Railway safety awareness campaigns as an educative process

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DECLARATION

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I, Kekeletso Prudence Mbombo, hereby declare that the dissertation entitled **Railway safety awareness campaigns as an educative process**, which I hereby submit for the degree master's in education at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

ETHICS STATEMENT

I, Kekeletso Prudence Mbombo, the author of this dissertation, have obtained, for the research described herein, the applicable research ethics approval.

I therefore declare that I have observed the ethical standards required in terms of the University of Pretoria's Code of Ethics for Researchers and the Policy guidelines for responsible research.

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August 2019

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- Compliance with approved research protocol,
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ABSTRACT

In the railway industry (like other industries), safety awareness campaigns are conducted as intervention programmes for providing educational programmes to change the attitudes and behaviours of the general public that interact with the railway environment. Such educational intervention programmes are ideally achieved by following pedagogical principles that ensure programme quality. However, it seems that even with the use of safety awareness campaigns, the desired safety behaviour among the general public in the railway environment is not yet established. The purpose of this research study was to understand how the Railway Safety Regulator (RSR) – as the custodian of railway safety in South Africa – plans, designs and implements its safety awareness campaigns as an educative process to combat railway-related occurrences involving the general public. As an exploratory study, the researcher applied the industry standard logic model framework (LMF) to guide the process of the investigation and utilised an interpretivist lens to understand the context of the phenomenon investigated. Following a qualitative programme evaluation research approach, a safety awareness campaign was studied as a single case study to understand how the RSR plans and develops their safety awareness campaigns. Six purposively selected RSR employees participated in the study, providing qualitative data through semi-structured interviews and document analysis. The findings of the study conclude that the Regulator's current practice of conducting awareness campaigns does not reflect an educative process, hence helping to explain why the envisaged change in public behaviour is not attained.

Keywords: Awareness campaign, educative process, logic model framework, evaluation, interpretivist

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To whom it may concern

This is to certify that I, Alexa Kirsten Barnby, an English editor accredited by the South African Translators' Institute, have edited the dissertation titled "Railway safety awareness campaigns as an educative process" by Kekeletso Prudence Mbombo for the qualification Master of Education (MEd) in Curriculum and Instructional Design and Development.

The onus is on the author, however, to make the changes suggested and address the comments made.

LIST OF ABBREVIATIONS

APP	Annual Performance Plan
LMF	Logic Model Framework
Ops Plan	Operational Plan
PPE	Personal Protective Equipment
PRASA	Passenger Rail Agency of South Africa
RM	Regional Manager
RRP	Rapid Rail Police
RSR	Railway Safety Regulator
SALGA	South African Local Government Association
SAPS	South African Police Service
SLA	Service-Level Agreement
SOP	Standard Operating Procedure
SOS	State of Safety
TFR	Transnet Freight Rail
UCV	United Commuter Voice

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CHAPTER 1

INTRODUCTING THE STUDY

1.1.   INTRODUCTION

The railway industry in South Africa is faced with the greatest challenge where a large number of people involved and harmed in train collision occurrences on a running line. The most alarming of these collisions is the train–pedestrian collision, which has become a leading cause of fatalities in the industry (Havârneanu, Burkhardt, & Paran, 2015). Over a five-year period (2011/12–2015/16), a total of 2760 train–pedestrian collision occurrences were reported and recorded by the Railway Safety Regular (RSR), in which 65% of the victims sustained fatal injuries and 35% sustained serious injuries. This is despite the numerous intervention strategies carried out by the Regulator and the railway operators to reduce the rate of such occurrences.

Safety awareness campaigns aimed at combatting such occurrences are the most common strategic intervention used in the railway industry to convey safety messages to the general population. This is a method widely used in many industries and sectors with the aim of promoting safe behaviours and attitudes among the public at large (Alcaraz, Carrascosa, Whalley, Martin, & Escudero, 2015). These campaigns are done through a particular communication mode (such as posters, handouts, public service announcements, discussion groups, presentations etc.) to educate the public about the risk and real consequences of unsafe behaviours (Alcaraz et al., 2015).

Despite the tremendous effort and money put into these safety awareness campaigns, there has been only a 2.3% decrease in the number of reported occurrences involving the public over the past five financial years (between 2011/12 to 2015/16) (RSR, 2016). Accordingly, questions arise as to whether efforts have been made to evaluate the processes undertaken when planning an effective awareness campaign. In other words, what informs the decisions taken to conduct awareness campaigns and how are these campaigns planned and developed to ensure that appropriate safety messages are conveyed to the right target group or population? And lastly, do these

awareness campaigns follow a systematic or a strategic strategy to reach the intended goal?

This research study, therefore, seeks to understand how the Railway Safety Regulator (RSR) plans, develops and designs its safety awareness campaigns as a mitigation strategy to combat occurrences involving members of the public. This study will follow a qualitative programme evaluation research approach where an awareness campaign will be studied as a case to understand how the RSR plans and develops such awareness programmes. The investigation will be conducted through the lens of the logic model framework (LMF) to ensure that a systematic process is followed to evaluate the planning and implementation process of safety awareness campaigns. Triangulation will be used to increase the trustworthiness of the selected case (Grandy, 2010).

1.2.   BACKGROUND

The National Railway Safety Regulator Act, 2002 (Act 16 of 2002) (as amended) mandates the Railway Safety Regulator (RSR) to provide oversight and promote safe railway operations guided by an enabling regulatory framework by way of monitoring, enforcement and providing appropriate support (NRSR, 2002). As a transport agency, the RSR is also therefore responsible for promoting railway safety among the members of the public by educating them on safe behaviour in the railway environment. This is also aimed at positively influencing public perceptions, attitudes and behaviour regarding safe practice in the vicinity of the railway network. A significant budget is allocated to safety education through safety awareness campaigns. These campaigns serve as a proactive approach to mitigating occurrences strategically by urging members of the public to practise safe behaviour in the railway space (Malan, 2016). This approach therefore also aims to provide easy access to knowledge, raise awareness and influence the public's perceptions of the railway environment (Malan, 2016). It is to be noted that the RSR, together with many railway operators, advocates for awareness campaigns as a method for educating the communities on safe behaviour in and around railway lines. Accordingly, a budget of

millions of rand is allocated to safety awareness campaigns in the railway industry (BDFM, 2006).

1.3.   PROBLEM STATEMENT

Train transportation is one of the safest modes of transport, having a fatality rate of 1,35 per billion train kilometres (Evans, 2011). When train collision accidents do occur, they are often serious and/or fatal and often result in permanent physical injury to those involved. The immediate causes of most serious train collision accidents are errors or violations by road or train users (members of the public) (Evans, 2011). In part, these train occurrences may be prevented by common preventive approaches, including speed control, fencing, alarm systems and detection devices to be used by trains and flagman (Rådbo, Svedung, & Andersson, 2005); nevertheless, the safety behaviour practised by members of the public is paramount. Among the railway occurrences, train collisions with members of the public have revealed to be the primary cause of fatal railway accidents globally (Lobb, 2006). However, as Lobb, Harre and Terry (2003) found, general communication strategies aimed at railway safety have not been associated with a significant decrease in unsafe behaviours.

Awareness campaigns are widely used as a tool for changing human behaviour or inducing a desired positive behavioural change pertaining to fundamental issues in society (Bloomfield et al., 2015). Similarly, in the railway industry, millions of rand are spent on conducting safety awareness campaigns aimed at changing the behaviour of the public in the railway environment. Nevertheless, despite this enormous spending on awareness campaigns, the outcome does not match the input, as railway occurrences involving members of the public are increasing from year to year (News, 2006, & SAnews, 2018). Accordingly, the regulator reported that fatal railway-related occurrences involving members of the public increased by 8% between the 2015/16 and 2016/17 financial years (SAnews, 2018). A question that then arises is what factors are taken into consideration when planning a safety awareness campaign, or what factors influence the type of awareness campaign chosen to ensure that an appropriate safety message is conveyed to right target population.

The rationale for this study is to understand the processes followed by the RSR when planning to conduct awareness campaigns as an educative process which aims to address the mitigative strategy for the prevention of (re)occurring railway occurrences.

1.4.   POSITION OF THE RESEARCHER

The researcher in the study is an employee of the regulator (the RSR) and, at the time of the research, the researcher had been employed at the RSR for a period of approximately three years. However, it should be noted that the researcher was not working in the department that was subjected to this research at the time. Nevertheless, the researcher's location enabled her to assume the role of a participant-observer, giving her easy access to information at a minimal cost. Furthermore, owing to the researcher's "insider status", certain ethical implications should be noted as the gathering of data and its interpretation was done through the lens of the researcher. This often raises issues relating to biasedness and loss of objectivity (McGarvey & Volkman, 2006). However, in light of this the researcher remained aware of the possible implications of her insider status and endeavoured to assure that appropriate controls were in place to ensure that the credibility and trustworthiness of the study was not compromised (Saidin & Yaacob, 2016). Thus, field notes were faithfully kept, interviews were recorded and documentation analysis was thoroughly and meticulously done.

Saidin and Yaacob (2016) emphasise that there are benefits attached to being an insider researcher. Firstly, an insider has a passion for the topic under study; secondly there will be no disruption to the flow of social interactions, and lastly, the extraction of the data will be a true reflection of the participants as they have a pre-existing relationship with the researcher (Saidin & Yaacob, 2016). Possible benefits of the study to the regulator is the adoption of recommendations to help refine safety awareness project design and support for reflection, knowledge building and learning by project participants (McGarvey & Volkman, 2006).

1.5.   PURPOSE OF THE STUDY

Safety awareness campaigns are educative programmes aimed at changing the attitudes and behaviours of the users of rail transport and should meet the general pedagogical principles that underpin any quality educative programme. Since these programmes are often planned and executed without any involvement of educators, the question arises as to their success as educative programmes. The aim of the research study was thus to understand how the Railway Safety Regulator (RSR) plans and executes its safety awareness campaigns as an educative process. As an exploratory study, the aim was to apply the industry standard logic model framework (LMF) to evaluate the process that was followed in developing appropriate safety messages as an educative strategy and to determine whether it effectively communicated the message to the affected community.

1.6.   RESEARCH OBJECTIVES

The following objectives are to be addressed by this study:
- evaluate the planning processes used by RSR when conducting its awareness campaigns
- evaluate such process against the Logic Model Framework to explore whether its input will equate to its desired output and outcomes
- formulate recommendations for effective planning processes to ensure that awareness campaigns have a significant impact and that the desired outcomes are complemented with appropriate inputs for future campaigns.

1.7.   RESEARCH QUESTIONS

The primary research question for this study aimed at addressing the above problem statement as the RSR is the custodian of railway safety and it is within their mandate to educate the public regarding railway safety through the medium of awareness campaigns. The primary research question was as follows: How does the RSR conceptualise, plan and execute railway safety awareness campaigns? It is assumed that any safety awareness campaign will be based on a theoretical planning model.

For the purposes of this study the well-established logic model framework was used to guide the evaluation of the RSR railway safety campaign. In order to explore and address the primary question subsequent research sub-questions were formulated:

1. How does the RSR establish the outcomes to be achieved by an intervention campaign?
2. What factors are considered by the RSR to ensure that the inputs from stakeholders correspond with the desired outcomes formulated or perceived by the RSR?
3. How is the content to be included in the programme chosen and by whom?
4. How are the activities (educative interventions) chosen in relation to the target group of the population?

1.8.   THE RESEARCH DESIGN AND METHODOLOGY

The study involved programme evaluation research where a qualitative single case study will be used as a mode of inquiry for the research study. In accordance with Yin's (1994) definition of a case study, this will be used as a pragmatic inquiry for investigating an existing phenomenon within a real-life context. This approach will thus ensure that the investigation retains the well-roundedness and meaningful characteristics of the actual events in relation to the structural and administrative processes of the RSR as a proposed case under study. The dialectic for the use of a qualitative approach was that it allowed the researcher to collect qualitative data using a less structured research design and permitted the use of comparatively few samples, however generating enormous amount of data (Morse, 2003). Thus, having to undertake an interpretivist approach, an interpretive method will be utilised to produce a rich and in-depth information which will assist the researcher to understand behaviour and justification for actions of the participants. This will be achieved through document analysis and the use of semi-structured interviews with open-ended questions. (Upadhyay, 2012).

1.9.   SIGNIFICANCE OF THE STUDY

Railway occurrences involving members of the public have long been classified as the leading type of fatal accident worldwide (Lobb, Harre, & Suddendori, 2001; Silla & Luoma, 2008). Trespassing is noted to be the main cause of these occurrences and is thus acknowledged to be the most important railway safety issue and as requiring urgent attention (Silla & Luoma, 2008). A study by Akkas, Ay, Aksu and Gunalp (2011) sought to evaluate train accidents or occurrences in Turkey over a period of ten years. The results of the study concurred with previous studies in that most of the occurrences happened in the course of commuting period with majority of victims being males (Akkas et al., 2011). This, therefore, implies that these train–pedestrian occurrences are firmly identified with being on the way the respective workplace (or schools) and during peak hour (Akkas et al., 2011). In Finland, Silla and Luoma (2008) conducted a study with the aim of exploring the characteristics of trespassing behaviours. They subsequently reported that typical trespassers tended to be adults and predominantly male. When trespassers were interviewed regarding the reasons for trespassing, it was revealed that trespassing occurs mainly to take a shortcut and about 15% of the interviewed trespassers assumed that trespassing was safe and legal (Lobb et al., 2001; Silla & Luoma, 2008). A plethora of literature has shown that Finland and Turkey are not the only countries affected by this type of railway occurrence; most countries with an extensive railway network incur a high number of train–pedestrian occurrences (train accidents involving trespassers) (Silla & Luoma, 2008).

As a mitigation strategy to reduce the number of train–pedestrian occurrences (or train occurrence with the members of the public), Lobb et al. (2001) reported that several studies have recommended interventions such as the public education through awareness campaigns aimed at preventing unsafe behaviours, limitation of pedestrian access to unauthorised railway environments, as well as awards or punishment for safe and unsafe pedestrian behaviour in the railway environment (Lerer, & Matzopoulos, 1996; Pelletier, 1997; Blazar et al., 1997; Akkas et al., 2011). However, few of these studies evaluated the efficacy of any of these interventions; in fact, research on interventions to reduce train–pedestrian occurrences are scarce (Akkas et al., 2011; Lobb et al., 2001).

Owing to the fact that many countries are affected by this type of occurrence, it is a worrying factor that little research has been published investigating or evaluating educational programmes such as awareness campaigns as intervention strategies to mitigate these occurrences. It is in this light that this research was conducted to bridge the knowledge gap that exists in the literature.

1.10. CONCEPTUAL FRAMEWORK: THE LOGICAL FRAMEWORK

Paramount to any effective and successful safety awareness campaign is the interrelation between the planning and evaluation of awareness campaigns. Thus, a logical framework has been identified and used as the best tool for planning and evaluating such projects (awareness campaigns) (PCI, 1979). For the purpose of planning, the structure of the logical model assists planners to articulate the parameters and expectations of their project together with the changes among their participants, organisations or systems which are anticipated to be as the consequences of the project activities (Silverman, Mai, Boulet, & O'Leary, n.d.).

The logical framework as an evaluation tool enables organisers to make project design decisions that will provide guidance to the evaluation process. For instance, the framework allows for direct relations on various parts of the programme that would be favoured by the findings of an evaluation. Therefore, once the processes and the activities to be evaluated are identified, the planners could decide on the type of data to be generated, how the data will be collected and analysed, as well as when and by whom the data will be collected (PCI, 1979). The evaluation planning also assists in ensuring that the data collected throughout the lifecycle provides answerability to varied stakeholders, generates a communal understanding of the project and its intended outcomes, documents project progress, and lastly, determines the progress towards short-term, mid-term and long-term outcomes (Silverman et al., n.d.).

In a nutshell, Huhman, Heitzler, and Wong (2004) describe the logical framework model as a visual way of illustrating how planners intend their project to work out. It is, therefore, a systematic way of presenting the intended relationship between the project goal, activities, outputs and intended outcomes. In simple terms, the logic model graphically describes the theory or logic behind the way the project is intended

to work (CIDT, n.d.; Silverman et al., n.d.). Figure 1.1 presents a diagram of the generic logic model framework.
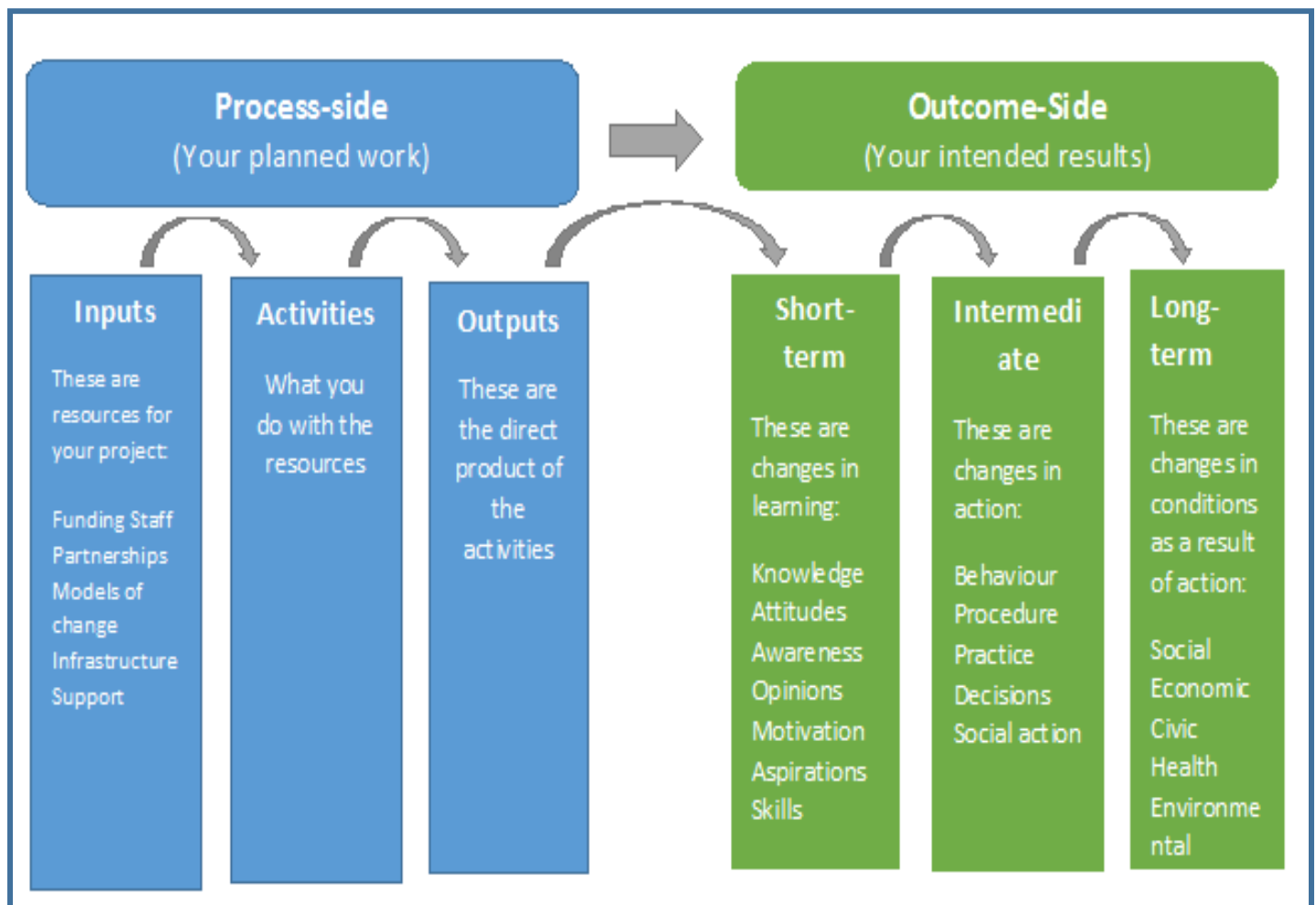
Figure 1.1: The logic model framework. Source: Joyce, Kunguma, and Jordaan (2010); Silverman et al. (n.d.)

As indicated in Figure 1.1, the logic framework reads from the left-hand side of the page to the right-hand side. The process side, that is the left-hand side, it identifies the inputs, activities and outputs.

- **Inputs** – These are the resources available for the project, which include staff, funding, organisational and community resources, leadership, expertise, evidence-based strategies and scientific knowledge, partnerships with various stakeholders and project infrastructure.

- **Activities** – These are the actual actions that take place in the project to bring about the intended change. This may include but is not limited to interventions such as events, distribution of messages through different multimedia and referrals to services.
- **Output** – These are direct products of the activities to be delivered by the project. They are the direct evidence of implemented activities which may include a numerical representation of families linked to the services, a quantitative counts of implemented intervention activities, as well as levels and targeted activities.

The outcome side (the right-hand side of Figure 1.1) identifies the short-term, intermediate and the long-term outcomes as results aimed by the project.

- **Short-term outcome** – This represents the immediate effect resulting from the project and should be attained within a one to three-year period. Some of the effects may include a change in learning, knowledge and attitudes.
- **Intermediate outcome** – This may reflect changes in actions, such as behaviour and practice, which result from increased knowledge and awareness.
- **Long-term outcome** – This is the expected effects as a result of the project, where conditions changes as a result of an action. Thus, the outcome should be attainable within a four to six-year period.

It is of essence to note that the logic model framework is not restricted to a linear format but comes in many shapes and sizes and conveys a diverse level of detail; however, it is designed to read from left to right. It must, therefore, be remembered that the concepts of the logical framework process can be presented in a 4 x 4 matrix, thus demonstrated on one-page with a brief summary of significant project elements and their interrelations (PCI, 1979).

1.11. WORKING ASSUMPTIONS

The following were the working assumptions formulated for this study:

- All employees in the Education and Awareness sub-department in the RSR are aware of the processes (standard operating procedure [SOP]) followed when planning awareness campaigns.

- All planning of awareness campaigns subscribes to a systematic methodological approach, as well as an evaluation tool, to ensure that the planning processes of safety awareness campaigns are continually refined and appropriate for the target population.

- An awareness campaign is therefore tailored to the age group of the target population.

- Target areas for conducting awareness campaigns are guided by the frequency of occurrence in an area or by the presence of a "hot-spot" in the occurrence data reported to the regulator by operators.

1.12. TRUSTWORTHINESS AND CREDIBILITY OF QUALITATIVE EVALUATION

The way in which data are gathered and analysed it is imperative to assure the quality of qualitative research (Vaterlaus & Higginbotham, 2011). The common terms used to describe the quality or accuracy of data and conclusions are "trustworthiness" and "credibility". According to many researchers (Miles & Huberman, 1994; Patton, 2002; Silverman, 2009; Sofaer, 2002), the credibility of research data and the conclusions are drawn from the analysis which beginning with the implementation of sound, consistent methods for collecting and analysing data (Acf.hhs.gov, 2016). To ensure the trustworthiness of this study, the researcher thus made use of triangulation. Vaterlaus and Higginbotham (2011) refer to triangulation as a concept used to cross-check data by employing multiple methods of collecting data (i.e. interviews and review of documents). Whereas Maxwell (2009) reported that triangulation reduces the potential "systematic bias" that happens when a researcher uses one source of data, method and procedure (Vaterlaus & Higginbotham, 2011). Accordingly, dualistic methods of triangulation were utilised in this research study, namely, methodological triangulation (that is, the use of several methods to study a programme or single case) and data triangulation (that is, the use of different range of data sources in a study) (Patton, 2002). It should thus be noted that the goal of triangulation is by no means an

expectation that data will produce exactly the same conclusion but rather to explore and comprehend inconsistencies to obtain greater insight into what has been studied and also to arrive at a more credible conclusion (Acf.hhs.gov, 2016).

1.13. CHALLENGES AND LIMITATIONS OF THE STUDY

As noted by Corbin and Strauss (2008), qualitative evaluation is without its challenges and many researchers feel overwhelmed by the time and high level of expertise required to complete qualitative evaluations successfully (Vaterlaus & Higginbotham, 2011). Crucial to a qualitative study is the researcher's ability to realistically plan the entire study, document their research procedure and follow the accepted best practices to ensure quality and trustworthiness (Maxwell, 2009).

The researcher should exercise caution when discussing the implications and generalisability of findings. Malterud (2001) explains in detail that findings from qualitative studies should not be used as facts that may be applicable to a broader population but rather as descriptions or theories applied to a specific setting (Vaterlaus & Higginbotham, 2011). On the other hand, it should be noted that the sampling technique and rigorous collection of data greatly influence the scope for the generalisability or transferability of findings. Therefore, the results of qualitative studies usually provide in-depth and rich information that may lead to recommendations that could provide a programme with new direction (Tracy, 2010).

1.14. ETHICAL CONSIDERATIONS

Since this study required human participation, it was crucial that ethical principles were applied. Hence, all participating staff were given a letter of consent to sign prior to their participation in this study. All participants were informed that their participation in the study was on a voluntary basis and anonymous as all information pertaining to the participants would be kept strictly confidential, in addition, that the results would be reported as a collective and not per participant.

The participants were also assured that the results of the study would in no way be presented or used to discredit them in their job. Thus, the study treated all information provided with respect and the human rights of all its participants were protected.

Chapter 2 which follows will discuss the literature review.

1.15. STRUCTURE OF THE STUDY

Chapter 1: Introducing the Study

This chapter introduces the study by discussing the background, purpose and the rationale of the study. Furthermore, the chapter discusses the problem statement, research questions, limitation of the study and the ethical aspects thereof.

Chapter 2: Literature review

The chapter presents the analysis of the literature on tactical approaches for planning an effective awareness campaigns as an educational intervention programme. The chapter furthermore deliberates the theoretical framework utilised for this research.

Chapter 3: Research design and methodology

The chapter presents the paradigm and the processes followed to conduct this study.

Chapter 4: Research findings

The chapter presents the collected data together with its analysis. The findings are presented according to the case study design.

Chapter 5: Discussion of findings, recommendations and conclusion

The final chapter discusses the findings of this research and the conclusions drawn from the study. Furthermore, recommendations are made in line with the research findings.

The following section present the review of the existing literature on effective planning for and educative awareness campaigns.

CHAPTER 2:

LITERATURE REVIEW

2.1   INTRODUCTION

South African railway network is reported to be the largest and arguably the most developed on the African continent. It transports an estimated 2.2 million commuters daily thus making safety a major priority of the sector (Railway Safety Regulator (RSR), 2015). The cost of railway occurrences to the South African economy exceeds an amount of R590 million annually (RSR, 2015). According to the State of Safety (SOS) report produced by the RSR, there are five main categories that constitute railway occurrences: (a) derailments during movement of rolling stock, (b) collisions during movement of rolling stock, (c) level crossings – motor collisions with moving rolling stock, (d) people struck by trains during the movement of rolling stock, and (e) people-related occurrences: platform–train interchange. The last three occurrence categories are largely the result of public behaviour in the railway environment. It is for this reason that the RSR has followed educative guiding principles to ensure that it carries out its legislative mandate of overseeing safety in this environment. One of the guiding principles is to educate members of the public on the risks associated with being around the railway environment. According to this principle, safety awareness campaigns are conducted to provide railway safety-related information and knowledge which leads to creating awareness, influence the perceptions and behaviour of the public. Thus, in the railway industry (the RSR in particular) safety awareness campaigns are used as an educational tool to empower members of the public with knowledge of risks inherent in the railway environment.

2.1.1   Safety awareness campaign: strategy for risk reduction education

According to multiple researchers (Mileti, Nathe & Gori, 2004; Morgan, Fischhoff, Bostrom, & Atman, 2001), safety awareness campaigns are regarded as a risk communication strategy (or safety risk awareness) with a multiple purpose. They are a means for those in authority to adhere to their legislative mandate and make hazard information available to the public by means of educative intervention programmes which aim to positively influence public thought patterns and eventually change risky

behaviour (Joyce, 2011). Bird, Gisladotttir, and Dominey-Howes (2009), on the other hand, reports that safety awareness campaigns generally endorse risk communication messages as an effective risk reduction measure among affected members of the public. He believes that risk reduction is achievable when the affected public (people) are provided with specific information that enables them to understand, appreciate and reach consensus on dialectic for reducing that particular risk (Joyce, 2011). Therefore, this mitigation approach forms an integral part for occurrence reduction strategy by empowering communities that are deemed to be at risk and providing them with the relevant knowledge and skills to evaluate the level of risk that exists in the railway environment.

However, when undertaking such a mitigation approach, it is important to note the five factors proposed by Bird, Gisladotttir, and Dominey-Howes (2009), which are believed to influence an individual's ability to react appropriately upon possible exposure to risk. These include the individual's knowledge of existing hazards, their perception of risk, their readiness to implement a preparedness measure, their responsive behaviour and lastly, their level of exposure to risk and hazard education (Joyce, 2011). These factors are also associated with and are reliant on the economic, political and social context of the at-risk community (Joyce, 2011). Therefore, planners of such mitigative approach should have a general, however, relevant knowledge of the target population when planning any awareness campaign.

Each of the proposed factors are described as follows: Paton (2006) refers to *hazard knowledge* as an individual's apprehension of hazard information and its particular processes. The logic of this is that the more a person apprehends the process of hazards, the more likely he or she is able to respond in a prepared manner and take the necessary safety actions. This then reduces their vulnerability within the railway environment (Joyce, 2011). The *risk perception,* on the other hand, is seen by Siegrist and Cvetkovich (2000) as a measure of how the exposed individual feels about their own risk. This is normatively shaped by the individual's cultural context as well as the past experience of the particular risk. Therefore, in order to bring about a positive change in unsafe behaviour, the targeted individual(s)' risk perception and areas of priority should be identified together with the specific community's contextual situation. Furthermore, Bird et al. (2010) describe readiness to *implement preparedness*

measure as the most important factor for empowering at-risk communities. However, for such communities to accept and enact these measures, the safety message should be continually stressed and reiterated. Moreover, it is the individual's hazard knowledge, cultural, social, and economic context which determines their level of response behaviour to the exposure of hazard. Therefore, any feeling of unconcern and lack of certainty could result into inadequate adaptive response behaviour that requires continuous educative intervention to ensure that the desired adaptive behaviour is achieved (Joyce, 2011). Lastly, any educational safety campaigns must provide insight to the *target audience* about their specific risk and how to prepare, respond and mitigate it accordingly. Such awareness campaigns should therefore be planned in such a manner that it impacts the risk-perception and decision-making patterns of at-risk communities.

Seen in this light, it is imperative that any safety awareness campaign should aim to focus on all five facets of risk preparedness and response. This will help to ensure that the overall safety message is effective and achieves its envisaged outcomes.

The following section discusses some of the safety awareness campaigns risk reductions challenges.

2.1.2 Safety awareness campaign: risk reduction challenges

There are several challenges that influence the effectiveness of safety awareness campaigns and thus affect the probability of risk-reduction behaviours among affected communities. Firstly, as noted by several researchers, most awareness campaigns are conducted as a tick-box exercise for the sake of compliance, with little or no measurement indicators as to whether or not the intervention programme is making the necessary impact. Most often, there is no proper analysis of the messaging content to ensure its suitability for the targeted audience (Blanchard-Boehm, Earl, Wachter, & Hanford, 2008). Secondly, Smith (2009) maintains that such campaigns are usually delivered from "experts" to the "public" without consultation with or input from locals. This poses challenges, as local context, customs and beliefs are not well understood by campaigners and this also may create the misconception that the public does not comprehend its own risk. This then makes it important for campaigners and planners to understand the local context and to include involve relevant community members in

the campaigning team, thus making them "champions" of the intervention programme (Joyce, 2011). Thirdly, risk reduction initiatives often experience challenges in that they seem to lack of the support and involvement of local authorities. Oftentimes, local authorities require an indication of project impacts before they are willing to commit (even financially) to future risk reduction projects. The problem with indicating programme impact is that there is a need for monitoring over a prolonged period of time, as it is usually difficult to identify the impact immediately. Lastly, in the event that the targeted audiences are not constantly reminded and educated about their hazard, chance are that such information will never progress into a risk reduction behaviour.

Therefore, outcomes set for any safety awareness campaign are only achievable if effective planning has taken place. The following section presents strategies for planning an effective safety awareness campaign.

2.1.3 Strategies for planning an effective safety awareness campaign

An effective safety awareness strategy is one that addresses the uncertainties in the minds of the targeted group regarding their risk (Nathe, 2000). The fundamental element of such a strategy is the ability to contextualise the message in terms of the target audience's threat and belief system. A contextualised message generally receives better results as it allows the target audience to obtain relevant information that will empower them to change their behavioural patterns and exercise safety precautions (Joyce, 2011).

Furthermore, interactive methods should be applied when conducting such campaigns to raise awareness in the targeted audience and ensure that they are actively involved in generating possible risk reduction actions. In doing so, the targeted audience is helped to feel a sense of ownership for the process which in turn results in the likelihood of such actions being integrated into their daily life (Mileti et al., 2004).

Mileti et al. (2004) report that strategies for awareness campaigns should be based on the "laws of effective public hazard education", including the following:
- First 'law' is for messages to be unambiguous and that all industry terms be simplified for the public to apprehend

- Secondly 'law', emphasize core information with artwork or demonstrations to draw attention.

- Third 'law', information should be credible emanating from different sources and must be locally relevant.

- Fourth 'law' is that campaigns should be consistent

- Fifth 'law', messages should be repeated through different range of media instruments such as school programmes, brochures and community networks.

- Sixth 'law' is that explicit risk-reducing actions ought to be the focal point of any awareness campaign to inform the public on what they could do pre-, during, and post-disaster events.

- Seventh 'law' of effective public awareness campaigns is to urge the audience to broaden the message reach by telling others about the campaign message and also providing them with where more information could be found (Mileti et al., 2004).

Moreover, the use of stakeholder partnerships with various relevant organisations (such as railway operators, rapid rail police, municipal official and community leaders) is an effective way to ensure and enforce the successful execution of planned strategies. However, paramount to the successful selection of the relevant stakeholders is the ability to apply maximum leverage to the partnership to achieve the strategic objective of the planned intervention programmes (in this case, safety awareness campaigns). A diversified group of stakeholders from relevant institutions as well as field specialists could add value to the strategy overall. Such stakeholders could, depending on their vested interests, assist in funding the intervention programme and with the necessary logistics. For instance, on the day of the campaign stakeholders could be involved in the distribution of promotional materials including pamphlets, or in the case of joint messaging (when all stakeholders involved in an intervention programme produce a core safety message and endorse one pamphlet with their respective logos), printing costs could be shared. In addition, depending on the target area, stakeholders could assist in ensuring that the campaign messages are translated into local languages and design pamphlets to cater for different age groups to ensure message delivery to an increased target audience (Mileti et al., 2004).

The following section discusses some of the important elements to include when planning for successful safety awareness campaigns.

2.2   ELEMENTS OF SUCCESSFUL AWARENESS CAMPAIGN PLANNING

2.2.1   Awareness campaign planning process

An awareness campaign comprises various components which assist the campaign planners to reach a particular, or a set, goal. The scale and scope of the awareness campaign is usually determined by the extent to which the behaviour of the targeted audience needs to change. It is in this regard that most awareness campaigns comprise of multiple audiences, timeframes to adhere to, a set of objectives and approaches and outcome measurements to account for the resources utilised (Sayers, 2006). Thus, the best chance of attaining a successful campaign critically relies on careful and detailed planning. Multiple authors (McNeil, McCallum and Arkin, 1989; Arkin, 1992; Arkin et al, 2004) have identified five attributes to effective awareness campaign planning (Sayers, 2006). These are characterised by **GAMST** as follows:

1. Define the goal of the campaign (**G**oal)
2. Define the campaign target audience (**A**udience)
3. Define the campaign message, pre-teste and refine (**M**essage)
4. Pre-test and revise the campaign's promotional materials (**S**trategy)
5. Implement the campaign in accordance to the plan and regularly evaluate your processes (Strategy and **T**iming)

Conventional planning process begins with the need to address a particular issue and the affected stakeholders come together for a brainstorming session. Such sessions then generate ideas on various approaches to undertake to address the identified issue. Guided by the facilitator or the person chairing the gathering, a simple guiding question is posed to identify possible obstacles (factors that may potentially hamper or undermine the success of the awareness campaign; however, such factors can be overcame with a thorough planning and resource availability) or enablers (these are forces or capabilities that could assist in achieving the set goal; an example may be an influential community leader or councillor who endorses the awareness campaign)

that may be encountered. Examples of questions that could be posed in relation to a campaign would be the following:

1. Is the core message(s) of the campaign designed and developed?
2. Are the goals or objectives to be achieved by the campaign established – what are the success indicators of the campaign?
3. Who are the core stakeholders paramount to the success of the campaign?
4. Who are the target audience for the campaign?
5. What is the envisaged campaign reach – how many of the target audience should ideally be reached by the message of the campaign?
6. What is the planned communication strategy most effective for the intended target audience(s) – is this an appropriate medium to be used to convey campaign message to the target audience(s)?
7. How much information is enough? The aim is to provide insight and educate the targeted members of the public, not to devastate them with unnecessary information.
8. To what extent must the target audience be involved to ensure the success of the campaign?
9. What controls are in place to ensure that the target audience participants as envisaged?
10. What are the timelines – when will the campaign start and finish?
11. What plans are in place to ensure campaign monitoring and evaluation? (Sayers, 2006)

The responses to these questions will be the outcome of a structured brainstorming session and this act as a groundwork for planning the awareness campaign. When considering the target audience, it is important to conduct market research to enable a thorough detailed description of the target audience. Elements to be considered in this regard include gender, age, cultural, social and political context, economic standing, level of education and language (Sayers, 2006).

2.2.1.1 *Set a specific goal and measurable objectives*

Prior to conducting or planning any campaign, it is important that specific goals be set. These goals should be closely aligned with the overall objectives of the organisation. Therefore, the process of goal setting should involve the active participation of personnel in management positions, as they have an in-depth understanding of the strategic objectives and planning of the organisation (Silverman et al., 2008). Such people could provide an accurate strategic objective for the awareness campaign as well as the insight required for successful planning.

Each goal must be specific and spelt out clearly; there should be an indication of who is responsible for its accomplishment, and a clear timeframe should be indicated for completion. At various phases of the awareness campaign, progress should thus be measured against these goals (Silverman et al., 2008).

2.2.1.2 *Identify target audience*

The intended audience is a key element of ensuring that the impact of the awareness campaign is realised. Planners should thus identify who they are trying to reach and what has to be achieved with them. All the materials to be used during the actual campaign activities should be aimed at the intended audience (people who need to be reached) (Bouder, 2013). For instance, if the intended audience is the senior citizens of a particular community, the planners of the awareness campaign should think about how these senior citizens will receive the information and should be aware of the type of communication media (e.g. senior citizen centres, newspaper columns for senior citizen) to use to reach to them. It should be noted that most people are interested mainly in matters that they identify with and that acknowledge the need for improvement or the need for help. Thus, it is crucial to develop a message that speaks directly to the needs of the intended audience (Bouder, 2013).

2.2.1.3 *Formulate a clear, simple and appropriate message*

Paramount to the success of any awareness campaign is the ability to communicate a message that is correct, that is clear and concise and that reaches the right audience. Messaging is defined by Bloomfield et al. (2015) as succession of words

and phrases which are found to be convincing to key audience, based on specific research. Bouder (2013) further alludes to the fact that messaging is not the mere use of words and expressions that sounds virtuous or that might have been persuasive before; it is used to present facts about a particular matter as a means of educating an individuals, communities or societies. These messages exude various types of knowledge in the manner at which they are presented and this can influence the success of the awareness campaign (Bloomfield et al., 2015).

Safety awareness campaigns often focus on diverse target audiences, with variant methods and messaging to attain a particular aim. To rationally categorise these various types of messaging and defined approaches for modes of delivery to the target audiences, it is imperative that a system be developed. This is known as "audience segmentation" and it is recognised by many researchers as the most critical factor to consider in the design phase of an awareness campaign (Atkin & Rice, 2012). There are three segmentation criteria that have been acknowledged by researchers, firstly it is the demographic factors – many researchers argue that demographic variables seem not to be used as the primary criteria for segmenting audiences in risk communication campaigns. This is owing to the level of difficulty in trying to empirically isolate the demographic variables that determine risky behaviours. However, it makes sense to link specific variables such as level of education and socioeconomic dynamics to the level of readiness to receive and act on safety messages. In the study conducted by Goulter and Myska (1987), women were generally noted not to be prone to engage in risky activities but the converse was found to be true for males (O' Neill, 2004). Meanwhile, Miller et al. (1999) reported that vulnerability increases notably with age depending on the circumstances (O'Neill, 2004). Secondly, the psychological traits refer to a person's reaction to hazards mediated by their own perceptions. Esmund (2000) and Granger (1996) reported that the perception of risk is usually generated by a specific hazard and an individual's belief in their ability to deal with the risk exposure (O'Neill, 2004). In simple terms, individuals who are confident and independent are more likely to be their own risk managers (people who have the ability to take action to reduce their own risk). That being so, O'Neill (2004) reported on one segmentation approach that may be adopted to categorises an audience in accordance with the level at which it is able to manage its own risk is as follows:

- *Risk averse.* These are individuals who are aware of and concerned about the existing risk. They also take initiate measures to reduce their own risk. They are therefore viewed as risk managers. These risk managers are further divided into two groups, namely:

  - they consider similar hazard as the safety authorities
  - those who, while concerned about hazards in a general way, may not perceive the specific threat articulated by the safety authorities as significant. They may be concerned about other specific hazards, or about the general safety of their family, household or business.

- *Risk tolerant.* These are individuals who are uncertain about the existing risk, they therefore depend on their personal experience to the hazard.

- *Risk deniers.* These are individuals who are less likely to take any form of action until an incident happens. This may be as a result of either their denial status or the fact that they lack the willpower to make individual decisions about their own risk. This is prevalent among individuals who practise inherently unsafe behaviour in their community.

- *Risk seekers.* These are individuals who believe that they are more than capable of managing their risk. These people often enjoy risk exposure and treat it as a personal challenge to satisfy their sense of adventure.

A thoroughly planned awareness campaign normatively develops messages and various mediums for reaching all four types of audience. The table 2.1 below thus shows various ways that a message could be developed for specific audiences.

Table 2.1: A proposed approach to segmenting types of risk messages to affected audiences
Source: O'Neill (2004)

Risk type	Description	Message
Risk averse	Concerned with similar hazard as the safety authority	Provide hazard-specific information and messages for this target group and emphasize on how they can manage their response to the risk (i.e. what to do in an event when safety is compromised).
	Concerned about general family safety	Provide non-hazard specific safety initiatives (i.e. educate how to response in a case of *emergency*). These group are potential stakeholder for safety initiatives.
Risk tolerant	inconclusive about the hazard or the effect on them	Provide general information about the hazard. Emphasize on the risk exposure to the hazard and possible effects this could have on their family.
Risk deniers	Deny that the hazard will occur or it will affect them	Provide messages that establishes the credibility of the authority and consequences should they be found endangering their lives or of others.
Risk seekers	Takes advantage of disasters to get involved in rescue efforts or to pursue their interests	Warn of endangerments and punishments for interfering with work of the safety authority. Provide specific messages relating to safety of individuals and families.

Thirdly is that the factor that must be taken into consideration when designing campaign messaging is the public's "personal experience to a hazard". A plethora of research attests to the fact that personal experience is often a deciding factor in shaping both the individual perception of risk and the likelihood of the individual being able to reduce their own risk. However, the mere experience of a hazard does not ascertain that an individual will voluntary practice safe behaviour. A possible criticism of the significance of experience is that individuals may have had individual experience of low-impact occurrences and hence don't value the potential risk and detrimental effects that an occurrence could have (O'Neill, 2004).

2.2.1.4   *Scale of and medium for communicating the message*

Various media are used to distribute safety messages in safety awareness campaigns. However, the type of option selected for channelling the campaign message is heavily reliant on the intended target audience. Salmon and Atkin (2003) report that the most

important factors to consider when selecting a medium for the envisaged campaign. Table 2.2 below presents the factors to consider when selecting a communication medium for any safety awareness campaign.

Table 2.2: Factors to consider when selecting communication medium for the planned safety awareness campaign. Source: Atkin and Rice (2012)

Factors affecting the selection of Communication Medium	Brief Description
campaign *reach*	the total number of people exposed to the campaign message
exclusivity	to address a particular subgroup of people or tailor message for an individual
interactivity	the extent to which the targeted audience actively engages with the content
meaning modalities	the ability to make use of the sensory system to convey the meaning of the message
personalisation	the ability to ensure that the message delivered is personalised so that the targeted audience relates to it
decodability	the mental capacity required for processing the campaign message as stimulus
depth	. the capacity of the medium to convey in-depth and multifaceted content
credibility	the trustworthiness of the material content to be delivered
agenda setting	the ability to align the safety message to address pressing community issues
accessibility	the ability to select a medium which is easily available to the targeted audience
economics	the ability to choose a cost-effective medium to distribute that intended message

The medium or media channel selected is often determined by the usage pattern of the target audience, the nature of the message and the topic within the constraints of resource availability. There has been a general increase in the use of digital media technologies as a channel for conveying the message. The use of digital media is believed to be more inclusive in that it promotes additional dimensions of campaigning through narrowcasting, interactivity and tailoring (Atkin and Rice, 2012). The digitalised messaging approach also maximises the amount of media access that the campaigners require through monetary support from the applicable government

department and industry. The use of these involves five major aspects of strategic message dispersion, namely;

- the total volume of the message (a considerable volume of stimuli assists in obtaining an adequate reach and frequent exposure to assist individuals to understand, recognize and make image formations. Therefore, the message saturation focuses on key issues the awareness campaign seeks to address),

- the amount of repetition (A certain level of repetition of a specific message ensures sufficient comprehension of the message and a positive change in behaviour. Caution should be taken not to over emphasise through repetition, as this produces wear out and diminishing in return),

- the prestige of placement (This enhances both levels of exposure and the significance of the message campaigned),

- the scheduling of the message presentation (Reliant on the situation, oftentimes awareness campaigns are effective when focussed on over a shortened period and disseminated thinly over a longer periods),

- and lastly, the temporal length of the campaign (Awareness campaigns that deal with problem prevention often require exceptional persistence in the message coverage. Such efforts should take place over a prolonged period of time to attain crucial mass exposure.) (O'Neill, 2004).

2.2.1.5 Resource availability

Effective planning of awareness campaigns requires resource availability, ranging from funds, staff or number of persons, developed materials (this includes online resources) and various modes of delivery. This necessitate that advantage be taken of all the resources available to the department responsible for planning and executing such campaigns. The following should carefully be kept in mind to ensure successful campaign planning.

- **Keep members informed**

The most successful awareness campaigns involve everyone relevant to its success. Such campaigns are not solitary projects to be rolled out by a single committee or member; they are joint efforts which include all of the related

executives, managers, officers and members of partnered organisations. Regular reports should be compiled to update all involved with the progress of the campaign.

- **Be persistent**

A safety awareness campaign is not a once-off event, nor is it something that happens overnight. Good campaigning requires time and patience. It is a process that requires commitment and a long-term approach. A network of media and community contacts should be built and a journal of press releases together with public service announcements (PSAs) submitted should be kept. One event failure does not mean it will not be a success next time. Lessons must be learnt. Keep trying and remain committed to the set goals with continuous efforts.

2.2.1.6 Launch date

Planning and timely execution can make the difference between the success or failure of an awareness campaign. A clear timeline should thus be created for each goal established as part of the campaign. This timeline should not only include what milestones should be reached, but also how they will be evaluated to determine successful completion. As these milestones are reached, it is important that the successes are shared with the relevant people within the organisation.

2.2.1.7 Evaluation and monitoring

The only way to demonstrate the effectiveness of or the degree to which the awareness campaign has achieved its set target is through monitoring and evaluation. Evaluation is defined by Bloomfield et al. (2015) as the systemic collection and analysis of information about the outputs (activities), outcomes, and impacts of a campaign. Measuring the relative success of an awareness campaign is the ability to establish indicators to measure whether there has been progress post the awareness campaign (this is a degree of change pre- and post the campaign, this even goes beyond the parameters of the original campaign to improve future campaign efforts). Sayers (2006) states that evaluation should be built in from the beginning of the awareness campaign, and should not be tackled at the end of the programme.

Therefore, this generally means that quantitative measures and qualitative indicators are to be included from the outset of campaign planning. One type of assessment deemed to be appropriate for the campaign assessment could be included; for example, quantitative data such as the number of people that accessed or participated in the awareness campaign comprises of information that could be statistically measured. Qualitative data include the analysis of rich information to assist in understanding participants' underlying reasons for, opinions on and motivations for their actions. Whatever the measures or indicators used, they should be included in the planning phase of the awareness campaign. The use of these (monitoring and evaluation) will enable feasible approaches to be effectively identified, as well as demonstrating the value and credibility of the campaign for management and stakeholders.

2.3.   STAGES OF EVALUATING AWARENESS CAMPAIGNS

The evaluation of safety awareness campaigns generally encompasses four stages. These assesses the various segments of a campaign. The first stage of evaluation is conducted prior to the actual launch of the safety awareness campaign. This initial stage is therefore referred to as formative evaluation. The second stage of evaluation happens during the course of the actual safety awareness campaign and is thus called process evaluation. Subsequently, the third stage is referred to as outcome evaluation because it examines the short-term effects of the campaign. This type of evaluation is conducted following the safety awareness campaign in order to assess its impact. The fourth and final stage of evaluation – impact evaluation – is also conducted after the safety awareness campaign; however, this type of evaluation assesses the long-term impact that results from the safety awareness campaign.

The following section will further elaborate on each of the above-mentioned stages of evaluation.

2.3.1 Formative evaluation

The initial phase of planning an awareness campaign is the most critical as it lays foundation for the rest of the campaign event. During this phase, it is imperative that thorough research is conducted to obtain information about issue to be addressed, and this includes the demographics of the affected population. This process of inquiry is known as the formative evaluation. Many researchers whom have studied campaign evaluation have intensely and time-and-again emphasised that formative evaluation being the most important for the success of any awareness campaign (Atkin & Rice, 2012; Bauman, Phongsavan, Schoeppe, & Owen, 2006; Bloomfield et al., 2015; Coffman, 2002). The application of common campaign design principles relies heavily on the specific context (specially the types of audience to be influenced and the type of message to be promoted), therefore an effective design requires substantive formative evaluation inputs (Atkin & Rice, 2012). At the initial period of campaign development, planners should thus gather background information about the pivotal segments and interpersonal influences using statistical databases and surveys to learn about audience predispositions, channel usage patterns and evaluations of prospective sources and appeals (Atkin & Rice, 2012). Therefore, in this subsection the following issues will be further elaborated: first, the importance of evaluation theory, second, a common framework of campaign influence, third, briefly, the logic model, and forth, developing and pre-testing campaign messages and branding.

2.3.1.1 The importance of evaluation theory

Thoughtfully planned awareness campaigns are generally characterised by the theoretical underpinnings and a well-planned evaluation procedure, as these are crucial when handling with the multifaceted and difficult campaign evaluations (Rice & Atkin, 2001; Bruce & Tiger, 2010; Banyard, 2014). A recognised tool deemed to be powerful to provide fundamental platform for meticulous evaluations is known as the evaluation framework (also known as evaluation models and evaluation theories) (Hornik & Yanovitzky, 2003). Incorporating various theoretical models or frameworks may be also be valuable in guiding the choice of variables to adequately assess attitudes and behaviour change (Banyard, 2014). However, insufficient or imperfect theorising about the campaign evaluation, purpose and messaging could mislead the

evaluators to erroneous inferences about the effectiveness of the campaign (Hornik & Yanovitzky, 2003). Such inadequacy may also lead to an examination of wrong outcomes, behaviour changes could be measured too soon and inappropriate units of analysis may be used (that is the prime of focus in the evaluation, this individual, the family, or the community).

The planning phase of an awareness campaign comprises of multiple steps which are crucial to this process. This includes justification for the need to conduct the campaign, what is the nature of the problem to be addressed by the campaign, identifying the short- , intermediate and long-term outcomes, defining the target audience, identifying possible campaign strategies, and formulating campaign messages which will be relevant to the intended audience (Coffman, 2002; Bauman et al., 2006). Critical to this is an unambiguous explanation on the dialectics how the campaign would add value in changing consciousness of, principles about, and attitudes regarding the key issue being addressed by the awareness campaign. Furthermore, having to gauge the level of support which will be available for the campaign is important to establish at this stage. Critical partnerships (stakeholders) with those that will be able to make some resources available for the campaign (e.g. time, ideas, feedback and financial resources) should be identified during this formative evaluation stage. Prospective community stakeholders (e.g. schools and local community centres) should also be identified at this stage. They too can be useful in supporting campaign efforts and emphasizing the campaign message in individuals who have not been exposed to the campaign (Bloomfield et al., 2015). Community stakeholders could also assist to identify small sample with which to conduct campaign message testing which tends to be throughout the course of campaign development and message pre-testing stage. Furthermore, they could assist in recruiting greater samples valuable for evaluating the impact of the campaign.

2.3.1.2 Common framework of campaign influence

Both designers and evaluators of awareness campaigns could make use of the theory of influence of the campaign. Hornik and Yanovitzky (2003) propose a model which focuses on five critical questions which are outlined below. Pensive and meticulous attention given to these questions would be of great assistance throughout the later

stages of awareness campaign evaluation, which includes the process, outcome and impact evaluation stages. These questions are as follows:

a) What are the expected outcomes of the campaign?

When evaluating awareness campaigns that have a clear focus on a behavioural objective, the evaluator should define this precisely in relation to the expected outcome and how it is to be assessed. Clarity when establishing campaign goal is critical for providing insight for choosing suitable metrics for the outcomes and impact evaluation. Furthermore, clarity of behavioural goals for the targeted audience enables evaluators to identify and use applicable processes.

b) What are pathways of effect of the campaign?

In respect to media campaign, there are at least three general paths that have been identified to have an influence on behaviour of an individual. The first pathway comprises of direct exposure to the swaying messages created by the campaign, this may be through educational programmes, advertisements placed in the media, or other formats. The subsequent pathway underlines the dispersal of the core campaign messages to other social establishments, for example, the official and administrative parts of government, the broad communications, the religious associations and equity and law implementation framework (Yanovitzky & Bennett, 1999). Few campaigns which incorporate a media promotion segment does so intentionally to draw in media's to fulfil the set campaign objectives (Wallack, 1990) while others pull in institutional consideration (Dearing, Rogers and Chang, 1991). The third pathway of influence regards the campaign-initiated procedures of societal dispersion. Through social communication with relatives, peers and different individuals in the network, individuals find out about practices that are socially affirmed and those that are not. They likewise become mindful of the expenses and advantages, in social terms, of playing out every acceptable behaviours. This social data, thusly, shapes their conduct frames of mind, convictions and expectations (Hornik & Yanovitzky, 2003).

- *Direct exposure to campaign messages*

Majority campaigners anticipate people's practices, frames of mind or convictions to change because of direct presentation to the messages or outputs (for example

Television promotions, announcements, online life posts and different mindfulness exercises). People may find out about the expenses and advantages of doing a certain acceptable behaviour, or structure specific dispositions or convictions about the behaviour because of seeing the campaign. People may likewise procure aptitudes to perform or dodge the behaviour and may increase self-adequacy subsequent to seeing the campaign message. Thus, a people can create constructive or pessimistic behaviours which aims to impact their very own conduct (behaviour). Ordinarily, when evaluating people's behaviour and the shifting behaviour degrees since the introduction of the campaign, it is assumed that this change is as the results of the direct exposure to the campaign messages (Hornik & Yanovitzky, 2003).

- *Institutional diffusion*

Individual's conduct could likewise be affected when campaign messages are communicated through various social establishments, for example, broad communications, equity and law requirement frameworks, religious or profound associations, official and administrative parts of government (Hornik & Yanovitzky, 2003). Numerous campaigns tend to incorporate media backing segment to pull in broad communications to focus them on the campaign's objectives (Wallack, 1990). Campaigns can likewise pull in institutional attention by connecting with network accomplices and talking about open doors for coordinated effort in distributing the campaign messages with the expected target audience(s) (for example Dearing et al., 1991). Prompts

- *Social diffusion*

A few campaigners urge people to transmit campaign messages to people who were not presented or mindful to the campaign messages, including relatives, peers, and other network individuals. In this manner, more individuals find out about the campaign message, together with its disadvantages and advantages of playing out specific behavioural practices presented by the campaign message. This information will thus help shape social mentalities, convictions and goals in the populace. This diffusion strategy is influenced by characteristics of individual social network, for example, the size, level of cohesiveness, quality or shortcoming of ties, and

soundness of the networks after some time (Rice, 1993). When assessing efforts, evaluators think about whether people had direct presentation to the campaign or received messages from somebody in their informal organization, or the amalgamation thereof (Hornik & Yanovitzky, 2003).

c) Who is the target audience(s)?

The other significant advance in developmental evaluation is to especially distinguish the intended target group (audience) for the campaign. It is unusual that everybody in a given populace be incorporated as a target populace. Most campaigners need to distinguish their target group utilizing a deliberate methodology. It is hence essential to observe whether campaign impacts will differ over these subpopulations. Campaign targets and messages will in general be applicable to people of a specific culture, age, sex, family circumstance, foundation, or beneficial experience (for example youth, single, African moms). It is imperative to consider the social foundation of such target audience(s) to guarantee that the campaign messages are socially delicate and fitting (Bloomfield et al., 2015; Poole et al., 2014). An evaluation that does not deliberately test individuals from the proposed target group could omit key discoveries, develop culturally inappropriate metrics, or inaccurately gauge the campaign impacts (Bloomfield et al., 2015). D'Enbeau and Kunkel (2013) likewise report that it is of significance that key stakeholders create a campaign cooperatively which unequivocally recognize or addresses the intended target population(s) as opposed to utilizing a general, or one-size-fits-all, approach (Bloomfield et al., 2015).

d) How much exposure is needed before effects can be expected?

It is common that an individual may need to encounter campaign messages on different occasions prior to their mentalities, convictions or practices change (Hornik and Yanovitzky, 2003). Awareness campaigns therefore often aim at providing simplified messages or information, whereas the impact of the campaign message rely on the recurrence of introduction to a message through a specific communication medium. There has been among some campaigner, a presumption that once the target audience has been exposed to common or existing messages, that they are new ready to receive new information. In any case, specific messages may should be passed on over and over through various communication channels (for example Television, bulletins and internet based life) to ensure that the message have impact

(Dumesnil and Verger, 2009). Various campaigns depend on the support from existing establishments and informal communities to boost their impact. Campaigns which carries these complicated techniques have been named "kitchen-sink" campaigns. Therefore, evaluating such campaign becomes increasingly perplexing in light of the fact that recognizing a non-exposed control group and having to perceive how the people got the message can be challenging (Hornik and Yanovitzky, 2003). Various campaign evaluations endeavour to show a relationship between direct single exposure to campaign messages and a quick change in individual comprehensions and behaviour (Bloomfield et al., 2015; Lapinski and Witte, 1998). Normatively such inquiries brings about uncertainties or inaccurate reflection of campaign impacts (McGuire, 1986; Atkin and Wallack, 1990; Brown and Walsh-Childers, 1994; Hornik, 1997).

e) What is the expected time interval between campaign launch and campaign effects?

The evaluation of certain campaigns may mirror a quick impact on individual behaviour generally not long after the campaign has been launched, while different campaigns may encounter a more extended time between campaign launch and quantifiable impacts. The campaign impact for the most part is reliant on a social or institutional pathway of effects. Such campaigns may take longer since they address practices which have an embedded cultural or social depth, and a rehashed exposure might be required before people are prepared to alter their behaviour. Impacts may likewise take more time to be established when chances to participate in the new behaviour are naturally deferred (Bloomfield et al., 2015; Hornik & Yanovitzky, 2003).

2.3.1.3 Logic models

The logic model is one method utilised for sorting out responses to the above mentioned questions. Such model is used at the planning stage of the campaign to guide on the following campaign element, namely; campaign activities, outputs, course of events and procedures (Bauman et al., 2006; Bruce & Tiger, 2010). Bloomfield et al. (2015) further note that the logic model illustrates how the campaign activities are speculated to prompt short-, mid-and long term effects. In conclusion, the logic model legitimately portrays the supporting hypothesis of the campaign and aides evaluators in selecting an evaluation design with proper measures.

2.3.1.4 Developing and pre-testing campaign messages

As part of the formative evaluation, it is paramount that the developed campaign message(s) be pre-tested on a small sample of the intended audience(s) to assess whether the campaign message will be understood as intended by the campaigners (Noar, 2006; Langford, Litts, and Pearson, 2013). Thereafter, the message design and campaign methodology should be constructed in accordance with the responses obtained from formative evaluation questions above. Concepts and ideas for the campaign are normally created by inventive publicizing experts together with the subject specialists. In the course of the development stage, general ideas or topics, explicit messages and potential slogans (for example paramount mottos or catchphrases) may rise. Testing draft ideas and messages (otherwise called pre-testing or idea testing) can be useful in evaluating their communication prospects and viability (Bloomfield et al., 2015). Pre-testing is normatively conducted over a small sample from the target audience(s) utilizing at least one qualitative research techniques (e.g., in-depth interviews and focus groups). The response obtained may be utilized to enhance the messages in manners that expands understanding and pertinence for the intended audience (Bloomfield et al., 2015). Thoughts regarding the campaign's image (or branding) may likewise be built up; the branding could be conveyed in different mediums such as images, symbols, words, and sounds. The use of quantitative strategies is commonly utilised by most campaign organisers to assess the viability of message and other elements of the campaign prior to concluding their planning. This is also done to determine whether the message would be effective, relevant and culturally appropriate to the intended populace.

When it comes to which methods to undertake to do a formative evaluation, many of the campaign evaluators make use of a different of research techniques which could then be utilised to respond to these questions. Alternatively, published literature and secondary data sets could be analysed by evaluators to assist in identifying the target audience(s) or choose a suitable pathway or effect. Interviews or focus groups could also be conducted with stakeholders to improve and pre-test campaign messages. Question could be formulated as follows:

- Are individuals from the intended interest group mindful of the recommendations made?

- In what way do they feel these concerns them?
- What indication is they to show that they would adapt with these recommendations?
- What sentiments are related with the recommended behaviour that could inspire to do the behaviour? (Bloomfield et al., 2015).

Exploring such questions will assist planners to undertake informed resolutions regarding campaign objectives, appropriate messages and potential reactions that could be invoked by the campaign.

2.3.2 Process evaluation

During the implementation of awareness campaign, the use of process evaluation becomes critical as it enables the evaluator to determine the degree to which the designed aspect of the campaign has been implemented as planned and the manner in which the campaign programme could be ameliorated (Atkin & Rice, 2012). Scheirer (1994) concurs, stating that this stage of evaluation allows the evaluators to compare the planned activities of the campaign to the actual delivery of these activities. This leads to the ability to comprehend the internal dynamics of the actual operation of the campaign, in particularly understanding the campaign planning strengths and weaknesses (Bloomfield et al., 2015). Process evaluation is therefore a helpful tool for assessing the efficacy of campaign administration and extracting the teachings learnt for overcoming the social and systematic obstacles.

Example questions to ask in this phase are "How frequent was the message exposure through the chosen communication medium?", "How many of the intended resource material (pamphlet) was distributed?", "How many of the intended audience did the campaign reach?" and "How much public interest did the campaign generate?"

Responding these questions would provide an indication as to whether the awareness campaign message was communicated as planned, whether the target audience was reached and whether the participation response was adequate.

There are various processes that could be used to assess the awareness campaign activities. These may include clipping services, tracking, website monitoring, case studies and small-scale surveys.

- **Clipping services** closely observe the details of the awareness campaign publications, such as the geographical location, time, frequency and dates where these were published. Such services could also be used to track and assess public views on the campaign (Berkowitz et al., 2008; Bloomfield et al., 2015).

- **Tracking** takes into account the collection of quantitative and descriptive information on the number of times (frequency) the campaign message was communicated in any medium (Bauman et al., 2006).

- **Small-scale surveys** allow evaluators to conduct a survey of a small sample that was exposed to the campaign and gather information on how the targeted audience responded to the message of the specific campaign (Bauman et al., 2006).

- **Website monitoring** includes observing website activities and mobile applications (Bloomfield et al., 2015; Tian et al., 2009). This also enables data collection on how users have accessed the website (either through links, search engines or bookmarks), time spent on the webpage, which icons were viewed more frequently and the geographical location of the user. It also reports on users who left the webpage immediately without exploring it (Bloomfield et al., 2015; Paek, Hove, & Cole, 2013).

- **Case studies** are a tool used to collect data, they make extensive use of analysis of a specific behaviour, over a certain period of time, of an individual or community. They provide an insightful knowledge on what is feasible in a particular context and what is not feasible and why. Lastly, case studies enable one to identify limitations to the effective implementation of a campaign (Bloomfield et al., 2015).

2.3.3 Outcome evaluation

Following the implementation of the awareness campaign, an outcome evaluation is conducted to assess the changes that occurred. It also establishes whether these changes were as a result of the campaign (ICAP, 2010). Bauman et al. (2006) further alludes to the fact that this type of evaluation measures the short-term effects of the awareness campaign, such as the campaign message, comprehension of the topic,

changed norms, attitudes and beliefs, changed in behaviour, changed in behavioural intentions, changes in skills, enhanced self-efficacy and reduction in risky behaviours.

Outcome evaluation therefore focuses on identifying which outcomes of the campaign should be measured and why; how these will be measured; what the desired "proportion of participants" is that would have changed due to the exposure to the campaign and whether the numbers have been reached (ICAP, 2010).

Critical to the effectiveness of this evaluation are the following requirements:
- In-depth information pertaining to indicators that could be used to measure the intended outcome (effective indicators are those that may be verified through the use of surveys, official statistics, administrative databases and third-party reports) (ICAP, 2010)
- Thorough knowledge of the methodology intended to gather the needed information (ICAP, 2010)
- A rigorous and reliable method to analyse and report on findings (ICAP, 2010).

2.3.4 Impact evaluation

The evaluation of the impact of an awareness campaign is regarded as the most complex type of evaluation and is extremely laborious (ICAP, 2010). It focuses on examining the long-term effects of the campaign on its participants and may include policy and environmental changes. The evaluation could be also conducted on a community level or a systemic level that has been influenced by the campaign. However, accurate reporting of the impact of the awareness campaign can be arduous since there may be many other factors that could influence the intended change (Bruce & Tiger, 2010). In addition, since the impact may be detected over a period of many years, it is challenging to prove the causal relationship between the impact and the campaign (Bloomfield et al., 2015). Furthermore, multiple researchers have identified potential challenges for organisations attempting to conduct awareness campaign evaluation. These challenges include the following:

- **Measurement challenges.** Coffman (2002) explains that if the campaign outcomes are not clear and not well apprehended, selecting appropriate measurement tools for evaluation is often a difficult task. Thomas and

Sheeran (2006) report that it is even more difficult to measure the attitudes and behaviour of the campaign participants. One factor seen to influence the process of "self-reporting" is the propensity of individuals to answer questions in accordance with what is deemed to be socially acceptable behaviour.

- **Accurate period for assessing outcomes and impact.** The timing plays a crucial role in determining the effects or impact of the campaign. Thus, should campaign evaluators measure outcomes too soon, false conclusion will be made on the effects of the campaign. Hornik et al. (2007) concur, reporting that it takes time before the outcome and the impact of the campaign can be detected by an evaluation. It is therefore paramount that campaign evaluators carefully consider the timing factor and include it in their planning (Bloomfield et al., 2015).

- **Influences of unintended variables.** There are many complex contextual factors that could influence the outcome and impact of a campaign (Coffman, 2002). Such factors may vary from personality traits, demographic characteristics and social influences reflected in an individual's behaviour, socioeconomic conditions, to the exposure to the awareness campaign (Bloomfield et al., 2015). It is unfortunate that such factors cannot be eliminated should they be found to have any form of influence on the target participant; however, it is the task of the campaign evaluators to acknowledge such factors as they may restrict or amplify the effects of the campaign (Bloomfield et al., 2015).

- **Difficulty in determining accurate levels of exposure.** Awareness campaigns often tend to reach a wider or more limited audience than expected. This makes it difficult to determine exactly who was exposed to the campaign, which aspect of the campaign message they were exposed to and the level of exposure. There is also no control over how the campaign will be interpreted by the individuals who were reached by the campaign. These types of challenges then make it difficult to accurately analyse which aspects of the campaign actually worked and for whom (Hornik et al., 2007).

- **Unforeseen consequences.** In everything, there are consequences whether positive or negative, even for well-planned awareness campaigns. For instance, awareness campaigns may have a positive effect on audiences that

were not the target of the campaign. Other campaigns may lose their impact owing to the protracted nature of the campaign, causing the target audience to become too familiar with the message.

That being so, the assessment of such impact is generally carried out using quantitative methods (Bruce & Tiger, 2010). Thus, the main aim of impact evaluation is to acquire a representative sample of the target audience and measure the incurred change using reliable and validated approaches (Bloomfield et al., 2015).

To wrap up this section, Table 2.3 below provides a summary of the critical elements of effective planning for any safety awareness campaign.

Table 2.3: Key elements of successful awareness raising campaigns: checklist

Key element	Success factors identified	A brief comment
1. Planning and monitoring	Detailed planning of the campaign; continuous evaluation and monitoring once it is run Defining the goal, the current situation and the gap that needs to be closed	Conducted at the very beginning of the campaign, it should help to clarify at least the following aspects: - issues target group(s) faces - needs of the target group(s) - the best channels and ways to communicate and spread the message to the target group - the content of the message. Exploratory research may be used for helping to identify the target groups, channels of the campaign. While continuous monitoring and evaluation of the campaign is useful in terms of identifying new emerging needs and adjusting the process of the campaign according to it.
2. Goal setting	Set objectives Set clear goals	SMART (specific, measurable, achievable, realistic, time-bound) Short term and long term Relevant to individual, national and/or European objectives of particular policy area.
3. Target audience	Identify target groups	This helps to identify the needs of the target group and, respectively, identify clear goals and prepare campaign contents which is more specific to influence the targeted audience.
4. Message	Develop campaign messages Tailor messages	Should be developed in a way to capture target audience attention, suggest acceptable solution to solve the problem and motivate learners for social change.
5. Stakeholder engagement	Identify experts, partners and networks to promote campaign. Engagement with various stakeholders and strong networking is also important to ensure a solid source of communication mediums)	Campaign developers should plan how to involve various relevant stakeholders in the campaign: - researchers - policy makers - trainers - media representatives - volunteers - other relevant groups.
6. Staff motivation	Feeling a sense of ownership of the campaign Loyalty to the message	Motivated staff and engaged stakeholders contribute to campaign's sustainability and success.

7. Communication channels	Identify tools and channels to use. Proper communication channels to spread the message	This would help to achieve the maximum target group.
8. Resource management	Identify sources of funding Accessibility, sustainability and continuation	Planned and efficient management of human and financial resources; Prepared strategies/plans to collect additional funding Wide outreach of services Continuous monitoring and evaluation of the campaign to make it renewable and cost-effective.
9. Multi-sectoral collaboration	Campaign integrated in broader initiatives Contribution to broader strategies and policies	Harmony in campaigns and national/international goals is helpful and may be beneficial in terms of increasing campaign visibility and influence, finding new funding opportunities, supporters and partners etc.

2.4   THE USE OF THE LOGIC MODEL AS A TOOL FOR EVALUATING AWARENESS CAMPAIGNS

As eluded to earlier in this report, the use of a theoretical underpinning when planning and evaluating awareness campaigns is pivotal when faced with complex and difficult campaign evaluations (Rice & Atkin, 2001; Bruce & Tiger, 2010; Banyard, 2014). Such theories, as used in a programme design, are termed programme theory. Programme theory therefore typically provides detailed reasons why and how a programme is anticipated to work. Subsequently, the logic model provides a schematic representation of the programme theory (Hornik & Yanovitzky, 2003). In a paper published by Wilder Research (2009), the logic model is described as a picture of a theory or a drawing like a chart that illustrates how something that is done could lead to an intended change.

The logic model is a commonly used tool for the effective planning and evaluation of an awareness campaign programmes (Silverman et al., n.d.). For instance, in planning, the logic model assists in clearly articulating the expectations and parameters of the campaign. It furthermore indicates the changes among the participants or systems that are expected to occur as a result of the campaign activities (Silverman et al., n.d.). As an evaluation tool, Hayes, Villatte, Levin, and Hildebrandt (2011) report that the logic model assists in clearly setting out relationships and assumptions between what the programme will do and what changes are expected to be achieved. Helitzer et al. (2010) further indicates that the logic model is specifically

valuable in illuminating the gaps between the composition of the programme, the founding assumptions and the expected outcomes (Strategyunitwm.nhs.uk, 2016).

The development of the logic model is normally done in conjunction with the narrative descriptions of the campaign as well as the framework for measuring the outcomes and impact thereof (Strategyunitwm.nhs.uk, 2016). This process thus helps in defining various components of the programme, which in turn provides foundations for measurements and evaluations.

2.4.1 Definitions

There is no single definition given in the literature that accurately defines the logic model. Silverman et al. (2009) describe the logic model as a visual snapshot of a program (or project) that communicates the intended relationships between program goals, activities, outputs, and intended outcomes. Hayes, Parchman, and Howard (2012) define it as a graphical/textual representation of how a program is intended to work and links outcomes with processes and the theoretical assumptions of the program. Lastly, Kaplan and Garrett (2005) define it as a graphic display or 'map' of the relationship between a programme's resources, activities, and intended results, which also identifies the programme's underlying theory and assumptions. In a nutshell, logic models graphically illustrate the theory or the logic of how a programme is intended to work. Furthermore, the logic model is often referred to interchangeably by the following terms: *theory of change, roadmap, model of change, blueprint, programme theory, conceptual map, theory of action and/or causal chain.*

For the purpose of this research, the term "logic model" will be used as described by Silverman et al. (2009).

2.4.2 Why the need to develop the logic model?

McLaughlin and Jordan (1999) encourage the use of the logic model as an enabler to set out the story line of a planned programme, as it provides the details of what the programme is aimed at achieving and reasons why it is important. It also measures what is being done and the effectiveness of the programme. Hayes et al. (2012) also add that the development of this model strengthens the relationship between the project team members and the relevant stakeholders as it clearly articulates the

purpose of the programme and the strategies that will be used to foster the intended outcomes. Silverman et al. (2009) maintain that having a clear outline of how the programme is intending to work and sharing a common understanding of how the success of the programme will be measured offers a baseline for reaching the expected programme goals and objectives. A planned programme is therefore more likely to succeed when everyone involved has consensus on the programme strategies and how each event in the programme will unfold. This therefore encourages a standardised approach to evaluation, as well as critical and systematic thinking on the pivotal steps to be undertaken to bring about the desired change (Silverman et al., 2009). The diagram in Figure 2.1 highlights the benefits of the use of logic models
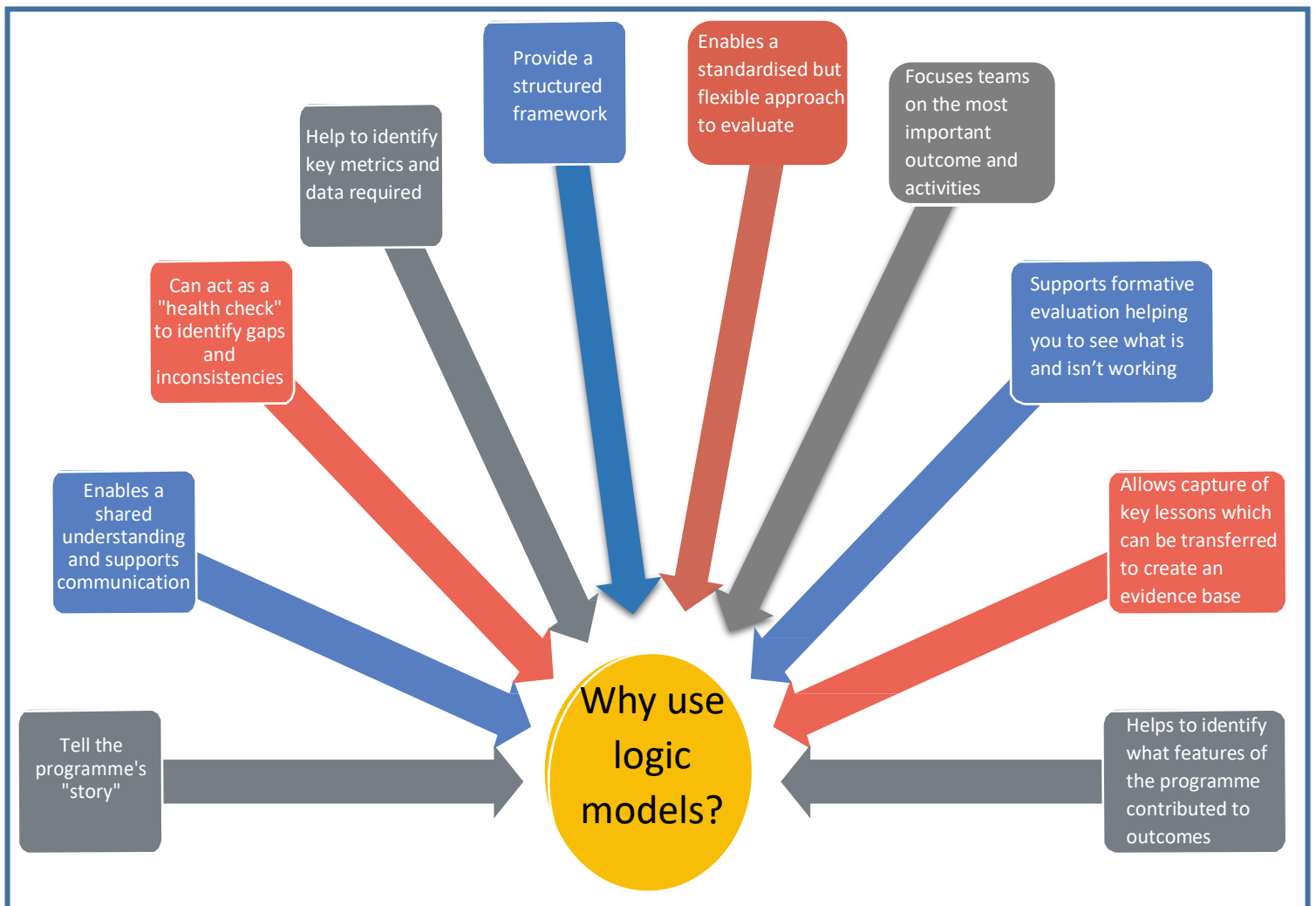
Figure 3.1 Benefits of logic models, Source: Strategyunitwm.nhs.uk (2016)

Furthermore, it should be noted that to create an effective logic model will require the commitment of resources, time and training of relevant personal (Kaplan & Garrett, 2005). The involvement of experts is also important for assisting to develop a robust model that will enable an accurate measurement of the intended and unintended outcomes (Strategyunitwm.nhs.uk, 2016).

2.4.3 Components of the logic model

In developing the logic model, careful thought has to be given to what assumptions or programme theory is articulated, as this shapes the compilation of the logic model and the types of intervention strategy undertaken to resolve the problem that may exist. Assumptions in this case are defined as an informed knowledge or belief. Therefore, the success of rightfully articulating the programme theory is deeply rooted in the ability to unpack the belief and knowledge employed when expressing such assumptions built into the logic model. In practice, any change in any programme employed to bring about change should be grounded in knowledge (Donaldson, 2007). When the obtained results are linked to strategy that reflects experience, practice, research and theory, these have a chance of greater success than strategies that lack such grounding (Donaldson, 2007). Figure 2.2 below illustrates the combination of elements found in knowledge to develop a sound logic model.
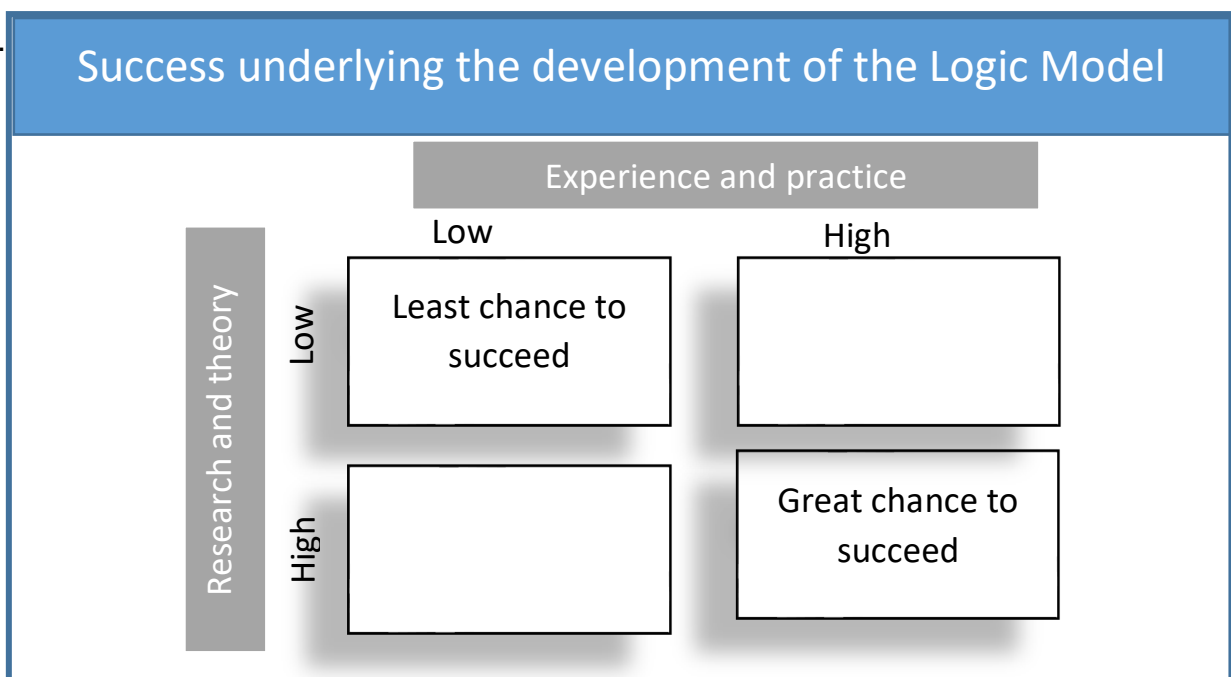
Figure 2.2: Relative success relies on a depth of practice, experience, research and theory. Source Donaldson, 2007

As observed in figure 2.2 above, a combination of little or no practice, experience, research and theory in your model means the effort it represents is an idea that may be highly innovative but is not likely to succeed. A combination of practice, experience, research and theory in the model suggests the effort it represents is more likely to succeed (Donaldson, 2007).

2.4.4 Generic layout of the logic model

Diverse layouts may be used when representing the logic model. However, a more generic layout is represented in Figure 2.3 below:
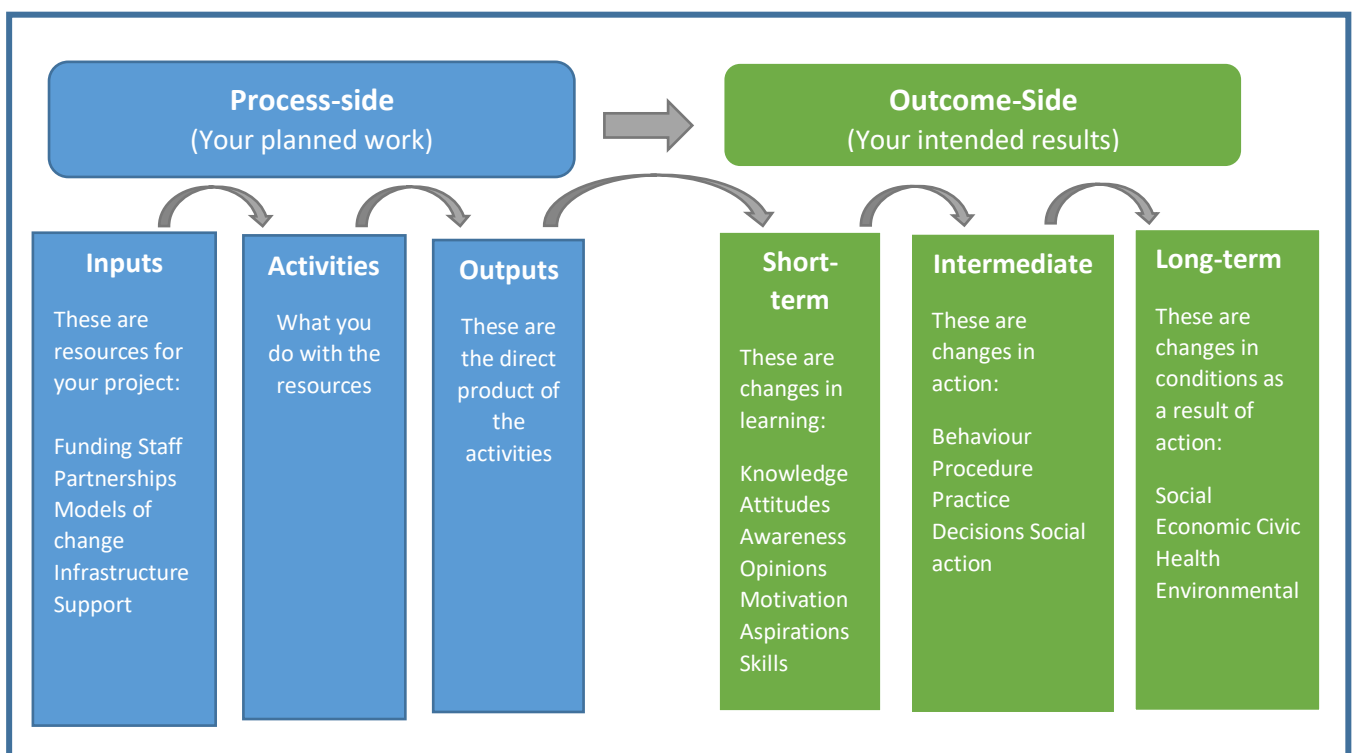
Figure 2.3: The logic model framework. Source: Joyce, Kunguma and Jordaan (2010); Silverman et al. (n.d.).

The logical framework in figure 2.3 above reads from the left-hand side of the page to the right-hand side. The process side identifies the inputs, activities and outputs.

- **Inputs** – These are the resources available for the project, which include staff, funding, organisational and community resources, leadership, expertise, scientific knowledge and evidence-based strategies, project infrastructure and partnerships with various stakeholders.

- **Activities** – These are the actual actions of the project to bring about the intended change. This may include interventions that include but are not limited to events, distribution of messages through different multimedia and referrals to services.
- **Output** – These are the direct products of activities to be delivered by the project. They are the direct evidence of implemented activities which may include a number of families linked to the services, number of implemented prevention activities, levels and targeted activities.

The outcome side identifies the short-term, intermediate and long-term outcomes as results to be achieved by the project.

- **Short-term outcome.** This represents immediate effect resulting from the project and should be attained within a one to three year period. Some of the effects may include a change in learning, knowledge and attitudes.
- **Intermediate outcome.** This may reflect changes in actions, such as behaviour and practice which results from increased knowledge and awareness.
- **Long-term outcome.** This is the expected effects as a result of the project. Therefore, conditions change as a result of an action. Thus, the outcome should be attainable within a four to six year period.

It is important to note that the logic model framework is not restricted to a linear format but comes in many shapes and sizes and conveys diverse levels of detail; however, it is designed to read from left to right. It must, therefore, be remembered that the logic framework concepts could be presented in a 4 x 4 matrix, thus resulting in a one-page, brief summary of critical project elements and their interrelationship (PCI, 1979; Silverman et al., 2009).

2.4.5 Types of logic model

The use of the logic model serves various purposes and thus gives rise to the adoption of different types of logic model. This dissertation will report on two model that are frequently used for evaluation.

2.4.5.1 Weaver's Triangle

This version of the logic model is considered to be the simplest tool for evaluating the effectiveness of small-scale programmes (Evaluationsupportscotland.org.uk, 2009). The use of this model assists in clarifying the programmes aims, outcomes and activities (Evaluationsupportscotland.org.uk, 2009). Therefore, this enables an organisation to explore ways in which the organisation mission is linked to its achievements and its daily activities (Taylor-Powell, Steele and Douglah, 1996). To strengthen the organisation's strategy when using Weaver's Triangle the following questions may be asked:

- Are the outcomes of the organisation activities clear?
- Are the outcomes contributing to the achievement of the set aims?
- Is the aim aligned with the mission of the organisation and does it contribute to the achievement of the mission?
- In reviewing the activities and the outcomes, are those that are misaligned to the mission reworked or dropped?

The Weaver's Triangle is illustrated in Figure 2.4.
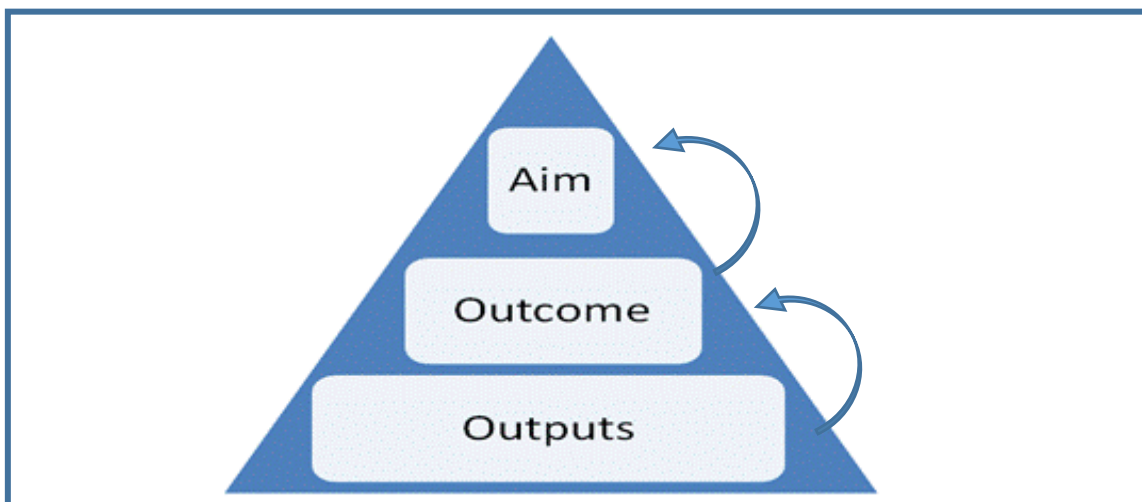
Figure 2.4: Generic diagraph of the Weaver's Triangle. Source: Taylor-Powell et al, (1996)

As illustrated in Figure 2.4 above, the *outputs* comprise the planned organisational activities, the *outcome* comprise the results of the outputs and the *aim* or impact is as a result of the accomplished outcomes.

This model is simple; however, it could be rendered more sophisticated by making connections (by using arrows) between the activities and the outcomes. This could become bit untidy, however, and restrict the ability to question some of the underlying logic assumptions. This type of a model is therefore only suitable for organisations that undertake small projects with minimal inputs. For more complex programmes, the following model will be more suitable.

2.4.5.2   Wisconsin model

The most frequently used type of logic model originates from the University of Wisconsin's United Way and therefore is termed the Wisconsin model. In addition to the normal elements of the logic model, this model adds components such as the situation (needs), assumption and the external factors. The Wisconsin model is displayed in Figure 2.5.
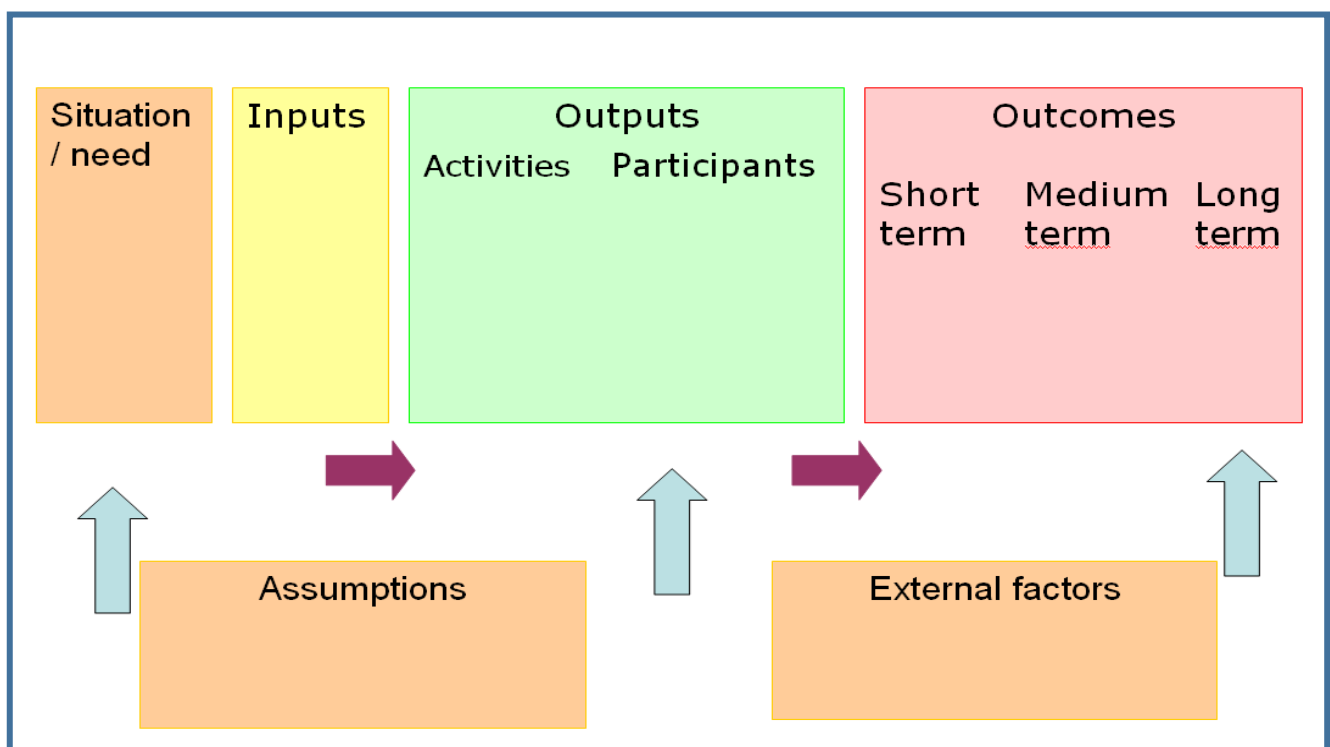
Figure 2.5: Generic illustration of the Wisconsin model. Source: Taylor-Powell et al, (1996)

The Wisconsin model presented in figure 2.5 adds assumptions and external factors to the common logic model. These two elements of the Wisconsin model are essential and beneficial to identify aspects of planning that might go wrong and it also allows planners to question their own logic in doing things (Taylor-Powell et al, 1996). The element of the assumption allows reflection on whether what is been done is meaningful, plausible, doable and also testable. Whereas, the external factors assist to identify factors that might change or hinders the progress or impact of the awareness campaign. These elements assist in putting measures in place to counteract any threat to the success of the awareness campaign (Taylor-Powell et al, 1996).

To further expound on this concept, Table 2.4 provides the components of the logic model, as well as a description and examples from the Public Health of Ontario (PHO), (2015).

Table 2.4: Common components of logic models. Source PHO, 2016

Component	Description	Example
Goal	The overall long-term health outcomes the program hopes to achieve.	To prevent diet-related health problems in adulthood.
Inputs	The resources invested into a program or initiative.	- Staff - Funding - Time - Materials - Supplies
Activities	Activities or interventions that will be carried out as part of the program.	- Public service announcements (PSAs) on health risks of sexually transmitted infections (STIs) - Workshops on healthy eating for children and their parents - Bi-weekly community sports activities for neighbourhood adolescents
Audience	Whom the program is targeting. Programs may target specific groups such as young children or older adults but may also be broad in nature. Primary audience: the main population that is being targeted. Secondary audience: groups who are impacted or influenced by a program, but are not the direct recipients of the program.	A program designed to train teachers on how to provide physical activity to students. - Primary audience: teachers - Secondary audience: students

Component	Description	Example
Outputs	Products that are produced from program activities or interventions. Outputs can be viewed as quantifying activities and providing numeric values or attributing percentages.	• Number of PSAs run during a health promotion campaign • Number of workshops provided on healthy eating • Percentage of organized community sports activities held
Outcomes	The changes expected to result from the program. Outcomes range from short-term to long-term, and are associated with changes in knowledge, awareness, behaviour and skills.	• Increased awareness of the health risks of STIs • Increased knowledge on healthy foods and proper food handling skills • Reduction in the number of secondary students reporting physical inactivity on school surveys

Component	Description	Example
Situation	The situational context that lead to the creation of the program.	• Increased rates of obesity lead to the creation of a physical activity program for adolescents aged 12 to 18 years old • Increased incidence of gonorrhea and low perceived susceptibility to sexually transmitted infections (STIs) amongst 14 to 24 year olds
Assumptions	Underlying theories and beliefs about the program and its context which can influence the development of a program and which activities are implemented. Transparency around assumptions makes explicit the beliefs that underlie chosen actions.	• Adolescents are interested in physical activity programs • The public has access to a radio and will hear the PSAs
External factors	Factors that impact the program but are beyond the control of program planners and overseers. Factors may be positive or negative and are likely to influence program success.	• Cultural norms • Political climate • Social policies • Environmental factors

Regardless of the type of the logic model chosen, the following questions should be considered for an evaluation process to be effective (McLaughlin, & Jordan, 1999):

- Are all relevant elements of the proposed logic model reflected at the appropriate level for the allocated timeframe?
- Are the outputs and outcomes aligned with the expected performance level?
- Are the implementation activities carried out as intended or designed?

- Are all relevant resources available and were the used at the projected levels?

- Did all the causal relationships illustrated in the logic model occur as anticipated?

- Was there progress made along the path towards the outcomes?

- Did the project experience unintended outcomes or incur unexpected costs?

- Is there any theoretical explanation for the outcome or the results achieved?

- Did the programme reach the intended target participants?

- Did the participants comprehend the programme message as intended?

2.4.6   Logic model indicators: measuring progress

It is generally advisable to have baseline data prior to the implementation of any intervention programme to gauge any change that could be as a result of the programme (Bitel, 2009). Accordingly, indicators are pivotal in assisting to measure any progress made throughout the programme. Bitel (2009) has therefore identified the two most basic types of indicators, namely, output indicators and outcome indicators.

2.4.6.1   Output indicators

Output indicators help in measuring the progress made during the delivery of the programme activities. Thus, during the programme planning phase, it is important to clearly indicate how many activities will be conducted and what target audience is envisaged. Furthermore, at various points during the delivery of the programme, monitoring and assessment regarding how many activities have been delivered against the identified output indicators.

> An example of an output indicator could be as follows: A project directed at elderly women plans to run
>
> - five information sessions for groups of ten women (50 women in total)
> - peer-led digital support services (for 25 women)
> - 15 workshops for up to 30 women per session.

2.4.6.2 Outcome indicators

Outcome indicators are used to determine whether change has been achieved through the implemented programme (these are the outcomes). The ability to measure outcomes with ease differs from situation to situation. Hard outcomes normally have straightforward indicators. For instance, if the outcome is to increase employment, the indicator would be a whether the target audience has obtained a job (Bitel, 2009). On the other hand, soft outcomes are often difficult to measure and thus requires a set of proxy indicators (Bitel, 2009). Such indicators have to measure something that indicates that an outcome has happened. For instance, if the outcome were to increase the young people's self-confident, an indicator may be whether the targeted young people are able to express their views clearly within a group (Bitel, 2009).

There are three types of outcome indicators, namely; the individual indicators which assists in assessing the progress of an individual as a target audience; group indicators measures the progress of a group of people participating in the programme; lastly, a whole community or population indicators, these measures the progress of a wider community or population that would have been the target audiences.

2.4.7 Logic Model Quality Testing: SMART and FIT

There are many ways of testing the quality of the logic model, however the SMART and the FIT approaches have been applied to examine the model in part as well as comprehensively. SMART therefore stands for:

-**S**pecific: Activities are clear and are aligned to the outcomes

-**M**easurable: Content can be quantified and qualified

-**A**ction orientated: Content provokes change in awareness, attitude, knowledge, behaviour and skill

-**R**ealistic: Content is both feasible and plausible

-**T**imed: Content duration is specific and displays time-dependent sequence of outcomes to track progress achieved

The other approach applied for testing the logic model is the FIT principle. FIT is an acronym for frequency, intensity and target. These could translate to paramount questions regarding the ability to achieve the intended results. The frequency relates to a question of: Does the programme repeat, occur at an appropriate volume or happens often to ensure the achievement of the intended outcome? The intensity relates to a question of: Do the programme have the necessary depth or concentration to ensure the attainment of the intended results? Lastly, the target relates to a question of: Is the programme aiming at the appropriate and specific audience?

For any model that is adopted or utilised, it is imperative to also have a means for testing the selected model to ensure it is fit for purpose, accurate and produces genuine results. Although SMART and FIT were identified as the quality checker of the logic model, the most common quality checker used is the SMART principle.

2.5   SUMMARY

This chapter alluded on the various principles that needs to be observed when planning to execute an effective safety awareness campaign as an educational intervention programme. The campaign planners must be aware of the various risk perceptions that may exists amount the target audiences. It is in this that audience segmentation is thus paramount to ensure that appropriate campaign messages are designed, developed and delivered in accordance to the target audience demographics and behaviour.

Moreover, the aspect of campaign evaluation was also discussed at length. Literature revealed the four different stages for evaluating awareness campaign. The logic model also known to be an effective planning and evaluation tool was also discussed in detail.

The chapter that follows elaborates on the research design and the methodology used to conduct this research. The rationale for choosing the methodology is also outlined. The entire data collection and analysis process is discussed in the chapter that follows.

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

This chapter describes the research process for the study. It therefore presents and discusses the interpretivist approach employed when undertaking this research, as well as the qualitative research methods utilised for the data collection and data analysis processes. In addition, the position of the researcher as having insider status is discussed in relation to qualitative research. The chapter ends by deliberating issues of trustworthiness and credibility in the qualitative programme evaluation, as well as the way in which the trustworthiness and credibility of the study were assured.

The main focus of the study was to explore factors influencing the planning and execution of awareness campaigns undertaken by the Railway Safety Regulator (RSR) as an educational process. The study thus undertook a programme evaluation approach by employing a single case study as a method for collecting data. This type of methodology provided the researcher with significant tools to study a complex phenomenon within its natural context (Baxter & Jack, 2008). The use of case study as a method of inquiry also enables triangulation, which was vital in ensuring the validity of the research study (Johansson, 2003). The department of Education and Awareness in the RSR was the unit of analysis, as this department is primarily responsible for planning and implementing such safety awareness campaigns. The unit of observation was a safety awareness campaign conducted by the aforementioned department with the aim of educating members of the public.

The logic model, underpinned by the theory of change, was used as a tool for evaluating the unit of observation. Thus, the purpose of this research was to understand the overall process used by the RSR when planning and implementing awareness campaigns as an educative intervention to mitigate railway occurrences involving members of the public in the railway environment.

3.2   PHILOSOPHICAL UNDERPINNING OF THIS RESEARCH

This study adopted the philosophical underpinning of an interpretive research paradigm. The term 'paradigm' is described by Creswell (2009) and Gringeri, Barusch & Cambron (2013) as a lens through which the world is viewed. These are the belief systems about the nature of reality, how reality is constructed, how knowledge is generated and what the underlying assumptions involved are (Makombe, 2017). In accordance with Guba and Lincoln (1994), paradigm is defined as "set of basic beliefs (or metaphysics) that deals with ultimate or first principles. It represents a worldview that defines, for its holder, the nature of the 'world,' the individual's place in it and the range of possible relationships to that world and its parts, as, for example, cosmologies and theologies do. The beliefs are basic in the sense that they must be accepted simply on faith" (Guba & Lincoln, 1994, p. 107). Additionally, a research paradigm is reported by TerreBlanche and Durrheim (1999) to be a research process comprised of three crucial dimensions, namely, ontology, epistemology and methodology. Thus, these researchers describe a research paradigm as an all-inclusive system of interdependent practices and thought patterns which shapes the essence of enquiry within these three dimensions. The aspects of ontology and epistemology are concerned with what is generally referred to as the 'person's worldview' which has a great bearing on how an individual perceives the relative essence of reality (TerreBlanche & Durrheim, 1999). Regarding methodology, Henning, Van Rensburg and Smit (2004) reported that methodology has to do with engagement, participation and collaboration. Therefore, the researcher applying an interpretive approach is a participant observer who participates in activities and derives the meaning of actions which are expressed within a particular social context (Carr & Kemmis, 1986).

3.2.1 Interpretive Research Paradigm

The researcher of this study has undertaken the position of interpretive researchers as they are of the view that reality consists of an individual's subjective experiences of their own external world, and therefore they adopt an inter-subjective epistemology and the ontological belief that reality is socially constructed. This means that with the same phenomenon, diverse individuals may construct their own meaning in different ways; however, the truth is a consensus formed by co-constructors (Crotty, 1998; Pring, 2000). Therefore, as Crotty (1998) rightfully observes, meaningful reality and

knowledge are constructed in their entirety from human interaction and with their respective cultural and social context. In addition, concurring with Cohen, Manion, and Morrison (2007), to understand a social world one needs to understand the standpoint of an individual participating in that particular milieu. As Reeves and Hedberg (2003, p. 32) put it, "[an] interpretive paradigm is concerned with understanding the world as it is from the subjective experience of individuals". Therefore, the aim of interpretivism is to bring to the surface the unseen social forces and structures.

Thus, the researcher in this study regards the nature of reality (ontology) in terms of relativism. Guba and Lincoln (1994) define relativism as "the view that reality is subjective and differs from person to person" (Guga & Lincoln, 1994, p. 110). Accordingly, the research sought to investigate a unit of analysis in which all the participating participants were involved to obtain a holistic understanding of the case being studied.

The interpretive epistemology (the nature of knowledge and the relationship among the inquirer and the inquired) for this study is that of subjectivism. Burrell and Morgan (1979) rightfully eludes subjectivism as a viewpoint of interpretivist paradigm in a way that what we know about the reality is socially constructed and thus acted out by human. Therefore, it is in this that the researcher of this study sought to understand the processes behind RSR safety awareness campaigns from the subjective viewpoint of the participants rather than undertaking an objective approach.

The interpretative methodology was guided by the need to understand the phenomenon from the individuals' perspectives, hence the investigation also focused on the interconnectivity among individuals, looking particularly at their historical and cultural context (Creswell, 2009). This was done by employing case study as a method of inquiry. Thus, this interpretive method yielded in-depth information which assisted the researcher to understand behaviour and provide justification for actions from the participants' points of view, without overpowering participant insight. This was done through the use of semi-structured interviews with open-ended questions, which allowed the participants to provide great insight and rich data. Such data was collected and analysed immediately after collection (Upadhyay, 2012).

Table 3.1 below presents the various documents which were reviewed for the purpose of the document analysis process.

Table 3.1: Presents various documents review for the document analysis process

Reviewed Documents	Content Analysis
RSR Strategic Plan 2016-2021	This document provided understanding on the planned strategic objectives and the envisaged outcomes. This is a high-level document providing overall view of the RSR 5-year plan.
Education and Awareness: APP 2018/19	The Annual performance plan for the Media and Communication Department was analysis. The focus was on the Education and Awareness Unit. This plan provided an overview of the unit's operational targets.
Education and Awareness Processes (SOP)	The SOP is guiding document highlighting the process to be followed when conducting safety awareness campaign. This document is also meant to ensure standardisation when safety campaigns are conducted. This provided an understanding of the thought process behind planning of the RSR safety awareness campaigns.
Education and Awareness: Safety Awareness Initiative Plan 2018/29	The Safety Awareness Initiative Plan. This is an annual plan presenting where safety awareness campaigns will be conducted for the year. This provided insight on the type of awareness campaigns planned per annum. This enabled the researcher to identify the safety awareness to investigate for the purpose of this study.
Eastern Cape Level Crossing Awareness Campaign Checklist	This checklist provided inside on the process followed as well as the priority of the planners.
Eastern Cape Safety Awareness Campaign Schedule	The schedule provided timeframes for campaign activities.
Post Campaign Report: Addo Level Crossing Safety Awareness (2018)	This post report discussed the campaign processes together with strength and the weaknesses of the campaign. This report provided the researcher with vital information to cross check information provided during the interviews. The pictures taken on the day of the campaign were taken from this report
Post campaign Article: Published on ULOLIWE (internal communication magazine)	The post campaign article was published as per the SOP guiding process.

3.3   RESEARCH DESIGN

The researcher of this study employed a qualitative research design to enable scientific inquiry into the phenomenon under investigation. In accordance with McMillan and Schumacher (1993), qualitative research is regarded as an inductive process for arranging data into various categories and also for identifying the relation between such categories. This therefore means that the data and its meaning were originally derived from the research context. Accordingly, the qualitative research design took the form of a single case study to allow the researcher to observe variables in their natural setting. Furthermore, Astalin (2013) reports a case study as an analysis of either projects, persons, institutions or any other system that could be studied comprehensively using one or more methods to enable the researcher to interpret the case under investigation within its natural context. Yin's (1994), on the other hand, defines a case study as a pragmatic inquiry for investigating a subject within a real-life context. The researcher subscribes to both of these approaches (or definitions stated above) as they both assure that the investigation retains the holistic and meaningful characteristics of the real-life events for the organisational and managerial process of the RSR safety awareness campaigns – the case under study. The method used to collect qualitative data was implemented in the field; that is, in the setting being studied (Patton, 2002). Accordingly, the qualitative data used for programme evaluation was sourced from in-depth semi-structured interviews and document analysis (Patton, 2002).

3.4.   RESEARCH METHODOLOGY

Multiple definitions for the term "methodology" are to be found in the literature. According to Mouton (1996), methodology is regarded as means or method of doing something. Burns and Grove (2003) report methodology to be inclusive of designs, sampling, methodological limitations and the collection of data, as well as the analytical techniques used in the study. Baxter and Jack (2008) describes methodology as a group of complementary methods that enables appropriate data collection and findings that reflect the research questions and are suitable for the researcher's purpose. Kothari (2004), however, encapsulates this term aesthetically

by reporting methodology as a systematic way of solving a problem. Concurring with the latter definition, the research methodology for this dissertation refers to how this research followed a logical sequence in the quest to find an answer to the research question. The research questions used to guide the phenomenon under investigation are as follows:

- Primary research question:

  How does the RSR conceptualise, plan and execute railway safety awareness campaigns?

- Secondary research questions:
  - How does the RSR establish the outcomes to be achieved by an intervention campaign?
  - What factors are considered by the RSR to ensure that the inputs from stakeholders correspond with the desired outcomes formulated or perceived by the RSR?
  - How is the content to be included in the programme chosen and by whom?
  - How are the activities (educative interventions) chosen in relation to the target group of the population?

The research undertook the approach of programme evaluation, employing a qualitative single case study as a method for collecting data. This type of methodology was chosen because it gave the researcher a tool with which to study a complex phenomenon within its context (Baxter, & Jack, 2008). This approach therefore reinforces a thorough understanding and interpretation of the intended and unintended human interactions. Furthermore, the use of case study as a method of inquiry enabled triangulation, which was vital in ensuring the validity of this research study (Johansson, 2003).

The following section presents the data collection process through interviews and document analysis.

3.4.1 The use of interviews and document analysis

The qualitative evaluation data for the study were sourced from interviews and the reviewing of documentation. In accordance with Taylor and Bogdan (1998), an in-depth interview (or interviewing) is a "repeated face-to-face" encounter between the researcher and the participants in aid of understanding the participants' actions, perceptions and experiences, observe non-verbal cues or their frame of mind expressed in words (Kumar, 2011; Patton, 2003). The interview was conducted in the form of a semi-structured interview. This form of interview is both unstructured and structured and thus may comprise both closed and open-ended questions. Therefore, for the sake of consistency, the researcher (who was the interviewer) pre-planned central questions to provide guidance to ensure that critical areas of discussion were covered by every interviewee, although they could all elaborate and provide additional relevant information should they wish to do so.

The researcher used different probing techniques to ensure that efficient and reliable data were collected. Interviews were recorded with the consent of the participants to ensure that the captured notes of narratives corresponded with those of the recorded interviews. The recordings were also meant to ensure that a thorough reflection was done to identify possible gaps (this may be information not captured or missed during the interview) that might arise. Furthermore, listening to the recorded interview assisted in ensuring that every piece of information is captured to the detail and accurately. It is thus paramount that prior to the recording, permission was granted. The actual time taken for the interview depended on the participants, but one hour was allocated to each interview. The obtained data consisted of verbatim quotations with sufficient context for interpretation (Patton, 2003).

Semi-structured interviews have both benefits and limitations. As Genise (2002) and Shneiderman and Plaisant (2005) indicate, the benefits of semi-structured interview as a method of collecting data are, firstly, that the researcher is in direct contact with the source of information and this enables the researcher to obtain specific and meaningful information about the subject under investigation; secondly, the information provided is rich in detail and, lastly, this method is powerful when conducted on a few participants, as only a few are required to provide the depth and detail of the information needed. On the other hand, Adams (2015) presents the

limitations of semi-structured interviews as the fact that these constitute a prolonged process, are laborious and require the interviewer to be skilled and knowledgeable about the subject matter. In addition, the interviewee must be able to express themselves sufficiently. Furthermore, following the preparation, scheduling and conducting of the interviews, significant time is still required to do the analysis and transcribe the data. Therefore, there researcher must be highly organised and have good time management skills.

The other data collection technique, that is, document analysis, was implemented by accessing documentation and reports such as the sub-departmental standard operating procedures (SOPs), policies, censuses, earlier research, publications, letters, photographs and any other documents available that were pertinent to the study. This method of collecting data is called document analysis. Document analysis is described by Bowen (2009, p. 27) as a "systematic procedure for reviewing or evaluating documents for both printed and electronic materials". As Corbin and Strauss (2008) report, the analysis of documents requires data to be reviewed and interpreted to extract meaning and comprehend the knowledge therein. Such analysis is a procedure which entails obtaining, selecting, making sense of and producing data from these document (Labuschagne, 2003). Therefore, the rationale for making use of document analysis is to ensure triangulation. Eisner (1991) denotes that data triangulation allows the researcher to provide evidence which corresponds with their findings, thus enforcing the credibility of the study. Moreover, by thoroughly reviewing the information collected through diverse methods, the researcher is able to cross-examine data to limit any possibility of bias. In accordance with Patton (1990), triangulation guards the researcher against being accused of findings that are biased as they would be if they were obtained from a single source or method.

Nevertheless, like any other method, document analysis also had its own benefits and limitations. The benefits of document analysis, as presented by Bowen (2009), firstly, it takes limited time as document analysis only requires data selection and not data collection. Secondly, the information is readily available, less costly and it is not influenced by the research process. Reliable and existing information could be sourced from the participants (Yüksel, 2010). Lastly, documents are non-reactive and are therefore viewed as stable and are appropriate for repeated reviews.

With regard to the inherent limitations of document analysis, as reported by Yin (1994), firstly, document analysis may have low retrievability, which simply means that some documents may not be easily accessible or some documents may be blocked intentionally to inhibit public access. Secondly, not all documents would have been found or exhausted and this could be an indication of 'biased selectivity'.

3.4.2 Sampling

The sampling technique for the study aimed at obtaining an information-rich data wherein the participants were purposefully selected (Patton, 1990). Thus, purposive sampling was employed in the study to gain an understanding of a single case rather than its generalisability (Vaterlaus & Higginbotham, 2011). Furthermore, this study employed mixed purposeful sampling (the evaluative research generally serves multiple purposes, therefore needing multiple sampling techniques to select information-rich data to enable an in-depth study of a case [Patton, 2002]). The multiple sampling therefore constituted of the following combination of sampling, (1) expert sampling, (2) homogeneous sampling and (3) opportunistic sampling (Etikan, Musa, & Alkassim, 2016).

The targeted group within the RSR was the Department of Media and Communication which has a sub-department called *Education and Awareness* which is responsible for planning and conducting awareness campaigns to achieve the strategic objectives of the organisation. It was, therefore, within this sub-department that data were gathered using the aforementioned purposeful sampling technique. The sub-departmental hierarchy was used to source information that would feed into the logic model framework. In descending order of the sub-departmental hierarchy, the Head of Media and Communications Department and the Senior Manager of Education and Awareness (SMEA) were interviewed as experts or knowledgeable people about the industry and the case under study. The use of an expert sampling technique provided the researcher with context and insight into the oversight or the strategic position of the unit of observation.

The second sampling technique used was homogeneous sampling which allowed the researcher to source information from the three Marketing and Communication Officers (COs) and a Cooperate Service Investment (CSI) Officer, who function as the

implementing agents of the awareness campaigns. They were therefore suitable participants to provide the researcher with detailed information about the planning processes and factors influencing these processes. This information obtained from the officers was further used to feed into the logic model (this is presented and briefly discussed at the end of this chapter).

Owing to the evaluative nature of the study, the last sampling technique, opportunistic sampling, was used to enable the researcher to make on-the-spot decisions about sampling to take advantage of any new opportunity that might arise during the collection of data. This technique was used because not all decisions could be made in advance (Patton, 1990, 2002).

As Patton (1990) states there are no rules specifying sample size in a qualitative inquiry, however, for cases that are information-rich, a small number of people can be very valuable as they will provide in-depth information. In light of the latter, the planned sample size for the study comprised five participants who were critical decision makers in the planning and execution of these safety awareness campaigns. An additional participant was identified during data collection and was also interviewed to ensure saturation of the information required. Therefore, a total of six participants participated in the study and provided data for analysis.

3.4.3 Ethical considerations

Ethical implications within the sphere of research have to be addressed, thus universities impose measures to protect the dignity and ensure the safety of the research participants in any given study (Silverman, 2009). Accordingly, the University of Pretoria has authorised the Research Ethics Committee to ensure ethical requirements are adhered to when research is conducted. Therefore, this research was approved by the Ethics Committee of the university. In addition, the proposal for this research underwent a proposal defence which was approved by the Defence Committee appointed at the time. Thus, the entire ethical process ensured that the researcher adhered to the formal ethical procedure, namely, obtaining written consent from participants, obtaining a letter from the RSR permitting the researcher to conduct the study at the organisation, and lastly compiling the necessary protocols (such as

management level interview protocol and lower management level interview protocol) and for the data collection processes.

All the required ethical considerations were complied with to ensure that the study was conducted in the manner that was appropriate to the participants and met the ethical requirements of the university. Prior to data collection, consent forms were distributed to the participants via email and a hard copy was presented before the interviews were conducted. This afforded the researcher the opportunity to go through the information contained in the consent form to confirm that the participant thoroughly understood the content therein before appending their signature to indicate consent. All participants willingly participated in the study and were briefed on the research purpose and processes.

The researcher explained the purpose of the research study to the participants who were assured that their participation was voluntary and that they could withdraw from the study at any point if they wished to so. They were also assured that the information they provided would be kept confidential as their identity would under any circumstances be revealed. Furthermore, the participants were assured that the collection of data was solely for the purpose of complying with the researcher's academic requirements and that the results of the study would not be used or presented to discredit or threaten their employment at the RSR. It was explained that the results of the study would only be shared with the researcher's academic supervisor who was unknown to all the participants. Pseudonyms were used throughout the data collection process to ensure the anonymity of all participants was maintained.

As the researcher emphasised the aspect of confidentiality to gain the trust of the participants, they assured her of their commitment to the research process. This aspect was particularly important as the researcher is a colleague of the participants and trust was an important pre-requisite to be established during the early stages of the data collection process.

Before interviews were conducted, the researcher requested permission from the participants to record the interview to ensure the accuracy of information provided and none of the participants had a problem with the interviews being recorded. After the interview, the researcher and the participants discussed the interview process and the

impact it had. Participants subsequently indicated that they had enjoyed the process. This was important to ensure that the participants were not left psychologically harmed or traumatised by the process. The participants engaged freely in the conversations and felt comfortable sharing their thoughts with the researcher. Most of the participants found the session therapeutic as it allowed them to voice their experiences and thoughts as well as the feeling that they play an important role in the work they do (Motsemme, 2002).

As mentioned in the first chapter of this research report, the researcher hopes to add value to the body of literature by bridging the gaps that exist when it comes to the awareness campaign evaluative process in the South African railway industry. It is also hoped that the findings of this study, even though they cannot be generalised, will add value to the overall planning of safety awareness campaigns by the RSR as the custodian of railway safety in South Africa.

3.5   DATA COLLECTION PROCESS

The ability to analyse data within its context is critical in qualitative research (Denzin, & Lincoln, 2005). Accordingly, in this research process, particularly during data collection, the participants were interviewed at their workplace and at a time convenient to them. The language used to interview the participants was mainly English; however, some also used their home language (especially those participants who speak Xhosa, Zulu, Sesotho and Tswana of which the researcher is fluent in all four) to express some idioms. All of the participants were comfortable with being interviewed in English as they were professionals and possessed educational qualifications. The use of English also allowed the researcher to save time by not having to first translate the interviews before they were transcribed. Thus, only idioms expressed in the home language were translated before being transcribed.

Throughout the course of the interviews, all participants were treated with respect (Mouton, & Marais, 1991). This was especially important given that the researcher is a colleague of the participants. The researcher also guarded against imposing her own views on the information that the participants provided. The research process

proceeded with ease owing to the standing of the researcher and the participants in terms of their social status, position in the organisation and a shared interest in improving safety within the railway environment. As a result of this social background, the researcher found it easy to create an environment in which the participants felt safe to construct and express meaning regarding their experiences without feeling judged (Orbele, 2002).

The researcher formulated the questions prior to the interview to assist in guiding the conversation. These were open-ended questions allowing the participant to answer according to their experience. Therefore, the interviews were relatively semi-structured and guided by the conversation between the researcher and the participants. The researcher did, however, ensured that the main information required to address the research questions was discussed, even though not in a particular order for each participant. During the course of the data collection process, the researcher added more questions to the pre-formulated interview protocol to address the strategic aspect of the awareness campaign planning processes. These questions were only applicable to the participants in management positions. All interviews were recorded and were conducted by the researcher herself.

The interview style adopted was in accordance to the qualitative research guidelines outlined by Neuman (2000):

- Interview questions were presented according to the participant's position.
- The interviewer gave undivided attention to each interviewee and encouraged elaboration of their responses when necessary.
- The interviewer gave slight direction to the conversation through probes.
- The interviewer and the interviewee together controlled the pace of the interview.
- The interviewer was flexible regarding the language used by the interviewee.

The interview process was conducted over a period of two months. This was to cater for the availability of the participants, which varied according to their workload. This period also allowed the researcher to conduct additional interviews prompted by the findings during the first round of interviews. The average time for these interviews was one hour and thirty minutes, as the participants were passionate about the subject in

question. During the course of the interview, documents for analysis were identified and were requested by the researcher to be forwarded by email.

3.6   REFLEXIVITY IN QUALITATIVE RESEARCH

According to multiple theories, the researcher forms an integral part of the research methodology (Miller, 2000). Creswell (1994) emphasises that the researcher plays the most significant role as a tool for gathering data. This therefore requires that the researcher understand and acknowledge the impact of subjectivity in the research process. Parker (1994), however, states that the researcher who is aware of this subjectivity is able to account for the dialectics of investigating the subject and devise counter measures to minimise any of their influence in the research process.

The researcher in this study is a professional and at the time of the study had been an employee of the regulator (the RSR) for a period of approximately three years. However, the department that was subjected to this research is not that of the researcher. Nevertheless, the location enabled her (the researcher) to assume the role of a participant-observer, gaining access to information with ease and at a minimal cost.

The insider-status of the researcher made it easy to identify with the participants and understand the way they constructed concepts from the point of view of their contributions to the subject investigated (Unluer, 2012). However, even though the researcher had this advantage, she constantly aligned the data with what the participants provided and ensured that she by no means imposed her beliefs or opinions on the participants during the interview process. The same courtesy applied throughout the analysis of the documents provided.

Understanding the context had the benefit of allowing the researcher to comprehend in-depth meaning of the case being investigated (Unluer, 2012). This meant that the researcher was able to process the information provided by the participants easily.

However, the researcher remained conscious of the need to listen and understand what the participants communicated.

3.7 DATA ANALYSIS AND INTERPRETATION

Burns and Grove (2003) state that data analysis is a mechanism for reducing and organising data to produce findings that require interpretation by the researcher (Macome, 2004). Interpretation, on the other hand, focuses on extracting meaning from findings or the usefulness of findings (Macome, 2004).

The researcher in this study applied the eight steps of data analysis by Tesch (Macome, 2004) and implemented two methods of data analysis to ensure that data were efficiently organised. Qualitative content analysis and the logical analysis was used as a complementary method for the analysing the data. Content analysis is explained by Kirppendorff (1980) as a research method seeking to make replicable and valid inferences from data (written, verbal and visual communicated messages) with the aim of providing knowledge, new insight and representation of facts (Elo & Kyngäs, 2007). Downe-Warnbolt (1992), on the other hand, describes content analysis as a "research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomenon" (Bengtsson, 2016, p. 10). The content analysis process begins right from planning and extends to data collection, data analysing and the creation of a report and the presentation of results. For the purpose of this section, the focus will be on outlining the data analysis process using content analysis (i.e. decontextualisation, recontextualisation, categorisation and compilation) (Bengtsson, 2016)).

To establish context, Figure 3.1 below gives an overview of the research process from planning to the presentation of results.

PLANNING

THE IMPACT ON THE QUALITY OF THE STUDY
Which external and internal resources are available?

AIM
Is there an interesting problem taped in size to be elucidated?
SAMPLE AND UNIT OF ANALYSIS
Who can best answer the queries set out in the aim?
METHOD OF DATA COLLECTION
How should the information from the informants be collected?
METHOD OF ANALYSIS
How should the collected data be analyzed?
PRACTICAL IMPLIKATION
Do we need someone's approval?

DATA COLLECTION

By written or verbal questions, or by observations, and transform the collected data into a written text

DATA ANALYSING

Manifest analysis
Surface structure
"What has been said?"

Latent analysis
Deep structure
"What intended to been said?"

Coding system
Inductive or deductive

Stage 1. Decontextualisation
Identify meaning units
Create code list, repeat and start at new page

Coding system
Inductive or deductive

Compare
with the original data

Stage 2. Recontextualisation
Include "content"- exclude "dross"
Distance

Compare
with the original data

Stage 3. Categorisation
Identify homogeneous groups
Triangulation by investigators

Bring subjects together

Condense meaning units
Bring subjects together

Stage 4. Compilation
Draw realistic conclusions
Member check, colleagues, inquiry audit

Use the words themselves
stay close to the text

Find the underlying
meaning of the text

Figure 3.1: Qualitative content analysis overview from planning to presentation stage.
Source: Bengtsson (2016)

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With regard to the logical analysis of data, the researcher also used a diagrammatical display of data which provided a multidimensional space in which information could be summarised (Dey, 2005). In this way, information can be seen at a glance, allowing connections to be made between different bits of information. Dey (2005) further reports that the use of such analysis assists in making a comparison between categories and identifying gaps that may exist in data.

3.8   THE ANALYSIS PROCESS

All of the interview sessions were recorded. Recordings were transcribed verbatim by the researcher and thus written text was generated for each interview. To maintain confidentiality, the identity of all participants was omitted from the transcripts and pseudonyms were used to protect the participant's identity, particularly for the information provided in Chapter 4. The researcher ensured that the recorded interviews were transcribed within 48 hours of being conducted. This was to allow the researcher to become familiar with the data as swiftly as possible.

The researcher ensured a rigorous analysis process by reading the protocols repeatedly to obtain an in-depth level of analysis. Throughout the analysis phase, the researcher continuously reflected on the types of question asked to guide the interview process, together with the responses of the participants. This was to limit unnecessary analysis that did not add value to the objectives of the study.

The analysis complied with the four stages of content analysis and each stage is briefly discussed in the section below.

3.8.1 Stage 1: Decontextualisation

At the outset of the analysis, the researcher to familiarise herself with collected data to comprehend the framework of individual participants. After several readings, the researcher generated notes which reflected how the participants constructed meaning of the concepts which were in question. Smaller units (called meaning units) were thus

created which provided insight into the phenomenon under investigation and also answers to a set of questions (Bengtsson, 2016). Therefore, each of the identified meaning units was labelled with a code relative to the given context. This procedure is classified in the literature as the "open coding process" (Bengtsson, 2016). The coding process was therefore repeated several times to increase the reliability and stability, and so that no new interpretation was missed that could have been crucial to this process. The researcher noted multiple similarities within the responses of the participants.

3.8.2 Stage 2: Recontextualisation

Following the identification of the meaning units, the researcher thoroughly examined the content to ensure that all relevant aspects relating to the aim had been covered. The original text was therefore read concurrently with the final list of meaning units (Bengtsson, 2016). Furthermore, the researcher made use of different coloured pencils to distinguish each meaning unit on the original transcript. Unmarked text was revisited to decide whether or not it should be marked or not. This afforded the researcher an opportunity to ensure that all the necessary information was included.

3.8.3 Stage 3: Categorisation

Prior to generating categories, the researcher condensed the meaning units by reducing the number of words without losing the context of the unit (Graneheim & Lundman, 2004). The coded material was further divided according to the questions asked during the data collection. Thus, during this categorising process, various categories were identified, and relevant meaning units were placed according. The researcher consequently concluded the categorisation process when a reasonable explanation was reached.

3.8.4 Stage 4: Compilation

After the researcher had established the categories, the process of analysis and writing began. A summary of these categories was presented in the logic model framework to provide a quick overview of the results.

3.9   ENSURING THE TRUSTWORTHINESS AND CREDIBILITY OF THE RESEARCH STUDY

In qualitative research, the quality of the research study is best judged by its trustworthiness and credibility. Fortunately for the content analysis, there is no prescriptive concept used to judge the quality of the research. Accordingly, the researcher continued to ensure that the research study maintained its trustworthiness and credibility. Graneheim and Lundman (2004) describe credibility as the establishment of how the data collection and the analysis procedures were carried out to ensure that all relevant data are included. On the other hand, they describe trustworthiness as the extent to which data change over time and amendments made in the researcher's decisions throughout the course of the analysis process (Graneheim & Lundman, 2004).

In the case of credibility, the researcher ensured throughout the data analysis process that the data were consistently checked to avoid repetition and that data irrelevant to the research question were excluded. This process assisted the researcher to reflect and to space the intervals between literature review, data collection and data analysis. The research questions for this study therefore aimed at understanding the phenomenon in question and thus the analysis also ensured that the research findings correctly captured what the participants said. Hence, the credibility in this regard is the extent to which the analysis reflects what was provided by the participants. One could go even further and indicate that through the stability of data, credibility was established.

In qualitative research, stability is referred to as the trustworthiness of data (Bengtsson, 2016). The researcher ensured that the data were stable by guiding the conversation with the participants to provide information that addressed the objectives of the study. Thus, the collected data addressed the focus of the study. The researcher

also used triangulation by analysing various related documents to ensure that no new information was found so as to make the data stable. Furthermore, consistency in the responses provided by participants allowed the researcher to compare the extent of stability in the findings. Lastly, it should be noted that the researcher herself is a tool for constructing meaning and possessed knowledge to some extent about the context in which the investigation was conducted. The researcher was always conscious that her knowledge should never influence the process or the findings thereof.

3.10   SUMMARY

This chapter presented the way in which the research was carried out and outlined processes used for data collection and the selection of participants. It also discussed the approach undertaken to do the data analysis. The research study thus aimed at understanding the planning process for conducting safety awareness campaigns as an educative process. The following chapter will provide details of the analysis process and elaborate on the findings of this research.

CHAPTER 4
RESEARCH FINDINGS

4.1   INTRODUCTION

In the previous chapter, the research methodology, research design and research tools used for this study were extensively discussed. The use of semi-structured interviews and document analysis as instruments for the collection of data was also discussed. It further described how the data were collected and transcribed into a written text. In addition, content analysis and logic analysis were employed to analyse the transcribed text. This chapter therefore presents data collected during the course of the study with the aim of understanding the processes undertaken by the Railway Safety Regulator (RSR) when conducting awareness campaigns as an educative process. The data analysis thus intended to address the research questions, namely: How does the RSR conceptualise, plan and execute railway safety awareness campaigns? How does the RSR establish the outcomes to be achieved by an intervention campaign? What factors are considered by the RSR to ensure that the inputs from stakeholders correspond with the desired outcomes formulated or perceived by the RSR? How is the content to be included in the programme chosen and by whom? How are the activities (educative interventions) chosen in relation to the target group of the population?

The transcribed interview material for each participant was first analysed individually to understand their thinking. Similar meaning units were grouped together under relevant categories. These categories therefore reflected the questions guiding the investigation of the phenomenon under study. To ensure confidentiality when reporting the findings and during the discussion thereof, participants' identities were anonymised through the use of pseudonyms. A total of six employees responsible for education and awareness campaigns at the RSR participated in this study. This chapter therefore presents the findings of this research.

The chapter that follows will discuss these findings and make recommendations or suggestions for future research.

4.2   BACKGROUND INFORMATION

The sample size for the study comprised of a total of six participants. The gender of the participants was three males and three females; however, they all held different designations in the regulator. The participants were aged between 25 and 50 years and all had more than a year's experience in the RSR Communication Department. It should be noted that pseudonyms were used for all participants to ensure that their identity is not revealed as per the study's ethical code.

4.2.1 Participants' background

This section presents background information on the six study participants. It should be noted that the participants are listed in descending order within the hierarchy and not in the actual order of participation.

- **First participant**

The first participant was Ester. At the time of the research she was the head of the Media and Communications Department at the RSR. She was primarily responsible for corporate communications and ensuring advocacy and communication with stakeholders to assist in developing a positive image of the organisation and the protection of its reputation (Education and Safety Awareness Initiative Plan [ESAIP] 2018/19). She was also responsible for ensuring that the department provided for and promoted safe railway operations and encouraging collaboration with and the participation of interested and affected parties in improving railway safety. The department is also involved in stakeholder relations (external communications) to promote strategic partnerships aimed at promoting railway safety in South Africa (ESAIP, 2018/19). The department also engages with both local and international stakeholders.

Ester's role in Education and Awareness is to see to it that education and awareness happens in the organisation and also with the targeted stakeholders. These stakeholders are educated with the aim of making them aware of their responsibility in ensuring railway safety. Ester is based at the Centurion Head Office.

- **Second participant**

The second participant was Thapelo. His designation at the RSR is Content Manager, however he was appointed to act in the place of the Education and Awareness Senior Manager who was on maternity leave at the time of the data collection. He indicated that he was knowledgeable about the work done by her.

He further indicated the scope of his responsibilities as Content Manager, namely, to profile the RSR through various platforms such as publications like the annual report stating the safety status of the railway industry (i.e. the State of Safety [SOS] report), the organisation's strategic planning document. Thus, since the work done within the railway environment is technical, his responsibility is to ensure that it is converted into reader-friendly documents that the public is able to understand.

As Acting Education and Awareness Senior Manager, he pointed out his responsibilities as being to guide the education and awareness team in achieving their goals. These include the goal of creating awareness of safe railway behaviour among communities and society at large, as well as forming partnerships with stakeholders of similar interests thus result in collaborative efforts. He is based at the Head Office in Centurion.

- **Third participant**

The third participant was Sherly. Her designation at the RSR is Marketing and Communication Officer with the responsibility of providing support in the planning and implementation of railway safety awareness campaigns and any other educational campaigns or events. She also provides support in conducting internal campaigning. She is based at the Head Office in Centurion.

- **Fourth participant**

The fourth participant was Bongani. His designation at the RSR is Marketing and Communication Officer with responsibility for providing support in the planning and implementation of railway safety awareness campaigns and any other educational campaigns or events. He further reports to the Shared Services Manager, the Gauteng

Regional Manager and the Acting Education and Awareness Senior Manager. He is based at the Gauteng Regional Offices in Johannesburg.

- **Fifth participant**

The fifth participant was Clive. His designation at the RSR is Marketing and Communication Officer with the responsibility for planning and implementing railway safety awareness campaigns and any other educational campaigns or events. He also provides support for some of the internal events. He is based in the Western Cape Regional Office, Cape Town.

- **Sixth participant**

The sixth participant was Nolwazi. Her designation at the RSR is Corporate Service Investment (CSI) Officer. She is responsible for planning initiatives that allow the RSR to give back to the various communities it serves. She operates through the three-pillars initiative: These pillars include: (1) Education, that is, the Maths-n-Science made easy initiative, which envisages maths tutoring for school learners, and Science, which envisages the provision of mobile science lab for schools. (2) Sport – this initiative envisages supporting community sports teams and providing them with sports gear to encourage sport in the community among the youth. (3) Health – this initiative is targeted at elderly members of the community, providing mobile clinics which are offered on trains. This is in partnership with the Phelophepa healthcare train, an initiative of Transnet. Safe railway behaviour is promoted through all these initiatives.

Over and above these initiatives, Nolwazi also has a supporting function in the planning and implementation of RSR safety awareness campaigns. She is based at the Head Office in Centurion.

It should be noted that these officers' roles change from campaign to campaign depending on the planning and nature of the campaign.

Table 4.1 provides a summary of the participants' background information.

Table 4.1: Background information on participants

Pseudonym	Year employed at the RSR	Years in the current position	RSR Office location
Ester	2015	4	Centurion
Thapelo	2007	5 months	Centurion
Sherly	2015	4	Centurion
Bongani	2017	2	Johannesburg
Clive	2016	3	Cape Town
Nolwazi	2017	2	Centurion

4.3   CATEGORIES EMANATING FROM THE STUDY

The following section presents the analysis of data wherein findings are organised and grouped under the identified categories (themes) and sub-categories which emanated from the data collected. The use of content analysis (as detailed in Chapter 3) enabled the researcher to identify the initial codes which were formulated and presented in the form of interview questions. Following the interviews, the interview transcripts were analysed and additional codes were identified. This led to the formation of more distinct categories together their respective sub-categories. The identified categories include the strategic planning (high-level planning) of safety awareness campaigns, the pre-campaign planning (actual planning of a particular campaign), the campaign activity (the activities done during the campaign) and, lastly, the post-campaign evaluation (the activities done after the campaign to measure the results against the set outcomes). The following table therefore presents the categories together with their respective sub-categories that emerged from the data. These address the research questions of this study and will thus be discussed later in this chapter.

Table 4.2: Categories and sub-categories

Codes	Categories	Sub-categories
A. Each departmental plan is linked to the company's strategic objective	Strategic Planning	- RSR Strategic plan - Departmental Operational Plan - Standard Operating Procedure
B. Guided by the SOS report to determine where to conduct campaigns	Pre-campaign Planning	- Selection of Campaign Area - Outcome setting - Pre-site visit and Stakeholder identification

C. Stakeholder involvement occurs during planning phase D. We have standard pamphlets		- Stakeholder involvement - Message - Interdepartmental involvement
E. Partnered stakeholders assist in handing out pamphlets F. Safety brief is done to all using the level crossing	Campaign Day	- Activities - Output
G. After campaign there is debriefing H. Once done with the campaign we don't return there	Post-campaign Activities	- Debriefing - Stakeholder Evaluation - Post-campaign Evaluation - Post-plan: Follow-up Programme - External Factor Diagnosis

4.3.1 Strategic planning

Within a comprehensive strategy, awareness campaigns offer an effective component for promoting behavioural changes among individuals, communities and society in general. However, the planning of such campaigns requires various elements to be carefully considered to assist planners in reaching the desired goal (Sayers, 2006). In this category, a detailed explanation of elements considered by the RSR when planning an awareness campaign will be discussed.
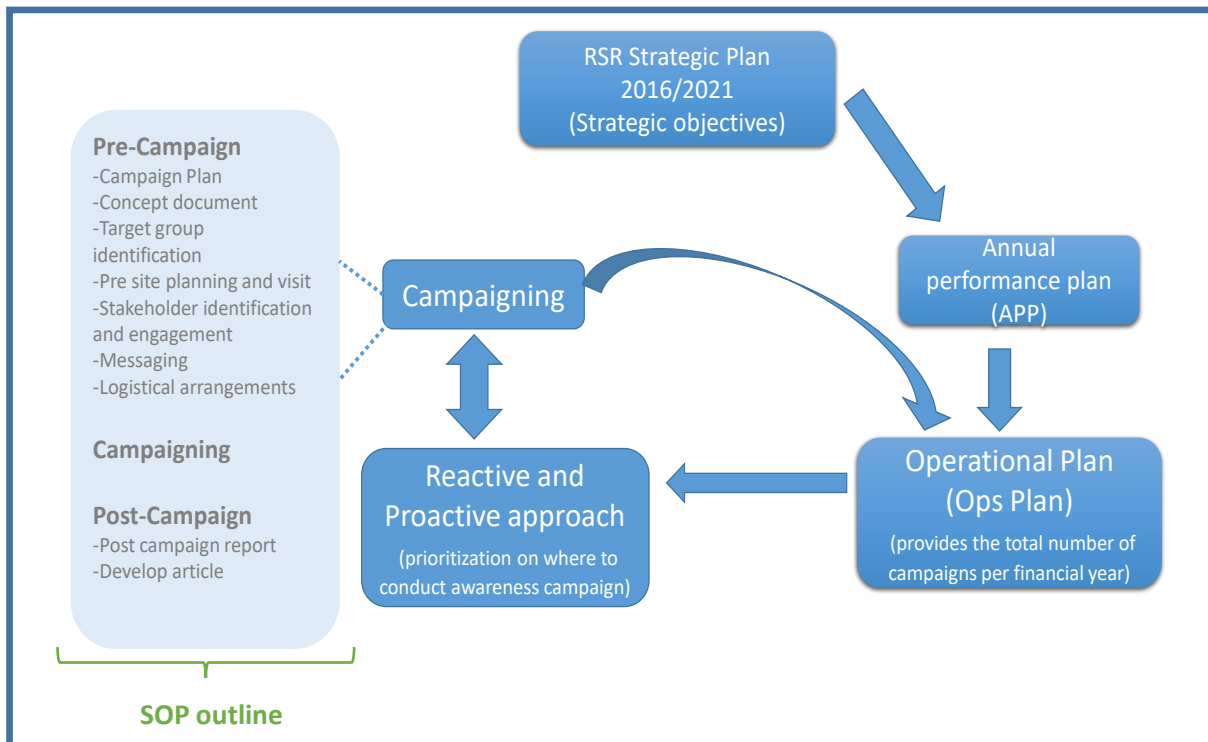
Figure 4.1: Summary of the overall planning process of an RSR safety awareness campaign

The strategic planning phase of the safety awareness campaign in the RSR is guided by the strategic objectives emanating from the RSR strategic plan 2016/2021. The components of the strategic planning phase detailed below include the RSR strategic plan, the annual performance plan (APP), the operational plan (Ops Plan), the standard operating procedure (SOP) and the task implementation (this could either be a reactive and proactive approach – to be discussed later in the chapter).

4.3.1.1 Strategic planning phase
- **Findings of the document analysis**

RSR operations (which include the Education and Awareness Unit) are guided by the RSR Strategic Plan 2016/2021 which was developed within the legislative mandate provided by the National Railway Safety Regulator Act. This document outlines the strategic objectives for each department. From these strategic objectives each department then formulates its APP, which gives rise to the departmental Ops Plan. Thereafter, the SOP and task implementation stage is thus conducted by managers and lower level staff of the affected department. Figure 4.2 represents this process.
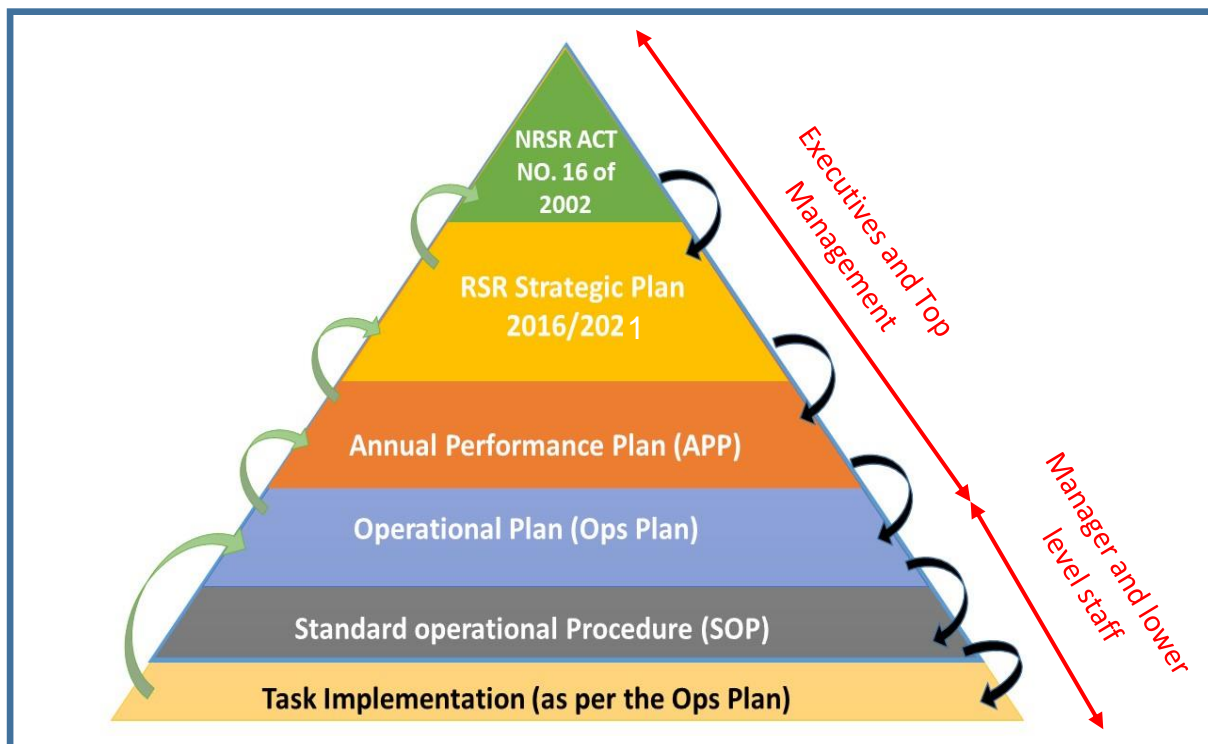
Figure 4.2: Overall strategic planning process of the Awareness Campaign and the respective role players

When doing the strategic planning for the organisation, the involvement of the executive and top management is essential. This process produces a five-year strategic plan that will address the current challenges facing the railway industry (RSR Strategic Plan, 2016). For the year in which this study was conducted, the strategic plan 2016–2021 was the document approved by the Minister of Transport and the strategy was in its third year of implementation (2018/19) towards the set medium-term strategy framework (MTSF). For the unit under investigation, Table 4.3 below represents the strategic objectives (which emerged from the Strategic Plan 2016–2021) to be achieved by the Education and Awareness Unit. For the purpose of obtaining an in-depth understanding of the RSR awareness campaign planning process, the researcher focused on one awareness campaign that sought to address strategic objective 1.1 as indicated in Table 4.3 below. This is elaborated later in this chapter.

The RSR strategic plan was approved together with the APP document which highlights how the target set in the strategic plan will be met. Table 4.4 below presents the APP set for the Education and Awareness Unit. The APP document therefore provides the unit with a predetermined number of safety awareness campaigns to conduct per year throughout the life span of the strategy.

Furthermore, the APP document is cascaded down to an Ops Plan where it details the way in which the annual target for the unit will be achieved. Table 4.5 below demonstrates this. For the 20 safety awareness campaigns set as an annual target, the Ops plan demonstrates how this will be achieved by identifying a set number of campaigns to be conducted per quarter. The Ops plan only provides the number of campaigns to be conducted per quarter, however, and does not provide details on where and how these campaigns are to be conducted. This therefore concludes the strategic planning for the awareness campaign. The implementing team therefore decides where these safety campaigns will be conducted guided by the SOP.

The following section presents findings from the interviews conducted.

Table 4.3: RSR Strategic Plan 2016/2021: strategic objectives for the Education and Awareness Unit

Strategic outcome 1: Risks in the railway landscape have been mitigated

Objective statement: Increase level of compliance at level crossings and change public attitudes and behaviour through collaboration with all relevant role-players, stakeholders, affected parties and the introduction of engineering solutions

Strategic objective 1.1	Audited/Actual performance			Estimated performance 2015/16	No	Medium-term targets				
	2012/13	2013/14	2014/15			2016/17	2017/18	2018/19	2019/20	2020/21
Reduction in the number of level-crossing occurrences	-	-	-	-	1.1.5	Behavioural risks of pedestrians and motorists interacting with the railway network researched	Behavioural change strategy in association with stakeholders developed	Risk relevant promotional material developed	Public awareness created of the risks associated with man–machine interface at level crossings	100% public compliance with rail–road interface rules

Objective statement: To substantially reduce the number of people struck by trains by securing the rail reserve, ensuring its integrity while providing alternate access across railway tracks, educating communities within the constraints of financial resources and regulatory framework

Strategic objective 1.2	Audited/Actual performance			Estimated performance 2015/16	No	Medium-term targets				
	2012/13	2013/14	2014/15			2016/17	2017/18	2018/19	2019/20	2020/21
Reduction in the number of people struck by trains	-	-	-	-	1.2.5	-	-	Public awareness created of the risks associated with people struck by trains	-	-

Objective statement: To reduce platform–train interface occurrences by identifying the causal factors associated with train delays and PTI occurrences; identifying and recommending applicable and financially feasible engineering solutions; influencing the introduction of new technologies, and by encouraging safety behaviours, attitudes and practices among operators and commuters.

Strategic objective 1.5	Audited/Actual performance			Estimated performance 2015/16	No	Medium-term targets				
	2012/13	2013/14	2014/15			2016/17	2017/18	2018/19	2019/20	2020/21
Reduction in the number of PTI occurrences	-	-	-	-	1.5.5	-	RSR-PRA- SA PTI safety culture awareness intervention programme developed	RSR-PRA- SA PTI safety culture awareness intervention programme implemented and monitored	Commuter awareness created of the risks associated with unsafe behaviours at stations	Safe commuter behaviour at stations

Table 4.4: Education and Awareness Unit APP (targets as per the RSR Strategic Plan 2016–2021)

Objective statement: Address the lack of awareness regarding railway safety through education, communication and training initiatives within the community and among operators									
Strategic objective 3.1	Key performance indicator	Audited/Actual performance			Estimated performance 2017/18	No	Medium-term targets		
		2014/15	2015/16	2016/17			2018/19	2019/20	2020/21
To promote safe railway behaviour	Number of safety promotion initiatives conducted	19 education awareness campaigns conducted on a specified topic	22 awareness campaigns conducted	RSR Profiling and Stakeholder Engagement Strategy developed and implemented	14 railway safety promotion initiatives conducted by 31 March 2018	3.1.1	20 railway safety promotion initiatives conducted by 31 March 2019	22 railway safety promotion initiatives conducted by 31 March 2020	28 railway safety promotion initiatives conducted by 31 March 2021

Table 4.5: Education and Awareness Unit Ops Plan with budget allocation

Strategic Objective 3.1: To promote safe railway behaviour								
Objective statement: Address the lack of awareness regarding railway safety through education, communication and training initiatives within the community and among operators								
Key performance indicator	Reporting period	No	Annual target	Quarterly targets				Goods and services
			2018/19	1st	2nd	3rd	4th	(rands)
Number of safety promotion initiatives conducted	Quarterly	3.1.1	20 railway safety promotion initiatives conducted by 31 March 2019	4 safety promotion initiatives conducted	8 promotion initiatives conducted	6 promotion initiatives conducted	2 safety promotion initiatives conducted	R1 585 749

- **Findings from the interviews**

For the purpose of obtaining an in-depth understanding of the process behind the actual planning of an awareness campaign, strategic objective 1.1 (reduction in the number of level-crossing occurrences) was selected as the primary focus when collecting data using semi-structured interviews and document analysis.

In terms of the strategic planning phase of the awareness campaign planning, all of the participants indicated that they are well aware of and informed about the strategic plan and the strategic objective they were responsible for achieving. They furthermore explained the process as to what informs the selection of an awareness campaign to be conducted in a particular place (this is either through a proactive or reactive approach).

In relation with Figures 4.1 and 4.2, in-depth discussion with the participants focused more on the aspect of the operational plan due to the following reasons:

- The RSR Strategic Plan is a five-year plan; it is a high-level document developed at an executive and top management level. It is therefore cascaded down for implementation although the implementers were not part of the strategic planning process. Moreover, most of the implementers were employed after the approval of the Strategic Plan.
- The Annual Performance Plan (APP) is also a high-level document which was developed in conjunction with the Strategic Plan. This is also cascaded down for implementation.

The following responses were obtained from the participants when asked to provide insight on the strategic planning process:

… each department's operational plan is linked directly to the organisation's strategy, so, I think there is … a strategic objective that speaks to safe railway operations … if I am not mistaken … so the activities of the Education and Awareness team would be underpinned mainly by the strategic objective. So, what happens is that we strive that our activities add up to the organisation's goal (Thapelo).

… going through the APP, we look at our target. We are informed by that (Bongani).

4.3.1.2 Departmental operational plan

- **Findings from the interviews**

All of the participants indicated that the operational plan was a guiding document which provides the number of awareness campaigns to be conducted within a particular financial year. For the financial year (2018/19) in which the data for this study were collected, the operational plan indicated that 20 awareness campaigns had to be conducted.

> *It's like we say, in order to support the strategic objective of safe railway operations, we could support it by having as many safety awareness campaigns we could have. But for the purpose of the operational plan, we said we will have 20* (Thapelo).

> *We were given 20 railway safety campaigns to conduct as a unit. That was our target* (Nolwazi).

Of the annual target of 20 railway safety awareness campaigns planned for the 2018/19 financial year, each quarter is then allocated a target number of campaigns to conduct. From this point onwards the Education and Awareness Unit becomes actively involved in determining where these campaigns will be conducted. The Unit then plans these campaigns and presents then in a document called the Education and Awareness Initiative Plan 2018/19. The researcher chose to investigate one particular safety awareness campaign from this document. This particular campaign was conducted during the second quarter of the 2018/19 financial year. Of the eight safety initiatives planned for quarter 2, a level-crossing safety awareness campaign conducted in the Eastern Cape Province was identified as the initiative to be investigated for the purpose of this study. This campaign was selected for investigation because the majority (4 out of 6) of the participants in the study were intensively involved from the planning to the execution stage of the campaign. This level crossing safety awareness campaign was conducted on 30 August 2018 at Valencia in the town of Addo (Uitenhage) (Addo Level crossing campaign report, 2018).

Table 4.6 presents the eight campaign initiative conducted in quarter 2.

Table 4.6: Campaign plan illustrating quarter 2 campaign spread (2018/19 financial year)

Education and Awareness Plan for Quarter 2 (July to September 2018)					
Event	**Province & Date**	**Objective**	**Resources**	**Target Audience**	**Additional Resources**

Level Crossing Awareness Campaign	➢ Mpumalanga Rolle 20 July 2018
	
	➢ Eastern Cape Uitenhage 30 August 2018
	
	➢ Western Cape Bellville 6 September 2018
		• To motivate for behaviour change among commuters, motorists and pedestrians to significantly reduce occurrences	• Branding
			• Promotional material
			  - brochures
			  - promo items
				Community members	Safety posters and informative brochures.

School Safety Awareness Campaign	➢ KwaZulu-Natal Klaarwater TBC	• To motivate for behaviour change among commuters, motorists and pedestrians to significantly reduce occurrences	• Branding
			• Promotional material
			  - brochures
			  - promo items
				Youths in Grades 7 to 12	Pens/rulers/diaries/bags/school flyers

Community Safety Awareness Campaign	➢ KwaZulu-Natal Umgababa 07 August 2018 ➢ North West Rustenburg 24 July 2018 ➢ Mpumalanga Acornhoek 13 September 2018 ➢ Limpopo Polokwane Westerberg Area 27 September 2018	• To motivate for behaviour change among commuters, motorists and pedestrians to significantly reduce occurrences	• Branding • Promotional material - brochures - promo items	Youths in Grades 7 to 12	Suitable promotional material for the various audiences the campaign was designed for

After identifying the area where the campaign should be conducted, the team should then be guided by their SOP for planning. The following sections elaborate on the use of the SOP as a guiding document for planning safety campaigns.

4.3.1.3 Standard operating procedure

- **Findings of the document analysis**

Following the strategic planning of the awareness campaign, the communication officers in the unit are responsible for thoroughly planning the campaign guided by a document called the standard operating procedure (SOP). The SOP is a document which briefly outlines the steps to undertake when conducting safety awareness campaigns, as indicated in Figure 4.1 above. The elements on the SOP are then arranged into three groups, that is, pre-campaign, day of campaign and post-campaign activities.

Table 4.7 below is taken from the SOP and outlines the steps to follow when conducting an awareness campaign.

Table 4.7: Steps to take when planning to conduct an awareness campaign

Ref	Activity	Description	Authorisation
625a	Safety Awareness Campaign	1. Review quarterly plan 2. Develop safety awareness campaign plan 3. Develop concept document 4. Develop checklist 5. Confirm theme 6. Develop database for target group 7. Logistical arrangements (requisitions etc.) 8. Confirm service providers 9. Site visit and floor plan confirmation 10. Travelling and pre on-site planning and exhibition	Senior Manager: Education & Awareness

		management, campaign packs and confirmation of service providers	
		11. Confirm programme director and speakers	
		12. Identify promotional material and branding	
		13. Develop post-campaign report	
		14. Develop article	

- **Findings from the interviews**

All of the participants indicated that they were aware of the SOP as a guiding document when planning safety awareness campaigns. The following are the responses given to illustrate this:

At first, there was no guiding document to follow and I was involved from the beginning of the development of the SOP when it was needed … the development of this process was informed by the experience of how we have been doing our campaigns … looking on how we have been doing things, it sort of developed, and we just improve it (Sherly).

Yes, we do have an SOP (Nolwazi).

However, when the participants were asked about how they ensured standardisation (common ways or processes for planning and conducting the awareness campaign) when conducting campaigns, their responses conflicted with the SOP document which was developed to ensure standard practice in conducting safety awareness campaigns. There was a general view that there was an absence of processes to follow, despite the SOP document having been compiled.

There is no particular process to follow. We do it, the process is the "unwritten rule" of doing things (Thapelo).

Because the team is so small, there is an unwritten rule on how to do each initiative (Ester).

I feel that we need a formal way of doing things … cause when I joined here, different people do different things when conducting awareness campaigns … I also then learn somethings there and there to do the best I can … We don't have one way of doing things (Bongani).

When I arrived a year ago, I didn't have any official orientation on how to do the campaign (Clive).

4.3.2 Pre-campaign planning

- **Findings of the document analysis**

As part of the pre-campaign planning, the team developed a checklist document as per the requirements of the SOP. This document therefore details things to be done, as well as persons to be delegated to carry out a set task. **Table 4.8** below illustrates this.

Table 4.8: Pre-Campaigning Checklist

Item	Specification and descriptive work	Status and Responsibility	Due date
Obtain statistics	Request stats for level crossing incidents and occurrences in the Eastern Cape province.	Bongani	13 August 2018
Campaign concept	Develop brief concept on what the campaigns seeks to achieve and what informs it.	Bongani	6 August 2018
United Commuter Voice (UCV)	Contact UCV in the Eastern Cape and inform them of our intention to having level crossing campaigns.	Bongani	3 August 2018
Contact regional manager (RM)	Draft an email to RM informing her of the intention to host a campaign in the region. Email to be accompanied by stats, concept and execution plan.	Bongani	6 August 2018
Internal support	Solicit the support of inspectors in the Eastern Cape region for the campaigns. Confirm level crossing where campaigns will take place.	Bongani	6 August 2018
External support	Send out campaign-specific invitations to external stakeholders requesting their support on the campaigns.	Bongani	5 August 2018
Follow-ups	Confirm stakeholder support for the campaigns.	Bongani	15 August 2018
Meeting venues	Secure venues for pre- and post-campaign meetings.	Bongani	6 August 2018
Requisitions	Develop accommodation and catering requisitions.	Bongani	13 August 2018
Flights and accommodation bookings	Requisition and motivation drafting for flights, accommodation and car hire bookings	Nolwazi	17 August 2018
Courier arrangements	Draft courier requisition and submission	Sherly	
Corporate Communications	Issue communique to Corporate Communications informing them about the campaign.	Sherly	27 August 2018

Public engagement interview	To draft questionnaire for interviewing community members, operators and learners during the campaigns	Sherly	27 August 2018
Evaluation form	Prepare campaign evaluation forms for post-campaign meetings.	Bongani	24 august
Branding	➢ Wall banner ➢ Pull up banner ➢ Trestle table ➢ Table cloth ➢ Brochures	Sherly/Bongani/Nolwazi	27 August 2018
Promotional material	➢ Drawstring bags ➢ Pencil cases ➢ Cricket hats ➢ Towels ➢ Pens	Sherly/Bongani/Nolwazi	27 August 2018
Meetings	Have meetings with stakeholders to confirm resources, roles and responsibilities.	Sherly/Bongani	29 and 30 August 2018
Campaign day	Successfully host campaigns.	Sherly/Bongani/Nolwazi	30,31 August and 1 September 2018
Meetings	Have meetings with stakeholders to evaluate the success of the campaign.	Sherly/Bongani/Nolwazi	30,31 August and 1 September 2018
Reports	Develop post-campaign reports.	Sherly/Bongani/Nolwazi	5 September 2018
Articles	Develop campaign article for the internal newsletter.	Sherly/Bongani/Nolwazi	5 September 2018

The following sections provide details on what informs the choice of where to conduct an awareness campaign. Most of the information provided was obtained from the interviews.

4.3.2.1 Selection of campaigning area

- **Findings from the interviews**

When the participants were asked what informs where they conduct their awareness campaign, they indicated that the Education and Awareness unit takes the proactive and the reactive approach to what informs where they needed to conduct the awareness campaign. With the proactive approach, their selection on where to conduct the awareness campaign is informed by the State of Safety (SOS) Report which is a published annual report that presents the safety status of the railway industry in South Africa. This report presents historic occurrence data and analysis of occurrence trends which in-turn informs future planning of the regulator, in particular the planning team for the Education and Awareness unit. The Research Department also assist in sharing historical statistics to guide where most problematic or "hot spot" (most frequent occurrence occur) areas are.

> *I am informed by the number of occurrence from the SOS* (Clive).

> *We are guided by the State of Safety Report which provides occurrence data with hotspots areas within their different categories or the type of occurrence … It states the types of occurrence, where is most frequent and time of occurrence* (Sherly).

> *We look at the trends and the frequency of occurrence from the research department* (Bongani).

> *When we are planning, we look at the 20* (this is the total number of safety campaigns that should be conducted for the financial year), *informed by the SOS statistic, and then look at the budget* (Nolwazi).

As part of the reactive approach, the planners are informed by current occurrence data obtained from the RSR Research Department (should there be a sudden spike in occurrence) and also informed by public requests for campaigning when need arises.

The research department provides further data to inform planning. We also get the request from the public (through the social media platform) to go and conduct campaigns should there be an urgent need (Sherly).

Sometimes we become spontaneous and don't wait for the annual report (SOS) … but we are guided by a spike in occurrence. For example, in Gauteng, should there be an occurrence in Mabopane, we go and conduct awareness there (Thapelo).

… You might find that there seems like there are trends developing when you are already stuck during the year doing things … so just periodic checks to see if there are other trends emerging, we then twig our direction slightly (Ester).

Therefore, the choice of conducting a level crossing campaign in the Eastern Cape formed part of a proactive approach.

The reason we did the level crossing in the Eastern Cape was that we have been doing awareness in the Western Cape, KZN and the North West, but there was nothing really going on in the Eastern Cape (Bongani).

It is a busy level crossing with settlements close by … and we were advised by the United Commuter Voice (UCV) to do the campaign there as there was someone that committed suicide there (Nolwazi)**.**

4.3.2.2 Outcome setting
- **Findings from the interviews**

All of the participants indicated that their planning of awareness campaigns does not factor in the elements of outcomes, that is, whether the outcomes will be short-term, intermediate or long-term. The following illustrated this:

Honestly, we don't really have that in writing (Sherly).

It's nowhere written or nothing that says, what you are hoping to achieve out of that … (Thapelo).

Well, I stand to be corrected, however, I have never come across where it states, post level crossing campaign, one should expect x, y, z of the KPI for a successful campaign versus unsuccessful ones (Clive).

Pre-determined outcomes? ... Currently, no, there is nothing like that (Ester).

No outcomes are discussed and documented (Nolwazi).

No, it's negative, Ma'am (Bongani).

4.3.2.3 Pre-site visit and stakeholder identification and engagement
- **Findings from the interview**

As part of the pre-site planning, the team drew up a letter to the RSR Regional Manager (RM) in the Eastern Cape to inform him/her that they were planning to conduct a level crossing campaign in the region (Addo level crossing campaign report, 2018). The letter also requested the Eastern Cape RM to identify stakeholders crucial to the success of the level crossing campaign (Addo Level crossing campaign report, 2018). After identifying the stakeholders, a formal invitation requesting support and participation in the run up to and during the level crossing campaign was sent to the stakeholders which included the Passenger Rail Agency of South Africa (PRASA), Transnet Freight Rail (TFR), Rapid Rail Police (RRP), South African Police Service (SAPS), the area ward councillor, the United Commuter Voice (UCV) and the local traffic police. The RSR inspector in the region was also requested to be part of the campaign to answer some of the technical inquiries from the stakeholders and the commuters (Addo level crossing campaign report, 2018).

A day before the actual campaign, a pre-campaign site visit was conducted with the planning team, the inspector and some of the partnering stakeholders.

The site visit was made a day before the awareness campaign. Only available stakeholders accompanied us (Nolwazi).

Pre-site viewing was done (Sherly).

Pre-site visit is done a day before, together with the selected stakeholders (Thapelo).

On the day of the level crossing site visit, the level crossing inspection and a planning meeting were concurrently conducted in a safe open area next to the level crossing. The following was discussed as the agenda of the day:

- Brief stakeholders on the following:
  - Why the particular level crossing, providing statistical justification
  - Reasons for the collective site visit and to discuss various challenges for that level crossing
  - Campaign intentions and how the campaign will be conducted
- Promotional materials to be distributed on the day of the campaign
  - Stakeholders are requested to provide additional materials
  - RSR to provide level crossing pamphlets and various other promotional materials
    - Pedestrians to be given pamphlets, branded rulers, bags, caps
    - Motorists to be given pamphlets and disc holders
- Development of related safety message
  A safety message brief was given so that a common message is delivered on the day of the campaign. Any of the target audience (any one intended to cross the level crossing) approached must be given the safety message, a pamphlet and appropriate promotional material. The safety message brief entails the following:
  - Stop at a level crossing and observe whether it is safe to proceed.
  - Stop when the train is approaching and only proceed when the train has passed.
  - For more information or any rail-related incidents, please contact the number on the back of the pamphlet.
- Safety brief on what to do and what not to do during the campaign:
  - Be sure not to obstruct traffic while engaging with the target group.
  - Only stop motorists at the stop sign, or
  - Stop motorist after the stop sign at the side of the road to allow traffic to flow.

- Do not stop motorists on the railway line.
- Be as brief as possible.
- Be flexible and gauge your target audience.
- Time of arrival on the day of the campaign 05:45. Campaign start 06:00.
- All should be in their safety clothing: PPE
- Level crossing inspection:
  - Level crossing is on a gravel road with visible signage but no road marking, signalling or boom barrier
  - Addo Train Station is located a kilometre from Valencia Level Crossing.

The participants responded as follows, detailing the same process flow as above:

… the promotional material offered by the RSR has a brief safety message printed on it and it's mostly, licence disc holder, caps, stationary and pamphlets which include that provided by the stakeholders (Sherly).

When we pack our promotional material "e dizannelwe" [that is designed] *for the campaign, we know "ukhuthi"* [that] *we will have learners there, we'll have motorists, so, with the motorist, we will give them the disc holders and then we will have rulers that says "rail safety is your responsibility"… this also has the call-centre number* (Nolwazi).

4.3.2.4 Messaging
- **Messaging (campaign content)**

The messaging component of planning refers to the campaign content or key information to be delivered. The content of the campaign is the most crucial element of the campaign and is a strategic way of creating and distributing valuable, consistent information, relevant for attracting and retaining a vividly defined target audience to change a certain behaviour into a desired one (Content marketing institute, n.d.).

- **Findings from interviews**

All of the participants indicated that the RSR has only one standard pamphlet to distribute at the level crossing. Therefore, there is no material (pamphlets) designed for the specific age group of the targeted audience. In light of the above, the

participants were asked questions relating to pamphlet design to suit the target audience and the campaign outcome objectives. The questions and responses were as follows:

- ***Who and how is the content developed?***

> *… the Corporate Communications team gives great input into that, as the message delivery is important. But that pamphlet is not done in isolation – the technical people give input into it – so that we ensure what we are saying to people is correct … But we obviously make it user-friendly for the reader and that is where we as the department come in. So that we ensure that when the reader gets this it's actually easier to understand* (Ester).

- ***Is the content tailor-made specifically for the target population? This is in terms of age appropriateness, issues of language and the geographical layout of the level crossing?***

> *We have something standard with the same information. We don't do things like, where you will get pictures which are talking to learners or a picture of "abo poppie"* (cartoons) … *We don't have that, we just have a standard pamphlet* (Nolwazi).

> *As varied as the level crossings are, they possess basic elements... therefore it would be unnecessary to create varied level crossing messages … However, I don't have the justification of why we use one type of pamphlet* (Clive).

> *The message is the same throughout. We have one type of brochure for the level crossing which is standard … It's about who we are and what we are about, a little do and don'ts and how you could contact us … anything over and above that, it will be us that person … one-on-one* (Bongani).

> *We rely mostly on the versatility of our team more than the content we take out for financial reasons* (Thapelo).

Coming back to the versatility, we, like expect the officer or the team member to address the audience specifically in the language they would understand … If they see a youth in the car, they must use a language that they would understand (Thapelo)*.*

It's not always possible to address the language issue in totality … The business language of the organisation is English, so all of our content is in English. Some of our team are able to converse in other languages. The team would then gauge what is the predominant language is and engage with the target audience as such … However, the material we leave behind is in English (Ester)*.*

…. going to the financial resources again, it's going to be difficult to translate the material, pay for translators and for printing the material … However, we have never been in a situation where we were not understood (Ester)*.*

- ***How do you ensure that the intended message is received as intended?***

We can't, I mean, how do you? (Ester)*.*

We try to give the message as briefly as possible, however, in terms of us ensuring that our message gets there, we cannot … I believe it's something we don't have control of … but we believe that the little that we have shared gets there (Sherly)*.*

Well, I share the safety message and ask prompting questions. I also ask them to repeat what I said before giving them the promotional material … In that way I get their attention and ensure that they understand (Nolwazi)*.*

4.3.2.5 Target group Identification
- **Findings from the interviews**

The target group for the level crossing campaign conducted in the Eastern Cape comprised the motorists and the pedestrians using the level crossing.

> *We believe that the person driving the car is the one crossing the level crossing and they are our target audience … Both motorist and pedestrian are given a brief and a pamphlet* (Sherly).

> *Sometimes the geographical layout determines the target audience. When the level crossing is in a residential area, then the people residing close to the railway line will be our target. Level crossing in a residential area gives us the heads-up that pedestrians will most probably be one of our target audience* (Thapelo)

Table 4.6 above refers to the community as the target audience (group) for the campaign investigated.

4.3.2.6 Stakeholder involvement

Participation of the relevant stakeholders is crucial for any awareness campaign. Thus, having a relevant stakeholder assists in reaching the intended outcomes of the campaign (Lamb, 2011).

- **Findings from the interview**

All of the participants indicated that stakeholder participation was important to ensure the success of awareness campaigns. The following are the sub-categories that emerged during interviews:

- **Selection criteria for involvement**

Before the stakeholders were invited to participate in an awareness campaign, the following criteria are considered to ensure that relevant parties are invited.

- Who owns the railway line?
- Who owns the train?

- Do the occurrences involve passenger or goods (freight) trains?
- Who are the relevant parties that will be able to address the need?

The following stakeholders meet the required criteria for this level crossing campaign: Transnet Freight Rail (TFR), United Commuter Voice (UCV), Rapid Rail Police, the RSR inspector, Passenger Rail Agency of South Africa (PRASA), Road Safety and Municipality (Area Councillor).

Table 4.9 below presents the relevance of the stakeholders for the level crossing campaign investigated:

Table 4.9: Partnered stakeholders and their relevance

Stakeholder	How are they relevant?
TFR, PRASA, RSR	Knowledgeable, experienced and understand railway rules
Road Safety	Knowledgeable, experienced and understand road rules
TFR	This is an operator and network owner. It provides the profile of the level crossing.
Municipality	The level crossing is located in an area that falls under within the municipality.
UCV	UCV comprises organised community members who have formed a commuter union. UCV is a national NGO which not only represents commuters but is also comprised of commuters themselves. They therefore understand the challenges facing commuters as they also experience them. The UCV acts as mediator between the public and transport entities to address concerns that may arise.

- **Role of the stakeholders**

All the participants indicated that the role of all partnering stakeholders is to be involved during the planning phase, implementation phase and post-campaign debriefing and evaluation of the campaign.

> *They would be part of the planning meeting, implementation and post-campaign debriefing to have learning questions for the future* (Ester).

Planning phase

> *… the involvement of UCV from the planning phase is to advise on which areas are more problematic and in need of rail safety education. They will also inform the team on how to package the delivery of the message to make it effective* (Sherly).

> *UCV provides guidance on the areas that are more problematic and hazardous which need attention* (Nolwazi).

> *Stakeholders are also requested to bring pamphlets and promotional materials should they be able* (Nolwazi).

Implementation phase

> *All the stakeholders pretty much know their roles, however, the focus what's really done there is the distribution of flyers and having a conversation with the commuters … its really those basics (Clive)*

Post-campaign debriefing and evaluation

> *There is also a debriefing after the awareness campaign (Sherly)*

❖ **Partnership agreement with stakeholders**

The participants in management positions indicated that there is no formalised relationship with stakeholders for participation in the RSR awareness campaigns. The only agreement is with the South African Local Government Association (SALGA) to ensure the participation of municipalities.

> *No MOU with stakeholders... it's only with SALGA at the moment. We also leverage on our position as the regulator as we have long standing professional relationships which ensures that we partner with relevant stakeholders* (Thapelo).

> *When it comes to the level crossing specifically, I think we have a good relationship with all the parties we should be collaborating with. We have parties such as the roads, law enforcement, various operators, municipalities … I can*

say with confidence that when we do a campaign as the RSR, we involve relevant stakeholders (Ester).

4.3.2.7 Interdepartmental involvement

When it comes to interdepartmental relations and support for the education and awareness initiative, most participates indicated that they have an unwritten rule of engagement with other departments within the organisation in that they provide support to the unit when possible. Other participants felt that support is only offered when requested from the regions; however, the personnel required from head office are seldom available which makes it difficult for the unit. This refers particularly to support from technical experts in the organisation.

> *We do not have an SLA (service level agreement) with other departments in the RSR … we sort of have the unwritten rule to have technical people when the need arises* (Ester).

> *No, we do not have an SLA with other departments* (Thapelo).

> *It was advised that we should have an inspector at the campaign, because they would have a technical eye as they could identify things we would overlook* (Bongani).

> *The inspectors should be part of the team, in order for them to follow-up on technical things* (Nolwazi).

4.3.3 Campaign day
- **Findings from the document analysis**

Valencia level crossing campaign

On the day of the campaign, RSR officials and partnering stakeholders arrived at the level crossing. Banners and all the necessary materials were put in place. All involved were positioned to engage with the motorists, passengers and pedestrians (Addo level crossing campaign report, 2018).

Photographs taken on the day of the awareness campaign are displayed below.

Figure 4.3: Campaign official engaging with motorists

Figure 4.4: Campaign official engaging with motorists

Figure 4.5: Campaign official engaging with taxi passengers

Figure 4.6: Freight train passing during the awareness campaign

Figure 4.7: Pedestrians – learners with pamphlet and promotional materials

Figure 4.8: RSR officials and the various stakeholders who partnered with the regulator in the campaign

4.3.4   Post-campaign activities

- **Findings from the interviews**

4.3.4.1 Stakeholder debriefing and evaluation

All the participants indicated that shortly after the conclusion of the awareness campaign, a planned debriefing and evaluation session was held with the stakeholders. This debriefing took the form of a meeting where the awareness campaign issues indicated by motorists and pedestrians were discussed, challenges faced during the cause of campaign activities, and the successes achieved were discussed. Regarding the evaluation, evaluation forms were already prepared to be handed out to stakeholders to complete as a form of feedback to the planners on how the campaign was. However, owing the time pressure, the stakeholder debriefing and evaluation was not conducted.

> *Surveys were drafted for stakeholders, however, they were not really implemented* (Bongani).

4.3.4.2 Addressing emerging challenges

During the course of the campaign, challenges from operators and the public were noted and were passed on to the Eastern Cape inspector.

> *Issues raised at the campaign are then given to the inspector. However, no further communication was done to find out if they were resolved or not* (Nolwazi).

4.3.4.3 Post-campaign evaluation

- **Evaluation**

Subsequent to the fact that no outcomes (the campaign had no short term, intermediate nor long tern outcomes) were developed for this awareness campaign, the element of evaluating the campaign served a similar purpose – to check the effectiveness of the campaign. According to participants, post-campaign evaluation

was limited to the planned surveys which were intended to be completed by the stakeholders involved. Therefore, apart from the planned stakeholder surveys, no other form of post-campaign evaluation was planned to indicate whether the campaign was a success or not. The following illustrates this:

There is no follow-up, no evaluation of impact, only the stakeholder evaluation and even that the responses are no analysed and reported properly (Sherly).

Unfortunately there is no … which I would like … no pre- and post-assessment just to evaluate their knowledge on rail related issues prior to the session and post that (Clive).

There is no form of measurement of whether or not what we do has made impact or there was a change in behaviour post the campaign (Nolwazi).

But in terms of measurement of effectiveness … that was one thing that has been raised a number of times in our meetings … We can't really say whether we were effective or not since we go the place only once and never return there … so there is no measurement of impact (Bongani).

… the measurement of our success is basically on how well we do … the stakeholder gets to rate us through the use of surveys … and between ourselves, we say the campaign was a success because people stopped and listened to us (Bongani).

In what I have experienced, is that, after we do the campaign, we are done and we look forward to the next one. We never really go back and say, ok, the issue here was 1,2,3 … were they really addressed … It's not until another occurrence that we go back (Thapelo).

We try to do that but as the RSR, we have budgetary constraints, so we try as far as possible to go to specific area … we would go back if there is an accident in the area where we have been there before (Ester).

So, in our plan for the year, there are 20 awareness campaigns that must be conducted. But, there is nothing that says, out of the 20, how are you going to measure or how are we going to see if there is an impact? … This is one of the shortcomings of the organisation (Thapelo).

One could say that this is a tick-box exercise without going back as to whether or not we have made impact to address the strategic objective (Thapelo).

4.3.4.4 Post-plan: follow-up programme

- **Follow-up**

In terms of following up and engagements with the stakeholders following the awareness campaign, most participants indicated that after the awareness campaign everyone goes their separate ways and engagements with the stakeholders are informal to maintain general professional relationships and not about the past campaign.

> *There is no follow-up post the briefing session with the intention that or the assumption that the affected stakeholder will address issues delegated to them* (Thapelo).

> *We keep stakeholder relationships informal, so I just call them randomly just to keep the relationship. However, we don't follow-up for the purpose of the post campaign* (Nolwazi).

> *After the campaign, when we are done, we are done!* (Bongani).

4.3.4.5 External factor diagnosis and proposed recommendations

Most of what was viewed as possibly hindering the implementation of the awareness campaign as intended could be attributed to the fact that the officers expected to plan and conduct awareness campaigns had not received training since becoming employed by the regulator or since their appointment to the Education and Awareness Unit. Therefore, all the participants indicated that none had received formal training on what they do. What they know is generally obtained by observing others and from their

own experience. The second factor was that they do not and cannot control how the intended message gets to the target audience and whether or not it has understood their message. The last factor is the financial constraints experienced by the regulator which have an impact on the way things are done. The following is a representation of the responses received as all reported of the same challenges.

> *We rely mostly on the "on-the-job" training and learning. We do not have a designated period for training. You need to find the communicator in you and learn through observations* (Thapelo).

> *There hasn't been training, but we will look to do that in the future to capacitate the team to ensure that they deliver and get results* (Ester).

> *No training is provided or trained personnel made available to guide the process* (Nolwazi).

> *Lack of training received* (Clive).

> *… the level crossing is an environment that one does not have any control over to adequately educate commuters* (Clive).

> *We don't have control over the motorist behaviour or their response to the campaign message* (Nolwazi).

> *We have no power to change the current budget constraints and obtaining support from other departments and critical stakeholder when we need them* (Bongani).

- **Lessons learnt**

The last element, that is, the lessons learnt, was addressed in the form of recommendations on what to do to improve future planning of the awareness

campaigns. The responses below represent what was reported as similar views were mentioned.

It would be beneficial that the community is informed of the awareness campaign prior to the campaign so that we get a better response (Bongani).

The awareness campaign should be complemented by the installation of the needed infrastructure. Therefore, post campaign the level crossing should be rectified. Align the message we carry out with the pamphlet. Lastly, involve technical persons in all our level crossing campaigns to enforce compliance on the side of the operators (Sherly).

It's important that the awareness campaign planning team is aware of the various technical documents like the SOP to understand the technical environment (Nolwazi).

People relate better to pictures, so we need to change the format of our pamphlets and reduce the number of pages (Nolwazi).

4.3.4.6 Post-campaign report and article publication

- **Findings of the document analysis**

- **Post-campaign report**

The post-awareness campaign report compiled briefly highlighted the campaign planning, implementation and lessons learnt and made recommendations for future campaign initiatives.

- **Article publication**

In accordance to the Unit's SOP, the article was published in the internal newsletter of the RSR. Figure 4.9 below presents the article on the campaign conducted.

Figure 4.9: Education and awareness article on the campaign conducted in the Eastern Cape

Logic Model presenting
Valencia Level Crossing Awareness Campaign at Addo Region (EC)
30th August 2018

Situational Analysis
- Valencia Level crossing reports indicated level crossing occurrences and people struck by train in the Province

- Historic Data
  -2015/16:
  1-Fatalities; 1-Injuries
  -2016/17:
  4 Fatalities; 2-Injuries
  -2017/18
  1-Fatalities; 0-Injuries

- Level crossing only protected by signage and no signalling nor boom barrier
- Addo station is nearby the level crossing

- **Information on the following were not provided or noted:**
  -whether or not there is a Settlements or residential area near the level crossing

  -Whether or not there are schools, recreational facilities or industrial area nearby

  -Traffic Volumes at the level crossing was not indicated

INPUT

Planning

-1st : Pre-Campaign meeting with stakeholders was held onsite of where the campaign will be conducted a day before the campaign
Logistics
-RSR undertook all logistics;
-banners
-Promotional material
-Message brief, pamphlets
Finances
-All cost covered by the RSR

Stakeholders
-UCV
-PRASA
-SAPS
-Local traffic police
-RSR Inspector

Stakeholder which were unable to make it:
-Rapid Rail Police
-TFR
- Ward Councilor

Activity

Set-up at Arrival

-RSR and Stakeholder

- Briefing prior campaign

-Campaign activities: RSR and stakeholders Interacted and handed out pamphlets and promotional material to motorist, commuters, pedestrians crossing the level crossing

OUTPUT

-Common safety message

-Number of stakeholders not indicated

-Number of pamphlets handed out were not recorded

-Number of surveys intended to be completed by stakeholders was not indicted

-Campaign envisaged reach was not established

TARTGET

-Bus drivers
-Truck drivers
-Minibus drivers
-Courier drivers
-School transport

-Community members
-Pedestrians

-Leaners

Short-term Outcomes

-*No outcomes where compiled or established for the campaign*

HOW
-*There has been no report indicating how the outcomes will be attained*

WHO
-*No delegation of responsibility to ensure the outcome is attained*

WHEN
-*No date set for post campaign activities to ensure outcomes are achieved*

Post-Campaign Stakeholder Involvement

Involve associations
NO PLAN IN PLACE

Involve Community leader
NO PLAN IN PLACE

Involve Schools
NO PLAN IN PLACE

Minimal Formative and process evaluation

Indicators
No campaign indicators determined

External Factors

-Some invited stakeholders did not attend site visit meeting
-Campaign evaluation by stakeholders was not done due time pressure after the campaign

Outcome Evaluation
No campaign outcome evaluation conducted

Figure 4.10: Logic model presenting the planning process of Valencia Level Crossing Awareness Campaign at Addo Region (EC)

4.4   SUMMARY

This chapter is concluded by presenting the logic model (demonstrated on the previous page; figure 2.10) which provides a summary of the processes followed when the level crossing safety awareness campaign was conducted as both an intervention and an educative programme to mitigate level crossing occurrences. When looking at the situation analysis, the identified area for conducting the safety awareness campaign was the Valencia level crossing where historical data indicates that railway occurrences have taken place in the province. The level crossing itself is only protected by road signage and was reported to be in close proximity of Addo train station. However, because formative evaluation was not thoroughly conducted by the regulator, the following information, which is deemed to be important for efficient planning, was omitted or not documented anywhere. This information should have shown whether or not there was a residential area or an informal settlement near the level crossing and whether or not there are schools or recreational facilities nearby. All this information would at least have given an indication of the traffic volume in the area. Subsequent to this, there was no indication of set outcomes, success indicators or even evaluation plans in place. Therefore, input was limited to the logistical arrangements for the awareness campaign with little input from the stakeholders in terms of setting or developing a core campaign message, advice on promotional materials and so forth.

On the actual day of the safety awareness campaign both the RSR staff and participating stakeholders were involved in campaign activities from the briefing session (this was prior to the campaign) to the distribution of pamphlets and the engagement with the campaigns target audience. The output section should give an indication of the anticipated or planned elements of the campaign, for instance, there was a common safety message presented to the targeted audience; however, some important output elements were not established such as the total number of stakeholders that participated, the total number of pamphlets handed out versus the number intended, the number of survey intended to be completed by stakeholders and, lastly, the envisaged campaign reach was not indicated or established. However, the target audience was were clearly identified. Lastly, the external factors were identified as an after-thought and not deliberately thought through during the planning

sessions so as to have mitigative actions to minimize possible impact on the safety awareness campaign.

CHAPTER 5

DISCUSSION OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1   INTRODUCTION

The previous chapter presented the findings of this study. Four categories (themes) together with their sub-categories were discussed, as identified from the analysis of the collected data. In this chapter, the findings are integrated with the reviewed literature to understand how the Railway Safety Regulator (RSR) plans and executes its awareness campaigns as an educative process.

The objective of this study was to understand the planning processes and guiding principles followed by the RSR campaigners to highlight the educative aspect for their target audience on safe behaviour in the railway environment. The findings gleaned from the literature, those obtained from the study as well as their interpretations are discussed in detail in this chapter. Lastly, the chapter concludes with recommendations and suggestions for future research.

5.2   SUMMARY OF THE CHAPTERS IN THIS STUDY

In the first chapter, the background to the study together with the rationale for conducting were discussed. The chapter also presented the problem statement, the position of the researcher, the research objectives, the research questions, the conceptual framework, the working assumptions, the trustworthiness and credibility of the study and, lastly, the ethical considerations of the study. The study therefore aimed at understanding the planning process and execution of the awareness campaigns conducted by the RSR as an educative intervention to address the issue of train occurrences with the public. The main objective of this study was to evaluate the planning process for the RSR awareness campaign against the logic model.

The second chapter of this study provided a literature review of the strategies for the effective planning of safety awareness campaigns as an educative strategy to reduce

at-risk behaviours. Accordingly, the review highlighted certain important elements of such planning, including evaluation. To validate the study, an evaluation model based on the logic model was used for evaluating an awareness campaign, as a case of investigation in this study.

The third chapter discussed the research design, sampling and qualitative research methodology. As part of the data collection method used, document analysis and semi-structured interviews were conducted. To ensure the quality of the research, certain important steps were undertaken to ensure trustworthiness and credibility, as well as complying with certain ethical considerations throughout the study.

The fourth chapter presented the data analysis and the findings obtained from the document analysis and the semi-structured interviews with the participants involved in the planning and execution of the RSR awareness campaign. The identified categories include the strategic planning (high-level planning) of safety awareness campaigns, the pre-campaign planning (actual planning of a particular campaign), the campaign activity (the activities done during the campaign) and, lastly, the post-campaign evaluation (the activities done after the campaign to measure the results against the set outcomes).

In this fifth chapter, the research findings are discussed in the light of the literature reviewed in Chapter 2. The findings are interpreted in light of the research questions, as noted in the first chapter.

The following section therefore presents a discussion of the findings in line with the research questions, as alluded to in Chapter 1.

5.3   DISCUSSION ON THE FINDINGS OF THE STUDY

As the literature review revealed, safety awareness campaigns are regarded by multiple researchers (Mileti et al., 2004, p. 1; Morgan et al., 2001, p. 2) as a multiple-purpose risk communication medium. These purposes include the role such campaigns play in allowing the authorities to adhere to legislative requirements and disseminate hazard information, to educate communities, make a positive impact on belief systems and eventually change risky behaviour by making use of a combination

of various social science theories (Joyce, 2011). As is evident from the results of this study, the RSR has employed safety awareness campaigns as an approach to fulfil its legislative function of ensuring safe railway operations for all (NRSR, 2002). For at-risk communities, the regulator uses safety awareness campaigns as an educative intervention to change behaviour and reduce or mitigate train occurrences involving members of the public.

Accordingly, the following section discusses a holistic planning process for safety campaigns, starting with the strategic planning and concluding with their implementation. The first section to be discussed is the strategic planning aspect of the safety awareness campaigns.

5.3.1 Strategic planning phase

The findings obtained from the document analysis and in-depth interviews revealed that most strategic planning entails the high-level planning for awareness campaigns which is done by the executives and top management using a formal approach. Such strategies are therefore planned with little input from managers and lower-level employees. However, the implementation of such strategy becomes heavily reliant on these very managers and lower-level employees (who will henceforth be referred to as the implementers or implementing team) as well as a less formal planning approach for implementation. Concurring with Leslie (2008), if the executives and top management were to be involved in both the strategic planning and the implementation phase, the planning process would be more formalised throughout, with support and commitment to the process guaranteed. Leslie (2008), also mentions that the monitoring aspect of such implementation would then be of a high priority.

As the document analysis indicates, the Education and Awareness Unit's operational planning is highly influenced by what is contained in the APP, which emanates from RSR strategic Plan 2016/2020. The Strategic Plan then provides the RSR strategic objectives and outcomes to be achieved in line with the National Railway Safety Regulation Act No. 16 of 2002 (as presented in Chapter 4, Figure 4.2).

The Act therefore gives a legislative mandate to the RSR to ensure safe railway operations including the safety of all persons (including the general public) within the

railway environment. The role of the Education and Awareness Unit, then, is to ensure the safety of the public by educating them, by means of awareness campaigns, on safe behavioural practices in the railway environment and the risks associated with unsafe behaviour.

In light of the above, the study participants appeared to have general knowledge of the organisational strategic processes in that the APP emanates from the strategic plan to give guidance to their departmental operational plan (Ops Plan) (presented in Chapter 4, section 4.3.1.1). The execution procedure of those activities outlined on the Ops Plan is guided by Standard Operating Procedure (SOP) developed by the department. Therefore, this SOP document is used to guide the process on how the activities should be carried out. It is evident from the participants' responses that the initial involvement of the implementers in the strategic planning only starts at the Ops Plan level where they receive a predetermined number of awareness campaigns to plan and conduct over the course of a particular financial year (in this case, for the year 2018, the team was allocated a total number of 20 awareness campaigns). Their active participation then begins with planning when and where these 20 safety awareness campaigns should be conducted (see Chapter 4, section 4.3.1.2).

Consequently, once the implementers have determined when and where they would like to conduct a safety awareness campaign, they should ideally follow the SOP as the guiding document for planning such a campaign. However, from the participants' response it would appear that this is not the case, as some could not clearly articulate what was contained in the SOP and the majority indicated that they do not follow a particular process when planning safety awareness campaigns. Some mentioned that they generally used the "unwritten rules" for planning and others indicated that their planning was mostly informed by their experience gained over time (see Chapter 4, section 4.3.4). Furthermore, one of the implementers mentioned that they had been involved in the SOP development process, which was mainly informed by experiences on the way safety awareness campaigns had previously been conducted (see Chapter 4, section 4.3.1.3). The participant also indicated that this document was developed "when it was needed". This therefore implies that the development of the SOP was a matter of compliance and not a matter of developing a tool that would guide the effective planning of a safety awareness campaign. This document (SOP) was therefore not informed by the literature on the best practice or an approach for guiding

the process for planning safety awareness campaigns. This has left the process vulnerable to subjectivity, speculation, misalignment and inconsistencies in the way the RSR plan and conduct its safety awareness campaigns.

The RSR SOP itself is silent on any of the seven "laws of effective public hazard education" (as stated in Chapter 2, section 2.2.2), nor does it outline critical elements that must be considered when planning for such safety campaigns. These elements address issues related to defining the goal of the campaign, defining the target audience, testing and refining the intended message in relation to the target audience, testing and improving the mode of delivery, and lastly, regular monitoring and evaluation of the campaign implementation plan to ensure that things are going as planned (as stated in Chapter 2, section 2.3). It is apparent that the focus of the SOP tends to be on the logistical side of the campaign rather than focusing on how the campaign could be best utilised to meet the strategic objective of the company. Even if the implementers were to strictly follow the SOP as a guiding document, they would not be able to scientifically or evidentially account for whether or not the Education and Awareness Unit have assisted in meeting the regular's strategic objective.

To further comprehend the details of the planning and execution of the RSR safety awareness campaign, the researcher selected only one type of campaign conducted for investigation for the purpose of this study. Hence, a level crossing campaign conducted in the Eastern Cape was selected to understand the entire process undertaken when planning for such campaigns. The next section will thus focus entirely on discussing how the selected safety awareness campaign was planned and executed.

5.3.2 Pre-campaign planning

In line with the SOP, the Education and Awareness Team developed a checklist to guide their campaign planning. This list also included the delegation of tasks to each member of the unit (this was applicable only to the implementers). It has been observed, however, that most of the items indicated on the checklist are logistical issues and there was a number of items on the checklist that was not carried out as planned by the team. One of the documents requested by the researcher, which was deemed to be important in this process, was the campaign concept document;

however, it could not be produced by the implementers. Such a document could have highlighted and answered the most critical questions reported by Sayers (2006) (see Chapter 2, section 2.3): What was the central message of the campaign? What were the goals and the objectives of the campaign? Who was the targeted audience of the campaign? What was the predetermined reach of the campaign? Which communication strategy was deemed to be most effective for reaching the intended target audience? What were the roles and responsibilities of the identified stakeholders in the planning and delivery of the campaign? What were the identified indicators for judging whether the campaign was a success or not? And what approach would be used for monitoring and evaluating the campaign? Hence, no information was captured anywhere to give answers to these above questions. These are considered by Sayers (2006) to be critical questions to ask when attempting to ensure successful planning and an effective awareness campaign.

Moreover, owing to the limited information obtained from the document analysis, from this point onwards the findings discussed in this section will be based on the information obtained from the interviews:

- *Selection of campaigning area*

The selection of where to conduct a safety awareness campaign is informed by multiple sources and makes use of two distinct approaches, namely, a proactive and a reactive approach. In this case, the campaign under investigation was chosen by means of a proactive approach. The reason for this was that the province to host the awareness campaign was identified through an analysis of data obtained from the Research department within the regulator and information received from the Communication Department in terms of the provinces that had already hosted these awareness campaigns. Accordingly, the Eastern Cape Province was identified because the regulator had not had a safety campaigns in the region for a long time. However, the area in the province identified for the safety campaign was based on input from the United Commuter Voice (UCV), which voiced concerns on a suicide incident that had occurred in that particular area and the mushrooming informal settlement in the railway reserves.

Once the province and the area had been identified, the implementers were tasked with identifying rail-related challenges most prevalent in the area, as well as the

persons who were at potential risk. The level crossing was then identified as a potential risk for occurrences in the area, hence the decision to host a level crossing safety awareness campaign. Subsequently, once the area to host the campaign and the type of campaign to conduct has been decided, it is important to know who the intended audience is in order to ensure that the message of the campaign is received effectively as intended. Such information about the intended audience is generally obtained through intense research to enable an understanding of the target audience and to tailor the campaign message specifically to them (as presented in Chapter 2, section 2.3.2). In the case of the regulator, following the identification of the area in which to conduct the awareness campaign, no evidence was found that any research had been conducted to gather information about the intended audience in order to direct strategy when compiling the campaign message. This issue is discussed later in this chapter. The following section discusses the setting of outcomes for the safety awareness campaign.

- *Outcome setting*

In accordance to Silverman et al. (2008), it is imperative to set the intended outcomes to be reach by the safety campaign during the early stage of planning (presented in Chapter 2, section 2.3.1). Such outcome setting should therefore be in line with the overall objective of the organisation and thus this process requires thorough knowledge of the strategic direction of the organisation to ensure that all the campaign activities are in accordance with what the organisation wants to achieve. In addition to this, it is imperative that the outcome set follow the SMART principle and also that the progress of such a campaign is monitored (see Chapter 2, section 2.3.1). Salmon and Atkin (2003) discuss the reasons why outcomes should be set for any safety awareness campaign. These include the fact that setting outcomes provides insight on how the message of the campaign should be disseminated, which communication media should be used, as well as the frequency with which such messages should be pitched (see Chapter 2, section 2.3.4). Furthermore, when a realistic outcome is set it allows one to examine the extent of the resource needed versus the resources available to achieve such outcome (see Chapter 2, section 2.3.5). Therefore, outcome setting is important to also indicate whether or not the campaign was a success or not.

However, in the case of the regulator, the implementers of the safety awareness campaign conducted at the Eastern Cape did not include outcome setting in their planning process. In fact, as became evident from the interviews, such a practice was found to be a foreign concept for all the participants of this study. This, therefore, implies that the safety awareness campaigns conducted by the regulator are not monitored in terms of whether or not the safety awareness campaign made any difference or had any impact on the intended area and audience. Consequently, there are a number of limitations to the regulator's practice, as the Education and Awareness Unit cannot with evidence account for the resources used for the campaign as they currently unable to state whether or not their awareness campaigns are making any impact. Over and above the issue of accountability, lack of outcome setting means that it is not possible to generate a common understanding as to why the campaign was conducted, what reach was anticipated to be covered by the campaign and what the campaign sought to achieve. Therefore, in line with Joyce et al. (2010), the regulator's practice of conducting awareness campaign seems to be a "tick box" exercise rather than seeking to have an impact, which then conflicts with the entire organisational strategic objective.

- *Campaign pre-site visit meeting, stakeholder identification and involvement*

Following initial planning and in preparation for hosting the safety awareness campaign at the level crossing in Addo, the implementers conducted a pre-site visit a day before the actual awareness campaign. This pre-site visit was also an opportunity for the RSR implementers to meet the identified stakeholders to bring them up to speed with their plans as well as for the stakeholders to provide input where possible.

The discussions relating to the issue of resources (in terms of the promotional materials and pamphlets that stakeholders have) on the day of the campaign included all the partnered parties at the meeting. Other issues discussed included the common safety message that should be conveyed when talking to the target audience, safety clothing to be worn, any do's and don'ts pertaining to the campaign, the way in which branding would be displayed and the time of arrival on the actual day of the campaign.

In relation to stakeholder identification and involvement during the planning and implementation of the campaign, it was evident that a thorough process had been followed to identify the selection criteria (see Chapter 4, section 4.3.2.6), as well as the extent to which each stakeholder was involved in the process. As reported by Mileti et al. (2004), maximum use of relevant partnerships is vital when planning for any safety awareness campaign as this will ensure that effective strategies are implemented. However, the stage at which the identified stakeholders are involved is crucial to this maximisation. Sayers (2006) (see Chapter 2, section 2.3) stipulates that in a typical planning process the identified stakeholders should ideally be involved at the initial stage of the process to provide possible solutions or strategic ideas to address campaign issues during the brainstorming sessions (also see Chapter 2, section 2.3.7.1). Effective partnerships result in collective efforts, support and shared responsibility (also in terms of the resource availability and ensuring various modes of effective delivery of the campaign message are discussed and made available), ensuring that the envisaged outcome of the campaign is realised. Therefore, such planning sessions become more frequent to ensure that all involved have a common understanding of the process. This also creates a platform for addressing any arising issues or concerns well in advance of the day of the campaign (see Chapter 2, sections 2.3 and 2.3.5).

In the case of the regulator, as earlier indicated, there is a clear process that is followed in relation to the stakeholder identification and involvement; however, the majority of time and planning in this regard is spent on dealing with the logistical issues rather than the "thinking" on how to maximise its partnership with the stakeholders to effectively address the issue requiring campaigning, and also to put in place a mitigation or intervention plan even before the campaign is conducted in relation to each stakeholder's area of authority. The implementers of the campaign from the regulator's side therefore plan the campaign and only involve the stakeholders a day before the campaign during a pre-site visit where the campaign will be hosted.

Owing to the fact that the pre-site visit meeting was the first and only planning meeting with the stakeholders, this poses a number of challenges. Firstly, the meeting becomes cluttered with too much information as the intention would be to bring everyone up to speed with what should happen on the day of the campaign. Secondly, the stakeholders are not given sufficient time to maximise their input or level of

involvement in the programme owing to time constraints and, thus, the issue of funding the intervention then becomes solely the responsibility of the initiator (even if the stakeholder is interested in sharing this responsibility). Thirdly, the stakeholders were requested to bring their own pamphlets and promotional materials, which means that the target audience were given multiple messages. This might have posed a challenge in terms of identifying the specific message intended for the particular campaign and for the intended audience. Lastly, suggestions from stakeholders to invite other potential stakeholder who could add value to the campaign could not be considered due to time constraints.

- *Campaign message*

Campaign messaging is one of the most crucial elements of the planning process for conducting any safety awareness campaign. Paton (2006) suggests that the campaign message should provide hazard knowledge to the intended audience, as he maintains that the more the intended audience understands their own hazards the more they are able to respond and be prepared to take the necessary safety action and thus reduce their risk vulnerability in the railway environment (see Chapter 2, section 2.2.1). Siegrist and Cvetkovich (2000) further add that in order for the hazard knowledge to be effective, it should be in line with the contextual situation. This will enable the targeted individual to avert their level of risk exposure by implementing the preparedness measure in line with the risk knowledge they acquire. Joyce (2011) reiterates this by reporting that the individual's response behaviour during the at-risk situation is directly influenced by their hazard knowledge and their cultural, social and economic context. Moreover, Bird et al. (2010) conclude that as much as safety education campaigns are paramount to informing the targeted audience about their specific risk and about how they could prevent, prepare and respond accordingly to the exposure of risk, it is essential that the campaigners continually stress and reiterate such risk messages to the targeted audience to ensure that they are sufficiently empowered with knowledge about their risk to adapt positively to the desired safety behaviours (see Chapter 2, section 2.2.1 and 2.2.2).

Therefore, in light of the literature and information gathered on RSR practices, there are few contradictions in the way the regulator conducts its campaigns and this is in

particular on how they compile and delivers the intended campaign message in comparison to literature. The following are discussed: Firstly, the level crossing safety awareness campaign made use of a generic pamphlet for the targeted audience. This pamphlet is generally used during all level crossing safety awareness campaigns conducted by the RSR. The reported reason for having common pamphlets to distribute regardless of the age group, gender and audience type (including motorists, pedestrians and passengers) and the level crossing type (there are different types of level crossing found in South Africa and the level of protection of each depends on its geographical location, the intensity of the traffic flow, type of frequent user and the state of compliance with the Level Crossing Standards) was that there are enormous financial constraints that limit proactivity in terms of these factors. Furthermore, the issue of financial constraints seemed to be the common denominator among many other essential matters that could potentially hamper the success of an awareness campaign or even affect the visible results of the campaigning. Such matters included the fact that the generic pamphlet was only printed in English and had not been translated to any other official South African languages, despite the fact that such pamphlets may reach a target audience that cannot read or understand English; target audience segmentation was not considered in terms of adjusting the campaign message to cater for different cognitive levels in the intended audience (the pamphlet is wordy with very few graphics or pictures); the ability and flexibility of the campaign-specific message in catering for the different age groups was heavily reliant on the campaigners on the day of the awareness campaign (including the partnered stakeholders available), as they engage with the targeted audience; and lastly, in each area, campaigning happens only once with no deliberate plans for continuing education and awareness in a particular area.

Accordingly, it is concerning that the campaigners seem to be the most crucial medium used to ensure that the central campaign message reaches the intended audience as intended. However, they have not been provided with any training in any form to enable them to confidently and effectively carry out this task. This then places the team in a vulnerable position where they are merely complying with and conforming to a tick box exercise to indicate their performance, without having any in-depth knowledge of or interest in why they do what they do; hence the oversight in terms of the lack of monitoring and evaluation (whether or not the campaign reached the desired or

intended outcomes) (see Chapter 2, section 2.2.3). Moreover, the issue relating to the lack of training or up-skilling of campaign implementers was also indicated as being as a result of financial constraints within the regulator. As noted by Leslie (2008), the limitations caused by only involving the implementers in the later stages of the strategic planning for implementation results in misalignment between the strategy intent and the resources available to carry out the strategy. Hambrick and Cannella (1989) give a number of pointers in this regard, which are paramount to ensuring effective strategy implementation. These are that the employees (strategy implementers) should be involved early in the development of and the debate on the strategic agenda to ensure that there is universal understanding of the strategy in question. Relevant input should be obtained to improve the quality of discussion undertaken and, lastly, critical implementation issues should be raised for alignment and practicality purposes (Leslie, 2008). In a nutshell, effective implementation of the strategy in heavily reliant on effective communication between all levels of staff. However, based on these findings, such communication is not something that is practised in the RSR.

5.3.3 Day of the campaign

On the day of the level crossing safety awareness campaign, it was noted that things went according to plan with minor deviations until the end of the campaign (this will be discussed in the next section on the post-awareness campaign activities). At the outset of the campaign, stakeholders and implementers held a briefing session prior to handing out pamphlets to the targeted audience. The only challenge observed here was that no community members were invited as stakeholders to participate during the day of the campaign. Smith (2009) reports such mode of delivery an "expert" to the "public", which at times creates a perception that the "public" does not have any comprehension of their own risk. Such a notion poses the risk that the public will not take ownership of the message and ensure its longevity post the campaign.

5.3.4 Post-awareness campaign activities

A few activities planned were planned for the end of the level crossing safety awareness campaign, however these did not all occur as expected. For instance, a

debriefing session was held with the stakeholders involved in the safety campaign, but after the debriefing, the stakeholders were required to complete a survey which would have acted as an evaluation tool to inform planning for future campaigns. However, the campaign implementers did not make a concerted effort to ensure that the respective stakeholders completed this survey. It is therefore evident that post campaign activities were not deemed to be significant, hence the issue of outcome setting, monitoring and evaluation of the safety awareness campaign did not form part of their planning process. Even beyond the issue of financial constraints expressed, the team did not have any follow-up plans in place to revisit the place where the campaign was conducted. Therefore, concurring with Leslie (2008), the absence of proper and effective evaluation and control systems dilutes the essence and significance of strategy implementation. Thus, without an evaluation process, strategy implementation cannot be tracked. Consequently, in the absence of evaluation, campaign success and impact cannot be measured or accounted for. Bowman and Helfat (2001) censure strategic management practices for the regularity with which management fails to be informed or be made aware of whether or not the strategy implemented was successful (Leslie, 2008). It may be argued that this is owing to the failure of management to identify suitable strategic control systems to assure that the implementation of such strategy is seamless. Brache and Freedman (1999) concur, stating that the consequences of a failed strategic control system usually become evident during the implementation phase of the strategy, thus causing the implementation process to deviate from the original intent (Leslie, 2008). Hence, concurring with the explanation of Dooley, Fryxell, and Judge (2000), the strategic control in this instance is the phase of the strategic management process that focuses on the entire evaluative process selected, which will be used to substantiate whether the results produced by the tools employed by the strategy are as envisaged (Leslie, 2008).

5.4   ANSWERING THE RESEARCH QUESTIONS

This study aimed at understanding the process followed by the RSR when planning and implementing its safety awareness campaigns as an educative process. The

researcher of the study furthermore utilised the logic model framework as a tool for guiding the evaluation process. The following questions were asked in this study:

- How does the RSR establish the outcomes to be achieved by an intervention campaign?
- What factors are considered by the RSR to ensure that the inputs from stakeholders correspond with the desired outcomes formulated or perceived by the RSR?
- How is the content to be included in the programme chosen and by whom?
- How are the activities (educative interventions) chosen in relation to the target group of the population?

In regard to the first research question of the study, it was found that the implementers (participants) of the campaign do not, in principle, set specific outcomes as part of the campaign planning process. Therefore, the Education and Awareness team conducts safety awareness campaigns without having a predetermined outcome to be achieved by the campaign. However, the campaign in itself contributes to the organisation's strategic outcome. In addition, although the participants indicated that they did not establish outcomes for the campaign, they nevertheless indicated various sources that influence where they conduct their campaigns and the type of campaign and message they should convey. For instance, the level crossing safety awareness campaign sought to inform users of the level crossing of the danger associated with it in the expectation that unsafe behaviours would be reduced post the safety campaign. However, I think that the absence of an outcome to be achieved is a serious omission. How do you measure success, how do you learn from failure, how do you improve if you don't have an outcome to measure against? It is a generally accepted principle that any educative intervention should have a clearly articulated outcome (goal) to be achieved.

In line with the second research question of the study, stakeholder engagement, involvement and inputs are deemed to be paramount when conducting safety awareness campaigns. To ensure the relevancy of the stakeholders selected, participants sought consensus on the criteria used for stakeholder selection. Such

criteria included who owns the railway line, who owns the train, what type of train is likely to be involved in an occurrence, and lastly, who is relevant for addressing the need (this could extend to municipal officials, community leaders, rapid rail police and so forth). Therefore, stakeholder involvement in the campaign depends on the type of campaign, stakeholder relevancy and their capacity to address the identified need. The first criteria for stakeholder selection should have been, to my opinion, the type of target audience the campaign seeks to address. This would have automatically given an indication on which stakeholder(s) involvement deem imperative for the campaign to achieve the desired outcome(s).

With regard to the third research question, the participants alluded to the fact that the message of the campaign is conveyed in two ways: firstly, through the pamphlet which is a standard pamphlet designed by various personnel (in particular content specialists with input from technical experts) within the regulator. Secondly, through campaigners which must contextualise the campaign message when they give a safety 'talk' to the target audience. (This was done since the campaign message on the pamphlet was generic and not tailor made for the targeted audience). With regards the campaign pamphlets, there are three major focus areas wherein the RSR aims to address in terms of ensuring public safety, namely, people struck by train (this is in relation to the trespassers), platform train interface (this deals with issues relating within the train stations), and lastly, the level crossing. The latter was the area of investigation in this study, therefore the level crossing campaign pamphlet contained generic information to inform the public about safety behaviours when crossing the level crossing. It should however be noted that level crossings have different layout and different levels of protection. It is therefore very important that the message on the pamphlet provides contextual and relevant information to ensure safety behaviour is practiced.

With regards to campaigners (this includes stakeholders involved during the day of the campaign) providing context-specific messaging to the target audience, this, to my opinion may causes conflicting information since the pamphlet provides a different message than that provided by the campaigners. It would have been appropriate that the campaigner reiterate the same message contained in the pamphlet. This would have ensured that the message is repeated and understood by the target audience.

Lastly, in response to the fourth research question of the study, the participants indicated that the nature of the campaign determines the activity of the campaign in relation to the target audience. For the campaign under investigation, all of the target audience approached received a brief safety information (this then becomes in a form of a conversation between the campaigner and the target audience where the campaigner asks probing questions to gauge the safety behaviour and knowledge of railway safety at a level crossing among the participating audience), as well as a pamphlet and promotional material. The promotional materials had various "safety quotes" on them and this was the only times items were given that were appropriate to the age group. For example, learners would be given rulers and stationery, while drivers would get a license disc holder and an older persons or pedestrian would get a cap or a reflector.

Through the application of the logic model in this study, it should be noted that this model has revealed that much of the awareness campaigns conducted by the regulator lack proper planning, execution and evaluation and thus cannot serve as a good example of an effective railway safety campaign from an educational perspective. As indicated in Chapter 2, there was no or little reflection on the types of risk perceptions prevalent among the identified target audience, the message (pamphlets) was not based on the contextual situation of the target audience and lastly, the message delivery was not tailor made for the targeted target audience (no audience segmentation considered during the planning process of the safety awareness campaign).

5.5   RECOMMENDATIONS

In light of the discussion and the literature review undertaken in this study, it is evident that there is little research on the evaluation of safety awareness campaigns as an educative process, particularly within the railway environment. Accordingly, it is recommended that further research be conducted on the topic within the South African railway context. This study, however, focused on the application of the logic model framework as a tool for evaluating the processes followed by the regulator when planning and implementing educative intervention programmes (safety awareness

campaigns). Therefore, future research should explore the use of such a model, which would guide the planning and evaluation processes for safety awareness campaigns. This study also did not explore the different methods (such methods would include qualitative research methods, quantitative research methods and/or a combination of both qualitative and quantitative research methods) to be used when evaluating the different phases of the planning and implementation processes of such campaigns. Accordingly, further research should be conducted to provide guidance on what method to undertake depending on the focus of the evaluation process.

Furthermore, on the part of the regulator the following is recommended to ensure that the planned safety awareness campaign retains the nature of the educative intervention as intended and contributes to the organisation's strategy as intended:

- Involve all of the relevant members of staff at the early stages of the development of the strategic direction for planning and implementation purposes. Therefore, both planning and implementation processes should be formalised.

- Management responsible needs to be actively involved throughout the planning and implementation stage of the intervention programme to make sure that the processes are followed as strategically planned.

- Monitoring and evaluation should be integrated from the outset of the planning and throughout the implementation as well as after the intervention programme. This will ensure that the intended outcomes and indicators are established at the initial stage of planning. Furthermore, possible external factors that might hamper the success of the safety awareness campaign would be identified at this stage together with possible mitigative actions.

- Follow-up plans need to be in place to ensure that there is continuous risk information (risk education) sharing to enable evidence of risk reduction behaviours. Therefore, an adequate budget needs to be made available for revisits.

- Involve an experienced professional to assist in setting up relevant campaigning activities which would consider age-appropriate interactive methods and also advise on content-specific messaging which would also consider age appropriateness.

- Formalise partnerships with the relevant stakeholders (both for internal and external stakeholders) to ensure clear roles of involvement pre- and post the intervention programme.
- Set up an evaluation team which will comprise various experts (paramount for a researcher to be part of the team).
- Continuously identify possible external factors which might hamper the successful implementation of the intervention and also suggest possible mitigation action to counteract impact of such factors.
- Capacitation of implementing staff is critical to ensure that they are confident in carrying out their roles. This will also enable then to critically analyse and assess their activities in seeking to achieve the strategic outcomes.

Lastly, it would be of value to conduct research or investigate whether there are institutions or training providers which are accredited to conduct a holistic course focusing on safety awareness campaign and most importantly the entire evaluation such campaigns.

5.6   CONCLUSION

This study has revealed that clear and effective communication is essential to ensure that there is no misalignment between strategic planning and the implementation thereof. This communication encompasses all elements investigated and discussed in this study. As the findings of study indicate, such communication has been found to be wanting within the regulator. Although the participants indicated that they were aware of the strategic outcome to be achieved, there was no clear strategic document detailing the way in which the outcome should be achieved by each intervention programme. This meant the implementer of the strategy was consumed by chasing the number of campaigns to be conducted and not focused on planning how to ensure the quality of the safety campaigns to attain the strategic objective of reducing the number of level crossing occurrences. As intended by the strategic objectives, the awareness campaigns were intended as an educative tool to ensure behavioural change among at-risk communities. However, the structure of the safety awareness campaign conducted by the regulator does not comply with some of the "laws of

effective public hazard education" as stipulated by Mileti et al. (2004) (see Chapter 2, section 2.2.2).

Moreover, there was a general feeling among the participants that their planning and implementation processes for the safety awareness campaigns needed to be improved and that the aspect of evaluation had been thought about but never initiated owing to capacitation issues and intense financial constraints.

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APPENDIX A

SEMI-STRUCTURED INTERVIEW SCHEDULE

Lower-Management Level

INSTRUCTIONS:

1. Kindly respond to all questions

2. The interview schedule consists of 5 sections.

3. Mark with an "X" where relevant

NB: All information gathered will be kept confidential.

SECTION 1.

BIOGRAPHICAL DATA

1.1 Age   :   -18 years : ☐
                           19-29   : ☐
                           30-40   : ☐
                           41-50   : ☐
                           51+   : ☐

1.2 Gender   :   Male   ☐
                           Female: ☐

1.3 Highest Qualification obtained: Matric   ☐ :
                                                          Diploma   : ☐
                                                          Degree   : ☐
                                                          Honours   : ☐
                                                          Masters   : ☐
                                                          Doctorate : ☐

    Please indicate the description of the obtained qualification:

    _____
    _____

    1.4 Designation:_____

1.5 Your role in the planning of Awareness Campaign (in relation to the development, design and implementation)

_____
_____
_____
_____

SECTION 2

INTERVENTION OUTCOME ACHIEVEMENT

2.1 Briefly explaining how awareness campaigns are utilised to address the strategic objectives?

_____
_____
_____

2.2 How would you measure the degree at which the strategic objective is achieved through the use of such awareness campaigns? (i.e. in relation to the short, intermediate and long term outcomes)

_____
_____
_____
_____

2.3 What evidence is there to support that the outcome it attainable?

_____
_____
_____

2.4 What evidence is there to link the intervention (awareness campaign) with the envisaged outcome?

_____
_____
_____

2.5 What method(s) would be in place to monitor the progress post-campaign? (i.e. post-campaign evaluation methods or tools for measure level of outcome achievement)

_____
_____
_____

SECTION 3

CRITICAL INPUT

(This section aims at addressing critical support function to the campaign. E.g. Follow-up on the issues affecting the safety that was addressed by the initiative of the awareness campaigns. For instance, If the awareness campaign was to address the behaviour of trespassing, the regulator needs to involve the relevant operator responsible for putting up protection for the railway reserve.)

3.1 In relation to the identified risk exposure to the target population, is there a need to involve relevant stakeholders to ensure that the level of risk exposure to the targeted population is minimised or eliminated? (Please provide details)

_____

_____

_____

_____

____

3.2 What is the level of stakeholder engagement is needed in support of the conducted awareness campaigns?

_____

_____

__

3.3 How critical is the involvement of the relevant stakeholder as a support function onto the issues that the campaign wishes to address?(Explain)

_____

_____

_____

_____

____

3.4 If the relevant stakeholder cannot be involved up-to the capacity needed, what extra measures are put in place to ensure that the planned campaign is impactful?

_____
_____
_____
_____

_____

SECTION 4

INTERVENTION CONTENT

4.1 What informs the type of message to be conveyed?

_____
_____
_____

4.2 Who decides on the type of message to be conveyed and the content thereof?

_____

_____

_____

___

4.3 What method is used to ensure that the message is aligned with the content and the type of campaign to be conducted in relation to the target population?

_____

_____

_____

_____

_____

4.4 Which method(s) are used to address the different cognitive levels of your target group?

_____

_____

_____

_____

_____

4.5 What method of delivery is used to ensure that the intended message pitched reaches the target audience as intended? (Which controls are in place to ensure the intended message reaches the target group as is?)

_____
_____
_____
_____
_____

SECTION 5
INTERVENTION ACTIVITY

5.1 List the types of awareness campaigns that the regulator conduct.

_____
_____
_____
____

5.2 For each of the listed type of awareness campaign indicate the aim and the objective of the campaign.

_____
_____
_____
____

5.3 What informs the decision to conduct a particular campaign as age appropriate for the targeted population?

_____
_____
___

5.4 Who conducts the campaigns? (elaborate on the relevant experience)

_____
_____
_____

_____

____

5.5 Which mode(s) of delivery would be used to ensure that the target population actively participates during the campaign?

_____

_____

_____

_____

__

5.6 Which method(s) would be used to gauge the level of understanding of the targeted population?

_____

_____

_____

___

APPENDIX B

<u>**Semi-Structured Interview Questions**</u>

<u>**Management Level**</u>

As I have explained in my request for informed consent, I am looking at the way the RSR is running their railway safety campaigns to get a better understanding of how these campaigns are planned and executed. As I have indicated all information collected will be treated as confidential and no names of participants will be revealed in the report. You are therefore free to share your ideas with me.
For the purpose of the study we will be looking at the <u>**Level Crossing Awareness,**</u>

<u>**Eastern Cape, Addo, 31 August 2018**</u> campaign, but you are welcome to refer to other

campaigns to clarify a point.

1. Briefly tell me of your role in the organisation.
   _____

2. Tell me of your role in the planning and implementation process of the awareness campaigns.
   _____

3. In general, briefly explain the process undertaken to ensure that the intervention (awareness campaign) chosen addresses the strategic objective and the company's vision.

   - Are there pre-determined outcomes (that is from the Short-term to Long-term outcomes) to be achieved by the awareness campaign?
     _____

   - Are the indicators pre-selected to measure whether or not the conducted awareness campaign is a success?
     _____

4. What are the underlying assumptions about change which guides the planning and the design of the safety awareness campaigns?
   (in other words, what Theory of change has been adopted and drives the design and planning of the safety awareness campaigns?)
   _____

5. What process is undertaken to ensure that the type of campaign conducted is the best approach to have the expected impact? Meaning:

   - What informs or guide where the awareness campaign is conducted?
     _____

   - How is the type of awareness chosen in relation to the target audience?
     _____
     _____

- How is intended message chosen and delivered in accordance to the cognitive level of the target audience?

  _____

- Who decides on the appropriateness of the content (message) in relation to the target audience?

  _____

6. How often do you conduct SWOT analysis on the resources (inclusive of the staff in your department or organisation) you have to ensure that the outcomes are achieved? (Capacity to deliver)

   - How is the SWOT analysis done? (How is information collected?)

     _____

   - How are the identified weakness and the threads addressed?

     _____

7. What processes are put in place to ensure standardisation for the implementation of awareness campaigns?

   _____

8. What process are in place to ensure that all the necessary support is given to enhance the effectiveness of awareness campaign? That is:

   - Is there any SLA with other department to ensure longevity of awareness campaign impact?

     _____

   - Is there any MOU with stakeholders to ensure that they provided all the necessary input and support to ensure outcomes are achieved?

     _____

9. What are the possible risks that might interfere with the achievement of the proposed strategic objective through the use of awareness campaigns?

   _____

10. How are these risks managed and monitored?

    _____

APPENDIX C

LETTER OF INTRODUCTION AND INFORMED CONSENT FOR PARTICIPATION IN ACADEMIC RESEARCH

Title of the Study:
Evaluating Railway Safety Awareness Campaigns as an educative process: A case study
Researcher: Kekeletso Mbombo **Supervisor:**
Prof Jan Nieuwenhuis
Researcher contact details:
072 392 1008/ kpleeuw@gmail.com

Dear research participant,

You are invited to participate in a research study that forms part of my formal MEd in Curriculum and Instructional Design and Development. This information leaflet will help you to decide if you would like to participate. Before you agree to take part, carefully read this document and make sure you understand what is involved.

Purpose of the study:

The purpose of the study is to understand how the Railway Safety Regulator plans and execute their awareness campaigns as an educative process. The results of the study may be published in an academic journal. You will be provided with a summary of our findings on request. No participant's names or identities will be used in the final publication.

Duration of the study:

The study will be conducted over a period of 7 months and its projected date of completion is 28 February 2019.

Research procedures:

The collection of data for the study is based on semi-structured interviews, observations and document analysis. In the case of interviews, recording may be required for the sake of reflection and to ensure that information is captured correctly.

The researcher will however indicate this before recording takes place. All recordings will be kept as confidential and will only be used for the purpose of this study.

What is expected of you:
Your role as a participant in this study is to provide accurate information through the use of semi-structured interviews and/or allow observation and/or share necessary documents to be used for analysis.

Will you receive any financial compensation or incentive for participating in the study?
You will not be financially compensated for participation in the study.

Your rights:

Your participation in this study is entirely voluntary. You have the right to withdraw at any stage without any penalty or future disadvantage whatsoever. You don't even have to provide the reason/s for your decision. Your withdrawal will in no way influence your continued relationship with the researcher. Note that you are not waiving any legal claims, rights or remedies because of your participation in this research study.

Confidentiality:

Only the researcher and the supervisors will have access to the interview data. Your answers will be totally anonymous and your identity will not be revealed under any circumstance. Also, nobody outside the study panel will be able to connect any answer to you in any recognisable way. The results of this study might be published in a journal and/or presented at seminars meetings, but again without revealing the identity of any research participant. The original data sets will be stored in a safe place for fifteen years, after which they will be destroyed.
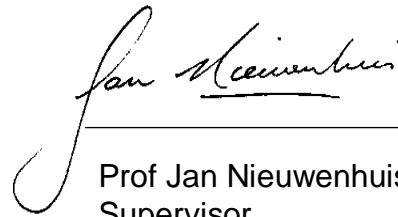
A FINAL WORD

Your co-operation and participation in the study will be greatly appreciated. Please sign the informed consent if you agree to participate in the study.

Your Sincerely,

Kekeletso Mbombo

Researcher

Prof Jan Nieuwenhuis

Supervisor

Email: jan27may@gmail.com

Mobile: 0827889637

_____

WRITTEN INFORMED CONSENT

I hereby confirm that I have been adequately informed by the researcher about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information. I am aware that the results of the study will be anonymously processed into a research report. I understand that my participation is voluntary and that I may, at any stage, without prejudice, withdraw my consent and participation in the study. I had sufficient opportunity to ask questions and of my own free will declare myself prepared to participate in the study.

_____   _____

Research participant's signature: Research's signature

_____   _____

Date: Date: