (right hand side of Figure 2).

Fourth, one should then use the constructed trend and problem tree to source, summarise, and synthesise literature to discuss the trend over time and the cause-effect of the research problem under study. The discussion should distinctively point out, with support from literature, the symptoms, the root-causes, and the consequences. We should emphasise beginning with a brainstorming session before sourcing literature to support our brainstorming product (trend and problem tree) as well as reconfigure it should the literature suggest so. A 'Figure 3 type' illustration should accompany the discussion so that it is focused, comprehensive, and critical. Further, we should also detail the literature sources including the data, information, and frameworks they employed as well as the limitations. Where possible, we should suggest how our research will overcome the possible limitations.

On concluding the research problem analysis, we need to take a stand on what is plausible to pursue and yet contribute to the research knowledge gap (next section). This is easier said than done because in business and public administration and management literature concludes differently. Some literature points to the problem actually existing while other literature will state otherwise.

In sum, it is important to undertake a thorough research problem analysis because it informs the remaining subcomponents of the conceptual framework and the other components of the entire research. More notably, a research problem interrogation helps us to refine our research conceptualisation – that is, the research problem statement, the research purpose statement, and the research questions as well as where applicable the accompanying research hypotheses or propositions. Therefore, a research problem analysis as well as a thorough understanding of the physical research context or setting determines what we should potentially pursue as well as focus on in our incumbent research. This also implies constraining the number of root causes that we should pursue. A thorough research problem analysis, in context of its physical research setting, will expose several factors affecting or affected by the problem under study. Regardless, we should only select, justify, and pursue utmost two root causes in a single research undertaking. Over and above, we should always contextualise the research problem analysis within its physical research setting. First of all, it is pointless to pursue a research problem that does not exist in our physical research setting or

Figure 3: Showing a Preliminary Product of Undertaking a Research Problem Analysis Before Sourcing Literature to Support or Reconfigure the Identified Factors and their Relationship



Source: Author

context even though it exists elsewhere. Second, it is our duty to show, with support from literature, that a researchable problem does indeed exist in the physical research setting or context. Lastly, contextualising the research problem within its physical research setting allows for distinguishing factors as well as literature that applies to our research from that which does not.

6. Research Knowledge Gap Analysis

It is a must that researchers should pursue a research that advances existing knowledge (Levy & Ellis, 2006; Rocco & Plakhotnik 2009). Ideally, the research knowledge gap is the difference between the research problem and what others have already pursued or uncovered on this research problem. Therefore, after reviewing literature to understand the research problem (second subcomponent of the conceptual framework) preferably in its physical research context or setting (first subcomponent of the conceptual framework), we should then proceed to undertake a research knowledge gap analysis (third subcomponent of a conceptual

framework). By decoding what others have not yet pursued, this interrogation provides justification why a research is worth pursuing and, if so, which of the strands among those we identified during the research problem analysis should we pursue to effectively contribute to the body of knowledge. As discussed in Section 3, we should differentiate between theoretical research knowledge gap and empirical knowledge gap. The former is the one we have just described above while the latter is the one we identify after undertaking the empirical part of the research under study. It differentiates the research results and findings of other studies from the results and findings of the research we are currently pursuing. This might extend to testing the ability of existing established frameworks to interpret research findings (Wotela, 2018).

To identify the theoretical research knowledge gap, we should review past and current empirical or primary research articles on the research topic under study so that we point out what others have pursued. In doing so, we can infer what has not been pursued - that is, the theoretical research

knowledge gap. Further, when doing so, we should also familiarise ourselves with the research strategy, research design, research procedure and methods that these similar studies employed. This includes the data or information they collected and analysed, their empirical research results, their research findings and the frameworks they used to interpret the research findings, the conclusions they draw as well as their documented research limitations and recommendations. Finally, we should also critically assess these articles and point out their strengths and limitations.

The starting point to a theoretical knowledge gap analysis is a detailed search and sourcing of empirical research studies on the subject under study. We should attempt to source ALL similar past and current empirical research studies done within our physical research setting or context and at least SOME done elsewhere. However, we should limit our search to empirical or primary studies. This means published studies that actually collected, collated, processed, and analysed research data or information before presenting the research results and discussing the research findings. Put differently, unless otherwise we should avoid theoretical studies without an empirical component. Once we have sourced the empirical studies, we should reflect on their content individually and as a collective. Sourcing past and current empirical and primary research studies is a defining moment because we should hope to find similar but not identical studies. If we find a research study that is identical to ours, it probably means we have no research knowledge gap to uncover and, therefore, our incumbent research cannot advance the existing knowledge. In this case, it is certainly fruitless to pursue such a research because we will not contribute anything to the known body of knowledge.

After sourcing the required and relevant literature, we can use Figure 4 - which is a customised thematic analysis grid template - to undertake a research knowledge gap analysis. See Anderson, Lees, and Avery (2015) for a discussion on thematic analysis grids. If used correctly, the research knowledge gap thematic analysis grid can provide for a structured, comprehensive, and critical approach to reviewing literature. The first column of the analysis grid template provides for the required information or themes on or from the sourced empirical or primary research article. We should use the top part of the grid - that is, above the grey shade - to capture

'administrative' information on the sourced articles. The bottom part is for capturing the 'content' from the sourced articles. The 12 themes are meant to guide what we should focus on when undertaking a theoretical research knowledge gap analysis. If need arises, we can add more or even subtract themes. Therefore, the second to fourth columns of Figure 4 provides for information on each article (top part) and information from each article on each of the 12 themes (bottom part). Similarly, we can extend the number of columns depending on the number of articles that we have sourced.

When fragmenting or abstracting information on each of the 12 themes, we should not paraphrase as yet but rather enter it into the spreadsheet as it is in the source articles accompanied by the page number (hence the "... pxx to provide for this) where the respective information is coming from. It should be more like we are highlighting text using a highlighter pen only we are actually transferring this text onto the analysis grid template. Further, the information fragment should not be more than 100 words or five sentences in each cell. Limiting the number of words provides for abstracting important material only. Not all articles will have information on all the 12 themes. Regardless, we suggest that each theme should have information from at least three articles.

Lastly, in the last row, we should point out what we think are the limitations of each article that we have sourced and fragmented. Therefore, apart from the limitations that each article documents, we should also assess and state what we think are the limitations of each article. The last three columns provide for us to interrogate similarities (third last column) and differences (second last column) of various authors - of the abstracted information - on each of the 12 themes. The last column (own reconciliation) provides for our final thought on what we think the articles are collectively communicating on each theme.

When writing up, we should introduce these studies as a collective and then briefly describe them individually starting with the earliest until the latest. We can also group them by area of focus especially if such areas resonate with our incumbent research. We propose concluding the research knowledge gap analysis with a write-up on the material in the last three columns of Figure 4 (similarities, differences, and reconciliation). These columns allow for us to

Figure 4: Showing a Research Knowledge Gap Analysis Template

Author and year:						
Title of the article:						
Start and end page:						
Country of publication:						
Record of where it is located:						
Type of the article (<i>book/journal/report</i>):						
Academic discipline:						
Topic:						
A brief description of the author:						
A brief description of the article (<i>i.e. central idea and argument</i>):						
				Similarities	Differences	Own reconciliation
Aim and objectives of the research	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Interpretive/theoretical frameworks considered	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Research strategy (qualitative or quantitative)	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Research design	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Data/information collection instrument used	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Target population and sampling technique applied	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Data/information collection process	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Data/information processing	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Data/information analysis	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Key empirical results presented	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Key research findings	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Limitations the study has documented	" ... " (pxx)	" ... " (pxx)	" ... " (pxx)			
Your own assessed limitations of the study						

Source: Author

start with what we want to say about these studies as a collective before drawing in selected literature to support our argument. This is the hallmark of good writing, research or otherwise. Further, we should highlight the limitations of these empirical studies (last row) as well as suggest how we intend to mitigate these in our incumbent research. Lastly, we should attribute all our arguments (idea or direct) and reference them correctly.

In sum, the theoretical research knowledge gap analysis serves three purposes. First, to point out the aims, objectives, research strategies, designs, procedures and methods as well as interpretive frameworks that similar research studies have applied. Second and an extension of the first, the research knowledge gap analysis should provide us with some research methodological options that we should consider employing when we undertake the empirical part of the incumbent research. Lastly and more importantly, to point out the research results, findings and conclusions of similar research studies and in doing so we should identify the theoretical research knowledge gap. Our potential theoretical research knowledge gap is the difference between our incumbent research problem and what other similar research studies have pursued and resolved. Procedurally, having detailed the research problem of the incumbent research, all we need to do is compare it with what other similar research studies have pursued and resolved. However, we should not be tempted to pursue ALL the unpursued or unresolved facets or root causes of a research problem in a single research because it might be too broad and, therefore, compromised on its criticality.

7. Conclusion and Recommendations

Within the context of the six components of a research report, Wotela (2017a) has discussed the second component of a research report - that is, the conceptual framework which he describes as a summarised outline that proposes how we should undertake the empirical part of our respective research based on an articulated theoretical interrogation of key literature. Further, he points out and details the six subcomponents of a conceptual framework. This paper is a contribution on how we can conceptualise a business and public administration research as part of the 'introduction to the research' (first component of a research report) and then explicitly interrogate literature on the first three (of six) subcomponents of a conceptual framework

(second component of a research report) to in turn augment the initial research conceptualisation. These three (of six) subcomponents of a conceptual framework are the physical research setting or context analysis, research problem analysis, and the research knowledge gap analysis. Therefore, apart from being key building blocks of a conceptual framework, the first three (of six) subcomponents of a conceptual framework are key ingredients of a solid research conceptualisation.

The paper has highlighted that research conceptualisation - that is, the research title, the research problem statement, the research purpose statement, and the research questions as well as where applicable the accompanying research hypotheses and propositions - is the nerve centre of a research undertaking. More importantly, we should idealistically initialise research conceptualisation and then augment it after interrogating key literature. This implies that we can only consider research conceptualisation as finalised after we have interrogated key literature and conceptualised its conceptual framework (second component of a research report). Second, the paper has emphasised the importance of contextualising a business and public administration research within its physical setting. Invariably, this implies that a research problem analysis should be contextualised within its physical research setting. Therefore, before interrogating literature on the research problem, we should interrogate literature on the key features of the physical research setting or context as well as those that relate the physical research setting or context to the research problem under study.

Third, for the research problem analysis, we should logically link the key factors and attributes of the research problem under study rather than presenting it as 'he said, she-said' that is typical in most business and public administration research. Therefore, we have proposed the use of systems methodology (Gharajedaghi, 2006) to identify and possibly link the key factors and attributes key to the research problem under study. Further, we have proposed using the problem tree and the theory of constraint also known as the current reality tree (Youngman, 2009) to (i.) categorise the key factors and attributes key to the research problem under study into symptoms, root causes, neutral effects, and consequences as well as (ii.) linking them into a logical tree-like structure. It is only after this reflective exercise that we should then summon

academic and non-academic literature to support or help us readjust our categorisation and linkages. The final product of this exercise is neither wrong nor right but it should be anchored in literature.

Fourth, after interrogating the research problem under study we should then undertake a theoretical research knowledge gap analysis. This interrogation points out what similar past and current research studies have pursued and resolved so that we know what we should pursue and aim to resolve in our incumbent research. We should explicitly opt to pursue what others have not resolved so that our incumbent research can potentially contribute to the body of knowledge. Further, we should pursue only one or utmost two root causes so that our research is focused and, hence, detailed and critical. A well done theoretical research knowledge gap analysis does provide for research strategies, design, procedure and methods we should consider for our incumbent research. We have emphasised that conceptualisation of our respective incumbent research is incomplete unless it incorporates the theoretical research knowledge gap.

In sum, this paper is answering the question, 'how can we conceptualise a solid business and public administration research?' There should be an explicit and purposive interrogation of the research problem under study in the context of its physical research setting as well as an informed research knowledge gap at the core of the research title, the research problem statement, the research purpose statement, and the research questions as well as where applicable the accompanying research hypotheses or propositions. The process and products of analysing the research physical context or setting, the research problem, and the research knowledge gap should be detailed enough to sufficiently contribute and determine the other subcomponents of the conceptual framework as well as the other components of the research including research conceptualisation.

We should treat this paper as an alternative guide that helps us navigate through a purposive literature review process. It is start-up capital that provides an initial structure as well as a process with the hope that our thought process would take over as we increasingly understand what we need to do. Therefore, it is not about merely following these steps but rather as Wotela (2016) has argued, the emphasis is a reflective process guided

by continuously asking and answering the questions 'what' should I do, 'why' should I do it, and 'how' should I do it? The product of a literature review and a solid research conceptualisation should be a well-defined output beyond the 'he-said, she-said' common in business and public administration research. Further, the outcome should be the innovative approach to how we should undertake the empirical part of our incumbent research. This means continuously asking 'why am I doing this?', 'what am I learning from this?', 'how is this relevant to my research?', and 'how do I adapt and integrate this knowledge into my research?' Whilst our target is business and public administration and management students we are confident that the principles we have discussed and proposed do apply to other social sciences and humanities.

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