

**Packaging Behaviour -
Developing Action Kits for the Promotion of Road Safety.**

Mark Ivan Rieker

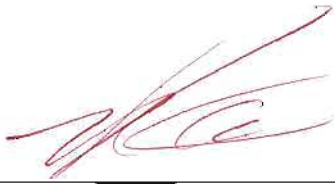
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Declaration

I hereby declare that the content of this dissertation, unless specifically indicated to the contrary in the text, is my own, original work.

A handwritten signature in red ink, consisting of stylized, cursive letters, positioned above a horizontal line.

Mark Ivan Rieker

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I would like to thank the Eastern Centre of Transport Development for providing funding to undertake this research. The social scientific contribution to transport issues is often overlooked and so their dedication to the advancement of *all* transport research is to be commended.

I would also like to thank my supervisor Dr Simon Burton for introducing me to Social Marketing in development communication and guiding my pursuit of this interest while constantly challenging my, at times belligerent, belief in its usefulness in development.

My gratitude is also extended to the administrative support staff at the University of KwaZulu-Natal for their patient help in all things bureaucratic. In particular, Ms Darlene Holtz for her constant and efficient assistance throughout the duration of this project.

Dedication

This dissertation is dedicated to the two women in my life, without whom I would not have been able to complete this research.

My fiancée, Nicky, for her dogged belief in my abilities and for her constant love, encouragement and motivation.

My mother, Sue, for her unflagging support, her practical input in all that I do and for the continual inspiration she effortlessly provides.

Abstract

Recognising that road safety is a development priority in South Africa, this research project aims to compare the efficacy of the Social Marketing development communication approach with that of the education approach favoured by the National Department of Transport in road safety development interventions. The research is also driven by the identified need to explore the role of new Information and Communication Technologies (ICTs) in development.

To this end, road safety “action kits” were developed using Social Marketing principles and incorporating the use of interactive technology. Educational kits using information supplied by the National Department of Transport were also developed. The efficacy of the two interventions was compared by comparing the results of a road safety inventory across three groups of participants. These participants were learner drivers from Pietermaritzburg aged < 25 years and with access to the required technology.

The first experimental group (N=36) received the action kits, the second experimental group (N=42) received the developed educational intervention and a third control group (N=40) received no intervention. The Social Marketing group was found to score higher than the education group across all items in the inventory (educational, attitudinal and behavioural).

The research concludes that the Social Marketing approach needs to be considered as an alternative to the current approach in road safety communication interventions. It also provides the basis for further exploration of the uses of ICTs in development interventions.

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Introduction

South Africa is hailed internationally for its constitution which provides for the rights and responsibilities of all her citizens. Since the first democratic elections in 1994, the development of South Africa in all areas has been prioritised. This has led to activity in the realm of development at the practical and theoretical level.

This poses questions around how South Africa should be going about the business of development. Who should be in charge of development? From whence should it come? Who are the role-players in development projects? Is there such a thing as 'best practice' in development? Which issues should be dealt with?

These (and other) questions about development as praxis underlie many academic and applied projects. This project seeks to contribute in a small way to the debate. The primary focus is on development communication. The project seeks to explore new, innovative ways of going about development using a tried and test framework.

The innovation stems from the still new and constantly evolving Information and Communication Technologies (ICTs) such as the Internet (and related) technologies and Mobile Telephone technologies which have a role to play in development interventions. These technologies need to be well-managed though, and a framework for their use in development is informed by Social Marketing - a relatively recent way of approaching communication in development.

Focussing on the issue of Road Safety, this project aims to apply Social Marketing techniques to the use of ICTs in a small development intervention. This culminates in the creation of a new tool for development communication - the Action Kit. These action kits are a natural combination of Social Marketing know-how and technologies how-to. These kits are tangible products with embedded "virtualness" and allow interaction that is fresh and relevant to the information society.

The project will compare the efficacy of these kits with the current development offering in road safety in South Africa - the informational approach. Having made such a comparison, the research is able to have something to say on the relevance of Social Marketing in development today and the way forward regarding the role and use of ICTs in development practise. Due to the nature of the research, problems are not only inevitable, but welcomed. Lessons learnt today shape the interventions of tomorrow.

Development is, and will remain for many years to come, a core priority in post-apartheid South Africa and this allows scope to explore development practise. Living in an ever globalising world with an associated increase in interconnectivity and interdependence between countries, new ways of communicating are emerging. In light of this, a need arises to embrace the technological revolution not only to play a role in international affairs but so as not to miss out on the benevolent uses of such technologies as they emerge. Commercial marketers use any and all methods at their disposal to market and sell products. It is time for the socially-responsible appropriation of these technologies to promote positive social behaviour.

Objectives of Research

This project explores the role of Social Marketing and Information and Communication Technologies (ICTs) in Road Safety specifically, and Development broadly, in South Africa.

The objectives of the research are threefold –

1. It will attempt to demonstrate the Social Marketing approach as more effective than alternate approaches when used correctly and when contextually relevant.
2. It will attempt to explore participant interaction with ICTs in development while noting problems and limitations therewith.
3. It will seek to describe the impact of such an intervention on participants based on behavioural, attitudinal and educational outcomes.

The further application of such research hinges on the achievement of these considered objectives. As this research seeks to innovate, the scope for ‘spin offs’ based on the outcomes is large. Providing the basis for further research into increasing the body of knowledge around Social Marketing in road safety and the use of ICTs in development, this research is necessary exploratory.

Literature Review

Road Safety

International Statistics

Road accidents affect all nations. Globally, the impacts these road accidents have far reaching, and often unthought-of repercussions. These impacts can be viewed across three different dimensions - Economic, Social and Health.

Economic Perspective

1.17 Million people die in road crashes globally per annum (World Bank, n.d.). The resultant human casualties and injuries represent a major drain on the workforce and impose a significant strain on the economy as a whole. The total global economic cost of these crashes is estimated to be about US\$500 billion per annum and at a national level these costs equal approximately 1 to 3 percent of a country's Gross National Product (GNP) (Ibid).

Social Perspective

According to the Global Road Safety Partnership (GRSP) (n.d.), the vast majority of road deaths occur among the young and those in the prime of their lives. Road crashes are a leading cause of head injuries and acquired disabilities. The burden of care for these disabilities often falls on the families and friends of the victim. This leads to a drop in household income from a loss in the victim's or carer's earnings (Ibid). These issues, among others, have an impact on the affected countries society and societal structures.

Health Perspective

In 1990, Harvard University and the World Bank assessed traffic crashes to be the world's ninth most important health problem (World Bank, n.d.). This ranking is projected to reach third place by 2020. Over 10 Million people are injured or crippled globally per annum (GRSP, n.d.). This puts financial and organisation strain on the Health sectors of the affected countries (Ibid).

South Africa and the Third World

While global road safety statistics are concerning enough, developing countries have a particularly inequitable road safety record with 70% of all road accidents occurring there (GRSP, n.d.). Estimates of the monetary amount that developing countries lose per annum as a result of road crashes range from US\$60- to US\$100- Billion per annum (Ibid). Road traffic injuries ranked third as cause of death in sub-Saharan Africa after diarrhoea and malaria (Nordberg 1994: 339), although, globally, road traffic injuries are the tenth leading cause of death (Krug et al. 2000: 524).

In South Africa we fare particularly badly. Authorities conservatively recorded a death rate of 11.7 per 100 million kilometres driven in 1998. This exceeds the rate for the United States of America by a factor of ten (Forjuoh et al, 1998).

There are approximately 500 000 road accidents per annum in South Africa. The resulting casualties have increased from about 7000 deaths per year in the 1970s to over 9000 in the 1990s (Butchart et al 2000). Over the course of the year in 1998 the Directorate of Traffic Safety (1998) reported that there were 9 068 deaths, 36 246 serious injuries, and 84 358 light injuries resulting from road accidents.

Of these 9 068 deaths, 2 741 were drivers, 2 875 were passengers and 3 452 were pedestrians. The majority of accidents involved cars (62.6%), followed by light-delivery

vehicles (16.3%), minibuses (8%), heavy vehicles (5.4%), buses (1.2%) and other (5.2%). Accidents involving minibuses (of which about 65% are taxis) were slightly down in 1998 from 8.2 percent to 8.0 percent (Department of Transport, 1999).

Regarding the causes of such accidents, Petridou & Moustaki (2000) show the multi-factorial nature of blame. Road accidents involve the interaction of a number of pre-crash factors commonly grouped as people, vehicles and the road environment. This can be graphically depicted as follows:

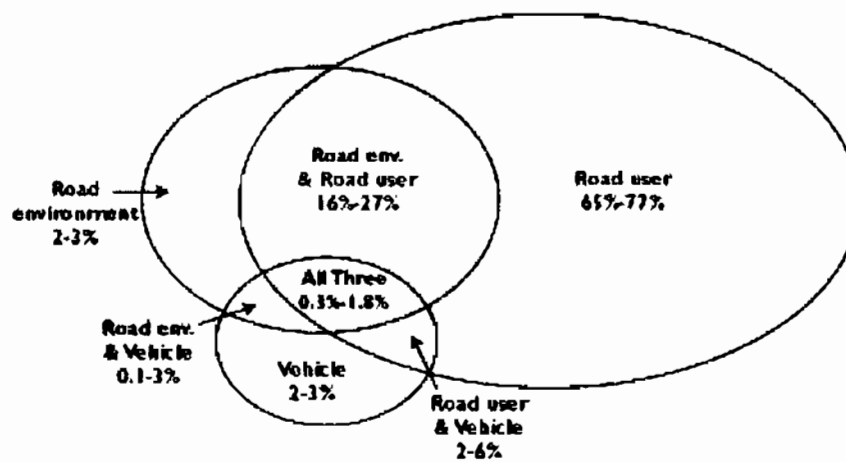


Figure 1: The Interaction of the Causes of Road Accidents.

Adapted from information supplied by the Global Road Safety Partnership (GRSP, n.d).

Human error is estimated to account for between 64 and 95 percent of all causes of traffic accidents in developing countries (ibid).

In Nigeria, Dagona and Best (1996) show human, vehicular, and road environmental circumstances to be the most important causal factors for road traffic accidents. Odero et al. (1997) specifically identify the high prevalence of old vehicles that often carry many more people than they were designed to carry, lack of safety belt and helmet use, poor road design and maintenance and the traffic mix on roads as factors that contribute to the high rate of accidents in less developed countries.

Peltzer and Mashego, (2003) see traffic accidents as the most significant mechanism of the injury toll in Africa. Specifically in Ghana, Zimbabwe and Kenya, traffic accidents are cited as the number one cause of injury-related death.

Forjuoh et al. (1998) identify that such injuries were responsible for more Disability Adjusted Life Years (DALYs) lost than any other single health condition and are steadily increasing in sub-Saharan Africa. Murray and Lopez (1996) predict a 1080 percent increase of DALYs for injuries for the period 1990 to 2020, making injuries with 94 689 DALYs the largest burden of disease.

Flisher et al. (1993) examined risk-taking behaviours among high-school students in the Cape Peninsula, South Africa. During the previous year, 8.5 percent of the students had been involved in a motor vehicle accident, and 7.4 percent had been injured in a pedestrian accident. Of those who had driven a vehicle, 63.2 percent reported driving without a licence, 16.1 percent drove an overcrowded vehicle, and 8 percent reported driving under the influence of alcohol or cannabis. Of those who had been on a motorcycle, 47.9 percent reported riding without a helmet. Despite the availability of seat belts, 37.3 percent had failed to wear one on the last occasion they were in the front seat of a vehicle.

In a study by Peltzer (1999), South African students rated road traffic accidents as the health problem with the second highest importance after AIDS/HIV in the country.

Still, for sub-Saharan African countries, only scarce evidence exists with regard to possible preventive measures and to drivers' attitudes towards traffic-related risk behaviour. (Peltzer & Renner, 2004)

Forjuoh et al. (1998) note that the main causes of road traffic accidents are speeding, overloading, non-observation of traffic rules, lack of effective and continued law enforcement, non-standardised methods of issuing driving licences and driving testing, poor road design and maintenance, and alcohol and drug abuse.

Hedden and Wannenburg (1994) found in a South African (Durban) hospital accident and emergency unit that among 530 injured drivers, passengers and pedestrians, 52 percentage had blood-alcohol (BAC) levels >0.08 g/100ml (the legal limit at that time), 35 percent were cannabis positive and 19 percent tested positive for alcohol and cannabis. Drivers were most commonly intoxicated with alcohol while pedestrians were frequently intoxicated with both alcohol and cannabis.

South Africa has a poor record of road safety compared to other countries. Figure 2 shows how South African cities stand relative to other cities around the world. This indicates that the fatality rate per capita is disproportionately high.

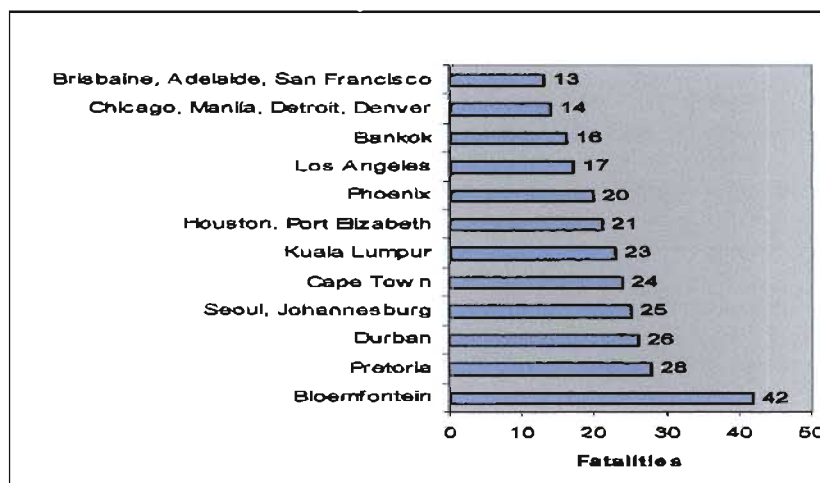


Figure 2: Road Accident Fatalities per 100 000 people in selected International Cities.

(Van der Schuren & Irvine 2002)

Every year sees approximately 500 000 crashes occurring in South Africa. Figure 3 shows how these collisions rose steadily in the period from 1980 to 1998.

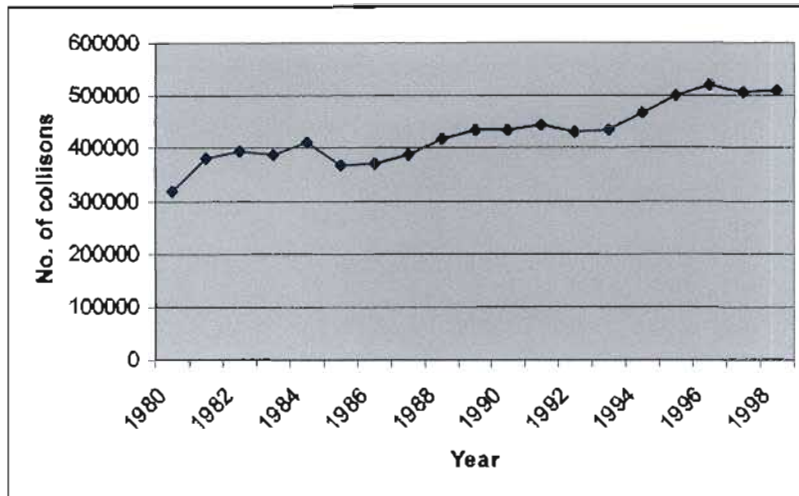


Figure 3: Number of Road Traffic Collisions in South Africa (1980-1998)

Adapted from Statistics South Africa (2002)

According to the South African Department of Transport, these collisions result in the deaths of between 9600 and 10 000 persons per annum (Department of Transport, n.d.). Figure 4 shows how the number of fatalities have fluctuated around the 10 000 mark for the years 1985 to 1998.

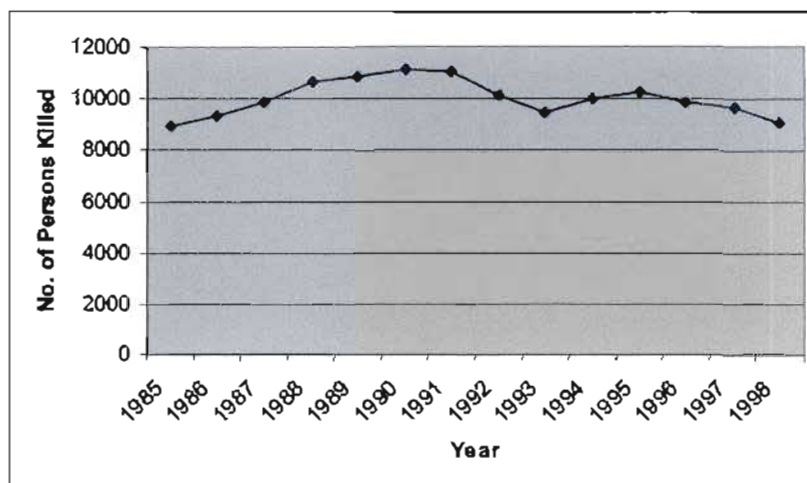


Figure 4: Number of Fatalities in Road Traffic Collisions in South Africa (1985-1998)

Adapted from Statistics South Africa (2002)

Aside from these fatalities, approximately 150 000 persons are injured in these collisions. This puts further strain on various sectors in South Africa, not least of which being the Health sector (Department of Transport, n.d.). The monetary cost of these crashes to the South African economy is estimated at R13, 8 Billion per annum (Ibid). This figure excludes the human and social costs of lost potential and pain and suffering of the victims and their families.

The South African Department of Transport's Response

The South African Department of Transport has responded to the aforementioned situation by instituting a comprehensive strategy to combat what it sees as the problems that underlie these dismal statistics. A case-in-point is the Arrive Alive campaign. This campaign is a multi-dimensional programme of enforcement, coordination and communication. Its dominant emphasis is on the punitive methods of reduction (enforcement). According to the long-term strategy, this focus is set to intensify over the life of the approach. The Arrive Alive approach is grounded in the results of studies conducted in developed, middle-income and developing countries which prove an incontestable correlation between speed and insufficient reaction time, and crashes and fatalities (DoT, n.d.). The strategic emphasis is on the following key areas of intervention:

- The increased on-road enforcement of speed, alcohol limits and vehicle overloading (the operational issues).
- The restructuring of Inspectorates: the 'cleaning up' of testing as regards licences and vehicles, the regulation of driving schools, the imposition of tougher professional driver qualification criteria and the increased regulation of freight and public passenger fleet operators (the systemic and structural issues).

The Arrive Alive campaign points to some success in bringing down the incidence of crashes and fatalities (Department of transport, 1999) although the actual reliability and validity of these findings in terms of methodological and theoretical issues fall outside the scope of this dissertation.

According to the South African Department of Transport (n.d.), and reflecting trends described in Figure 1, there are three key contributory factors towards the road crashes and deaths on the South African roads. These are driver factors, vehicle factors and road environment factors. The role played by each of these factors can be broken down as follows:

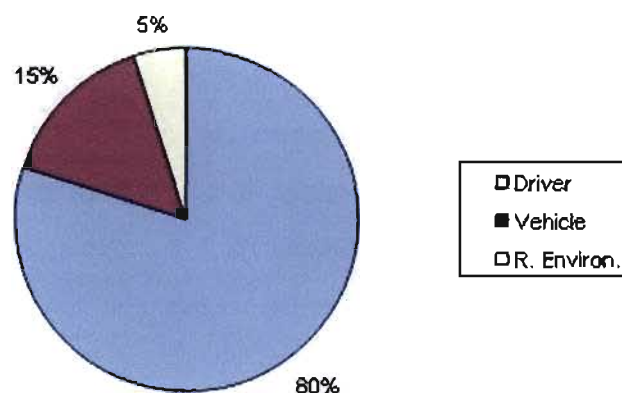


Figure 5: Contributory Factors in Road Crashes and Deaths.

Adapted from Information from the South African Department of Transport, (n.d.)

Although these factors are not as divisible as they at first appear, with combinations of the above often contributing to an accident, they do unmistakably show that the majority of crashes involve driver error. This driver error can be further broken down into issues of Speed, Driving under the influence of liquor and/or a narcotic drug, Fatigue and Driver Incompetence. Besides Driver factors, another human factor that is significant is pedestrian road use. In crashes involving pedestrians, jaywalking and walking under the influence of alcohol or drugs are the major contributing factors.

Importantly, this illustrates that, in the vast majority of road crashes in South Africa, human error is a major factor. This human error also overlaps to influence on how roadworthy one's vehicle is (For example, ensuring regular maintenance, correct inflation of tyres and the like). This warrants research into interventions that may reduce the incidence of this error. Such behavioural change interventions are varied with many strategies being employed to try and change or influence human behaviour. These strategies all, to various degrees, involve communicating to the person/s whose behaviour/s need to be changed. Different communication strategies are underpinned by different theoretical assumptions about why people act the way they do and what, if any, messages or methods can influence this.

Development Communication

Introduction

The use of communication technologies in development is not a new phenomenon (Mody, 2002; Nair, 1993). Development Communication emerged towards the former half of the last century (Rogers, 1993) and has its origins in post-war international aid programmes in countries in Latin America, Asia and Africa. The term Development Communication commonly refers to the “application of communication strategies and principles in the developing world” (Waisbord, n.d., 1). This definition is necessarily broad as there is little consensus around even the most basic premises (Ibid). Historically, the field has not had a unilinear progression but rather as new theories emerge they co-exist simultaneously with those already in use. Each theoretical camp has a different view of how the business of development (variously defined) should be carried out. Compounding this, the continuing evolution of new Information and Communication Technologies (ICTs) poses new challenges to practitioners and academics alike. Waisbord (n.d., 2) identifies the basic divergences between the theories around the following points:

- Cultural vs. Environmental explanations for underdevelopment.
- Psychological vs. Socio-political theories and interventions
- Attitudinal and Behavioural models vs. Structural and Social Models
- Individual- vs. Community-centred interventions development
- Hierarchical and sender oriented vs. Horizontal and Participatory communication models
- Active vs. Passive conceptions of audiences and populations
- Participation as means vs. Participation as end approaches

Development Communication approaches have conventionally been divided into two broad paradigms, each with a very different view on how development should take place.

At one end of the spectrum is the Modernisation paradigm and at the other is the Participatory framework. Practitioners in each paradigm seem to talk past each other due to the lack of a common source of reference. The two paradigms approach the practice of development from opposite ends with proponents of both sides having compelling arguments.

The Modernisation Paradigm

This paradigm was informed by scholars such as Inkeles, Lerner, McClelland and Rogers (Melkote, 2002). The Modernisation (or Dominant) paradigm dominated the early years of development communication. This paradigm has as its goal regional and national development with this development being measured in terms of crude economic indicators such as Gross National Product (GNP) (Melkote, 2002; Rogers, 1993; Mody, 2001). The belief of this model is that underdevelopment is due to economic, political, cultural, geographic and individual inadequacies.

This paradigm focuses on micro- and macro-settings with a notable lack of interest in local cultures or power relationships and structural impediments in the host society (Melkote, 2002). The levels of analysis of approaches within this paradigm are the Nation, Region and Individual. The role of the change agent is non-participant expert and the communication model involves top-down, linear transmission of information using mass media. These media are treated as independent variables with direct and powerful effects and they serve to correct the cultural and information deficits of the developing country/society (Waisbord, n.d.; Melkote, 2002).

The research carried out in this paradigm is usually quantitative with some use of focus groups and evaluation research. Exemplars of the modernisation paradigm are the prevention of underdevelopment through the role of experts which “blame the victim” (Melkote, 2002, 430) and spread standardised messages and entertainment that are “preachy, prescriptive and/or persuasive” (Ibid, 430) through the mass media to achieve

individual adjustment to a standardised norm. The archetypical outcomes of these types of interventions are seen as being modernisation, economic growth, political development, infrastructure development, and attitudinal and behavioural changes towards the acceptance of modernisation objectives.

A central tenet of the Modernisation paradigm then is that ideas are the independent variables that explain specific outcomes. This proposes that changes in ideas result in changes in behaviour and the underlying premise, originating in classical sociological thought, is that there is a “necessary fitness between a ‘modern’ culture and economic and political development” (Waisbord, n.d., 3).

Various criticisms of this paradigm have been raised and biases identified. The paradigm has been called culturally insensitive, overly-standardised and unsustainable (Melkote, 2002). The power of external sources and ideas in the direction of change has been criticised. The Modernisation paradigm, being a deterministic process towards a predetermined end dictated by an external agency, has come under fire for not involving the developpee in its own development (Mody 2002; Melkote 2002; Rogers 1993, Waisbord, n.d.). The victim-blame viewpoint and pro-innovation bias inherent in the paradigm has also been criticised (Melkote, 2002).

These (and other) criticisms led to disenchantment with the Modernisation paradigm and an alternate paradigm emerged which used strategies that sought to address the perceived shortcomings and which approached development from the bottom up.

The Participatory Paradigm

As its name suggests, this paradigm differs from the dominant paradigm in that the focus is on the participation of people in their own development (Mody, 2002). The goals of the participatory paradigm include the “empowerment of people, social justice... [and]... building capacity and equity” (Melkote 2002, p 430). Proponents of this paradigm believe

that underdevelopment is due to a lack of access to economic, political and cultural resources and a lack of power and control on the part of the people. According to Melkote (Ibid), the participatory context is the local and community settings, with practitioners needing to be aware of the formidable power inequities and existing systemic constraints. The levels of analysis in this paradigm are the Individual, Group or Community and the role of the change agent is that of “collaborator, facilitator, participant, advocate, risk taker or activist” (Ibid). At the first seminar on the subject in 1978, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) defined participatory communication as:

“[T]he social process in which groups with common interests jointly construct a message oriented to the improvement of their existential situation and to the change of the unjust social structure” (Mody, 2002:30).

The communication model informing the Participatory paradigm is non-linear, participatory and used to convey information as well as build organisations. There is an increased use of small and traditional media, group and interpersonal communication. Contrary to the Modernisation approach, the media here are seen as dependent variables with communication being used for transaction, negotiation and understanding and not for a powerful, changing effect. In this approach there is envisaged a symmetrical relationship (subject-to-subject) with horizontal flows (Ibid). The dedication to participation in this paradigm is reflected in the types of research methods which it employs; i.e. qualitative, longitudinal studies and labour-intensive participatory action research.

Practitioners working within this paradigm attempt to activate social support systems, social networks and mutual- and self-help activities. The goal is to have participation of all involved actors and to empower community narratives. The facilitation of community and organisational power should ideally occur as should the realisation of a critical awareness within the development context. Communication here is used to strengthen interpersonal relationships.

The desired outcomes of the participatory process include the access of all citizens to material, psychological, cultural and informational resources and the whetting of group and individual competence, leadership skills, useful life skills and communication skills at the local level (Melkote 2002). An important emphasis of this type of development strategy is on Empowerment. As McKee (1993) illustrates in Figure 6, true empowerment is seldom achieved.

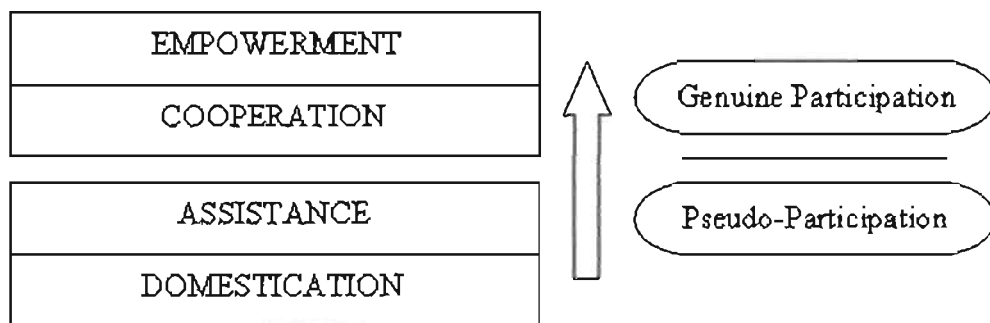


Figure 6: Levels of Empowerment in the Participatory Paradigm

Adapted from McKee (1992, p20)

Here it becomes clear that approaches which are grouped under the participatory paradigm sometimes do not achieve true empowerment or participation. In fact McKee (1993) goes so far as to suggest that participatory approaches have mainly been used to merely activate communities to collaborate with governments without giving them opportunities to shape the development programmes. He also identifies that participatory approaches can lead to situations of conflict. Although this conflict is often necessary to bring about change, it needs to be carefully managed and channelled which requires competencies which are often ignored (Ibid).

Approaches in Social Change Communication

Since the first attempts at “communication for development” there have been many different ways of communicating, each underpinned by differing assumptions. These approaches have been given labels such as Health Education, Health Communications, Health Promotion, Mass Communications, Media Advocacy, Public Advertising, Public Communications, Social Advertising and Social Mobilisation. Andreasen (1995, 9) neatly groups these approaches into four broad categories:

- 1. The Education Approach*
- 2. The Persuasion Approach*
- 3. The Behavioural Modification Approach*
- 4. The Social Influence Approach*

1. The Education Approach

This approach starts with the primary assumption people will do what is ‘right’ if they both understand why they need to do it and know how to do it. This approach underlies the Health Belief Model (HBM) and the practitioner’s task is to present the target audience with the facts in a persuasive and straight forward way. The HBM is driven by four sets of beliefs:

- Perceived susceptibility to a given problem
- Perceived severity of the problem
- Perceived benefits from acting
- Perceived barriers to taking the action

The focus of practitioners in this approach is primarily on the selection of the best channels of communication, and the use of convincing spokespersons. Messages are

carefully vetted in order to ensure the target audience will be able to easily understand them. (Andreasen, 1995; Kotler & Andreasen, 1991)

While conceding that changing of beliefs can occur using this approach, three important criticisms have been raised by Andreasen (1995).

First, the focus of the approach is on belief change and the assumption is that this will automatically lead to behaviour change. This is not always the case, as is apparent when one takes into account the number of smokers that are acutely aware of the dangers and risks of smoking yet continue to do so. Second, the effects of social pressures are ignored. This is important as social norms can result in behaviours that go against one's beliefs. Third, unexpected consequences, also termed boomerang effects, can result from the delivery of facts to a target audience. For example, disseminating a list of risk factors for breast cancer can lead to women without any risk factors concluding they do not need to take precautions against the disease – clearly not a goal of the campaign. For a coherent discussion of the Education Approach in health interventions see Thackeray (2002).

2. The Persuasion Approach

This approach builds on the Education approach by extending it in order to address some of its deficiencies. Proponents of this approach believe that action occurs only when people are sufficiently motivated. Thus it seeks to:

“...discover the careful arguments and motivational hot buttons that will get the educated consumer to ‘get off the dime’” (Andreasen, 1995, 11).

This approach underlies the technique of ‘Social Advertising’, an example of which is the (in)famous ‘Just Say No’ anti-drug campaign. A problem with this type of approach lies in its prescriptive nature that assumes to know what is best for the target audience resulting in what marketers call a ‘selling approach’.

3. The Behavioural Modification Approach

This approach pays little attention to the role of feelings and thoughts on individual behaviour. Rather, it uses the more simplistic tenets of learning theory i.e. people take action because they:

- Have learnt the techniques necessary for the action
- Find the outcomes of the action rewarding

The emphasis in this approach is on training and the modelling of desired behaviour and the allocation of rewards when the behaviour occurs, reminiscent of Skinnerian techniques. It follows that this intervention of this type then needs to occur at the level of the individual and so a practical fault of this approach is at once apparent. The cost involved in rewarding desired behaviour is prohibitive. This is a major flaw as social change practitioners developing even the grandest campaigns are subject to budgetary constraints.

4. The Social Influence Approach

The Social Influence Approach argues that the most cost-effective way of reaching and changing the target market is to design campaigns that are directed at influencing community norms and collective behaviour. According to Andreasen (1995, 12) this approach is limited to situations in which:

- Social issues and norms are widely understood and accepted.
- The pressures to conform are very strong.
- The behaviour to be influenced is socially important and visible.

These preconditions are particularly poignant in the South African situation where social change practitioners have to contend with cultural heterogeneity and its associated communication challenges, when attempting to roll out national campaigns. It is also

contended by Andreasen (1995, 13) that while social norms can serve to delay or accelerate action, this action is primarily under individual control and that the level of education and emancipation of the individual has an inverse relationship to the ability of these norms to influence one's actions. Thus this technique should be seen as a useful strategy to influence behaviour change when used in conjunction with other techniques but not as a standalone strategy for social change.

The presentation of the above approaches has been necessarily superficial. They serve primarily as an introduction to, and contrast with, the behavioural change strategy favoured by this research - the Social Marketing approach. The actual process of attitude, belief and behaviour change is not as straightforward as the above seem to suggest. Rather, the process is a complex one, involving different prerequisites and impacting forces. To illustrate, consider the Theory of Planned Behaviour (TPB) as propounded by Ajzen (n.d). This model of behaviour change is depicted in Figure 7. From this it is apparent that behaviour is the result of numerous interacting forces, all of which need to be addressed to some extent if a measure of success is to be achieved.

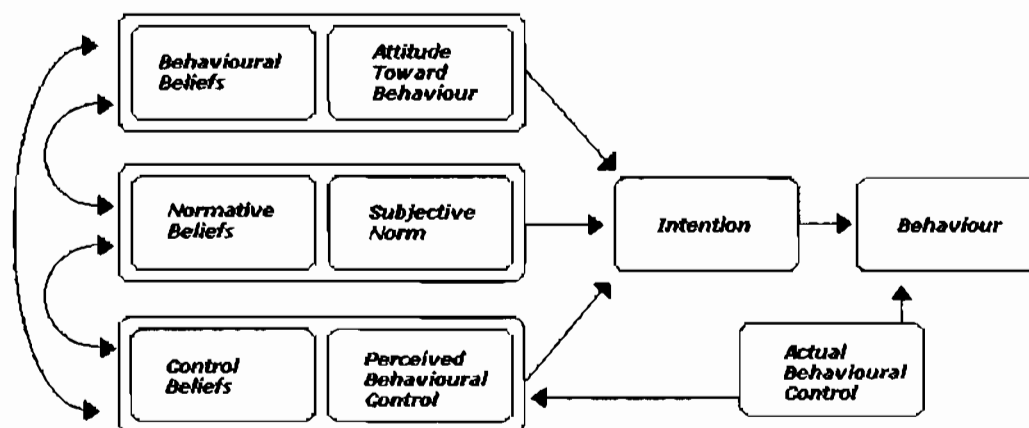


Figure 7: A Model of the Theory of Planned Behaviour

Adapted from Ajzen (n.d).

Andreasen (1995) is a proponent of a different approach to communication for development. This approach is commonly known as Social Marketing and will serve as the theoretical framework for this project.

Social Marketing

Introduction

The preceding description of the two major paradigms in Development Communication, while generalised, serve to create a background against which the concept of Social Marketing can be discussed. It will become clear later in this section that Social Marketing falls firmly under the Modernisation paradigm as its methods and assumptions are explored. A noteworthy point here though is that, as will be discussed later, Social Marketing does involve participation to a certain extent. This is clear in its dedication to designing the campaign around the market segment's needs and wants, beliefs and attitudes. The use of in-depth Interviews and focus groups to fully explore the market's characteristics and the use of pilot programmes and continual monitoring involves the market in message design to a degree (Kotler et al, 2002; Andreasen, 1995) although at best this might be seen as pseudo-participation. Interestingly, according to Burton (1998), Social Marketing is seen as a legitimate field of study and reflection by the participatory school of Communication for Development.

Thus, while there is little doubt that Social Marketing belongs in the Modernisation paradigm, it does have some affinity for participation although participation is not part of the foundations of the approach. Alongside Social Marketing in the Modernisation paradigm are the approaches of Diffusion-of- Innovations and Entertainment-education. The former emphasised the nature and role of communication in facilitating further dissemination within local communities while the latter involves the embedding of educational content in entertainment programmes in such media as Radio, Television, Records, Video and Folk Theatre (Melkote, 2002).

Social Marketing Defined

According to Andreasen (in Kotler, 2002), the practice and theory of Social Marketing is in the growth phase of its intellectual life-cycle. From an early introduction in the field of Family Planning in the early 1970's, Social Marketing has spread into related fields of Public Health and is now used in a wide variety of settings for a wider variety of uses.

The term Social Marketing was first coined by Kotler and Zaltman in 1971 in their seminal article "Social Marketing: An Approach to Planned Social Change" in the Journal of Marketing (Kotler & Zaltman, 1971). In this article they recognised that approaches that focussed entirely on alerting the public to the dangers of certain health related behaviours were often incapable in fostering changes in attitudes, opinions and, ultimately, behaviour. To overcome this, they advocated the application of marketing techniques in the solution of health and social problems. According to a synopsis by the Centre for Social Marketing (n.d.), the premise was that commercial marketing, shown to be remarkably effective in influencing people to change their purchasing and lifestyle behaviour, could be successfully used to persuade people to change their behaviour with regards to health issues. A definition of Social Marketing put forth in this article stated that it was:

"... the design, implementation and control of programs aimed at increasing the acceptability of a social idea or practice in one or more group of target adopters"
(Kotler & Zaltman, 1971).

Similarly, Meyer and Dearing have defined it as:

"...the application of management and marketing technologies to pro-social and non-profit programs" (1996)

These definitions hint at how Social Marketing can make use of techniques borrowed from the commercial sector which are adapted to 'fit' the social realm. This combination of traditional Social Change approaches with commercial marketing and advertising techniques led to a new field of thought and practice. Social Marketing has evolved into a popular field of study and practice.

Alan Andreasen concretises the relationship between Social Change and Commercial marketing when he describes Social Marketing as being:

" the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of their society. "
(1995, 3)

In his latest text, *Social Marketing: Improving the quality of life*, Philip Kotler refines earlier definitions of Social Marketing and describes it as:

"... the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behaviour for the benefit of individuals, groups or society as a whole. " (Kotler et al, 2002, 5)

These more contemporary attempts to corral the essence of Social Marketing move past the mere equation of the two fields and build further still on the earlier definitions by identifying that Social Marketers are selling a behavioural change and that this change is voluntary i.e. with no economic or legal coercion.

An addendum is needed at this point to show that the term "Social Marketing" is sometimes, erroneously, used to refer to commercial marketing which has a social component, for example a company that promotes recycling on its products. For a more detailed explanation see Fine (1981, 24).

From crude definitional beginnings the scene is set for a more comprehensive discussion of Social Marketing as a theory and practice. A useful genesis is a brief historical timeline of the evolution of Social Marketing since its inception in the 1970s.

The Emergence of Social Marketing: An Historical Timeline

To illustrate the temporal development of Social Marketing and ground it contextually it is useful to provide a timeline of its development and the events within this.

1970's

- 1971 – Philip Kotler and Gerald Zaltman coin the term ‘Social Marketing’ in their article titled “Social Marketing: An Approach to Planned Change” in the Journal of Marketing.
- Other distinguished researchers and practitioners recognise the potential of Social Marketing. Such proponents include Alan Andreasen, James Mintz, William Novelli and William Smith.

1980's

- The World Bank, World Health Organisation and Centres for Disease Control start to use the term and promote interest in Social Marketing.
- 1981 – Paul Bloom and William Novelli publish a review of Social Marketing in the Journal of Marketing. The article indicates a need for improvement in the application of marketing techniques including research, segmentation and distribution channels.

- 1985 – Richard Manoff publishes “Social Marketing: New Imperative for Public Health” which deals primarily with message design in Social Marketing Programmes.
- 1988 – R. Craig Lefebvre and June Flora publish “Social Marketing and Public Health Intervention” in the Health Education Quarterly which serves to give broad exposure to Social Marketing in the field of Public Health.
- 1989 – Phillip Kotler and Ned Roberto publish “Social Marketing: Strategies for Changing Public Behaviour” which outlines the application of marketing principles and techniques for influencing social change management.

1990's

- Several related academic programmes are established, including the Centre for Social Marketing and the Department of Community and Family Health.
- 1990 – The University of South Florida sponsors the first annual American national conference, “Social Marketing and Public Health”.
- 1992 – James Prochaska, Carlo DiClemente and John Norcross publish an article in The American Psychologist which outlines a framework for achieving behaviour change which is still dominant in the field.
- 1994 – A Social Marketing journal – the Social Marketing Quarterly is launched.
- 1994 – The first annual “Innovations in Social Marketing Conference” is held.
- 1995 – Alan Andreasen publishes an authoritative work on Social Marketing entitled “Social Change: Changing Behaviour to promote Health, Social Development and the Environment”.

- 1998 – Michael Siegel and Lynne Donor publish “Marketing Public Health: Strategies to Promote Social Change”. This text outlines principles, examples and practical theory for public health practitioners.
- 1999 – The Social Marketing Institute is formed in Washington DC, with Alan Andreasen as Executive Director.

2000+

- 2002 – Philip Kotler, Ned Roberto and Nancy Lee publish “Social Marketing: Improving the Quality of Life.” Kotler (2002).

The Scope of Social Marketing

The scope of Social Marketing is broad and the approach has been used in a wide variety of campaigns all with different objectives. The issues Social Marketing has been used to address can be grouped into four broad categories (Kotler, 2002):

1. Health Improvement

This is the area with which Social Marketing is traditionally associated. Although most Social Marketing work is carried out in this area, the scope is broadening to encompass other areas. The social issues Social Marketers have addressed in this area include:

- | | | |
|------------------|--------------------|--------------------|
| • Tobacco use | • Eating Disorders | • Breast Cancer |
| • Alcohol abuse | • STDs | • Breastfeeding |
| • Blood Pressure | • Fat Intake | • Obesity |
| • Exercise | • Teen Pregnancy | • High Cholesterol |

- Prostate Cancer
- Birth Defect
- Oral Health
- Colon Cancer
- Diabetes
- Immunisations
- Osteoporosis
- Skin Cancer

McKee (1998); Kotler (2001); Lefebvre (1999).

2. Injury Prevention

As the name implies, the emphasis is on prevention of injury among a target group. The social issues Social Marketers have addressed in this area include:

- Drinking and Driving
- Suicide
- Gun Storage
- Fires
- Traffic Accidents
- Seat Belts
- Falls
- Drowning
- Booster Seats
- Poisoning
- Domestic Violence

McKee (1998); Kotler (2001)

3. Environmental Protection

Emerging as an important and well-funded area of interest, environmental protection strategists have successfully used Social Marketing techniques to address issues such as:

- Energy Conservation
- Water Conservation
- Wildlife Protection
- Air Pollution
- Litter
- Watersheds
- Composting
- Forest Destruction
- Toxic Fertilisers
- Acid Rain
- Unintentional Fires

McKee (1998); Kotler (2001)

4. Community Involvement

This involves influencing the adoption of community-oriented behaviour - sometimes asking people to *literally* give of themselves for the “greater good” of society. Areas where Social Marketing interventions have proved useful include:

- Voting
- Blood Donation
- Organ Donation

Kotler (2001)

Having identified what Social Marketing is, and what sorts of issues it endeavours to address, a discussion on how Social Marketing has survived the influences of its roots in commercial marketing will be presented.

Social Marketing and Commercial Marketing: Differences and Similarities

Social Marketing emerged from an amalgamation of classical Social Change theory and Commercial marketing techniques. However, although Social Marketers borrow theory and techniques from the realm of Commercial marketing, there are some important differences which are worth noting.

First, there is a distinguishing factor around the product being marketed. In commercial sector marketing, the marketing process revolves primarily around selling goods and services while in Social Marketing the marketing process is used to 'sell' behaviour change (Kotler et al, 2002).

Second, the aims of the two fields diverge. Commercial marketing sells goods and services with the primary aim of realising a profit while in Social Marketing the aim is individual or societal gain. So while both groups seek to gain the best return on their resource investment, the nature of this return differs fundamentally. (Kotler, 2002; Andreasen, 1995)

A third difference involves the concept of competition. Both Social and Commercial marketers see the importance in the identifying of, and positioning their offerings relative to, the competition. However, the nature of this competition differs. In Commercial marketing the competition is identified as other organisations that either offer similar goods and services or satisfy similar needs. In Social Marketing the competition is often the current or preferred behaviour of the market and the perceived benefits of that behaviour.

Lastly, Social Marketing is seen to be more difficult than Commercial sector marketing in that Commercial marketers are attempting to influence behaviour which, if implemented, has relatively little effect on the person, for example which brand of tea they buy. Contrasting this, Social Marketers are often involved in attempting to influence behaviour

which may be discomfiting for the individual, for example giving up an addiction such as smoking. (Kotler et al, 2002; Andreasen, 1995).

Despite these basic differences, Social Marketing and Commercial marketing also have some key similarities:

First, there is an application of a customer-oriented approach whereby the Social Marketer identifies the need to tailor the product to the target audience.

Second, in both fields exchange theory is seen as fundamental. Exchange theory entails the consumer perceiving that the overall benefits of the product must equal or outweigh the cost.

Third, the use of market research occurs throughout both the marketings' processes. This is pivotal for the Social Marketing process and serves to ensure that the marketing strategies are informed by the research and understanding of the "specific needs, desires, beliefs and attitudes of the target adopters" (Kotler et al, 2002, 11).

Forth, in both fields the audience is segmented. This allows campaigns to be built specifically around the unique wants, needs, resources and behaviours of the specified market segments.

Fifth, all of marketing's '4Ps' (outlined later) are considered in a comprehensive framework.

Lastly, in both fields there is continual appraisal and refining of the techniques to further improve the overall strategy employed. (Andreasen, 1995; Kotler et al, 2002)

Relating to the relationship between Social Marketing and commercial marketing, a contemporary debate is raging around the creation of a separate identity for Social Marketing away from traditional marketing. On one side there are those that wish to

distinguish Social Marketing as a unique and separate discipline and on the other side are those that believe it necessary to remain connected to the marketing discipline in both theory and in practice. See Kotler et al (2002:24) for a more detailed discussion of this debate.

The Social Marketing Approach

Beyond definitional and comparative discussions, the question of what Social Marketing actually is has yet to be raised. This section will attempt to delineate how the Social Marketing approach moves beyond alternate approaches by presenting its distinguishing characteristics.

Andreasen (1995) points out that Social Marketing does have some aspects in common with other approaches. He shows how Social Marketing educates individuals (Education Approach), motivates them to act (Persuasion Approach), introduces group pressure (Social Influence Approach) and employs modelling and rewards to achieve its goals (Behavioural Modification Approach). However Social Marketing goes beyond these approaches in that it is more comprehensive. This difference can be found in its definitive features which Andreasen (1995) outlines. These are discussed below:

Social Marketers, like behaviourists, judge the success of their campaigns by looking at what their customers actually do. Social Marketers recognise that the learning of facts is only important if this leads to a desired behavioural outcome. This view is unlike that of the education approach which takes as its measure the fact that messages have been received and facts learnt. This is not to say that Social Marketing does not realise that the dissemination of information is important and necessary but rather it illustrates that this is seen as merely one step towards the final outcome, which is behavioural change.

All programmes have a finite budget within which the social change practitioner must work. Like Commercial marketers, Social Marketers are concerned with cost

effectiveness. This leads to a willingness to make tradeoffs, ignore inessential markets and seek strategic alliances. This mindset can result in the leverage of meagre resources to achieve often dramatic objectives (Andreasen, 1995).

Social Marketers have a consumer-centric ethos. They recognise that the audience will only take action if it is considered to be in their interests to do so. Therefore Social Marketing's strategies begin with an understanding of the target audiences' needs and wants. There is no imposition of the marketer's values on the audience but instead the campaigns' tactics emerge from in-depth study of the audience. This respect for the importance of the customer is therefore a central tenet of the approach.

In other approaches to social change, practitioners rely on one or two programme elements. Social Marketers use four sets of factors, borrowed from commercial marketing, to promote behavioural change. Social Marketers believe that if these four sets of factors are correctly in place then bottom-line behaviours will take place. These factors are known as the "4 P's":

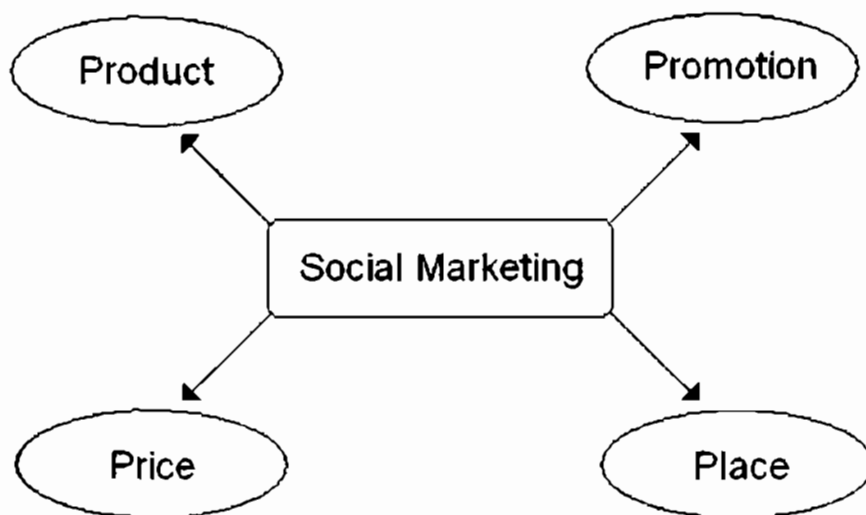


Figure 8: The 4P's of Social Marketing

1. Product

Social Marketers recognise that they must propose the right kind of behavioural offering if customers are going to act. In Social Marketing, the 'product' being sold is behaviour. Often this behaviour is aligned with a tangible product, for example Social Marketers working in the field of AIDS prevention often promote condoms parallel to the behavioural change (using a condom). Here issues of branding emerge which are important in heightening awareness around the message. Product design in Social Marketing is vital and involves a complex dialogue between the different groups running the campaign. See Appendix A for a process diagram of product creation in Social Marketing. Kotler et al (2002) shows that there is also a need for Social Marketers to distinguish between the product (desired behaviours) and the product's positioning (the benefits satisfied if the target market adopts the behaviour). Positioning strategies persuade the audience that the benefits are equal to or greater than the benefits of their current behaviour.

2. Price

This recognition that considerations of benefits and costs of a behaviour influence action shows the importance of researching *price* in Social Marketing. The price consumers pay for a social product is not only monetary. It can involve intangible costs such as comfort and time. For example promoting behaviour to increase the amount of blood stock (i.e. donating blood) can be difficult as the process involves voluntarily allowing the insertion of a needle to drain a pint of blood up to six times a year. This can be an uncomfortable and violating experience and this price needs to be weighed and countered with the benefits of the action.

3. Place

This aspect involves making desired behaviours easy to accomplish for the target market. Social Marketers recognise that even the best designed programmes can fail if the

products and services required to carry out such programmes are not easily accessible. To extend the above blood donation example, the holding of blood clinics at schools universities and shopping centres by the South African National Blood Service (South African National Blood Service, n.d) illustrate how the SANBS attempt to create accessibility for the behaviour to satisfy the ‘place’ requirements of their campaign.

4. Promotion

This aspect deals with the use of media to promote Social Marketing programmes. Here different distribution channels are used in conjunction with one another in order to best expose the target market to the campaign’s media material. Promotion also includes tactics that reward customers for desirable behaviour. The SANBS has a badge system that rewards donors with a badge at various donation intervals. They also give a branded gift to those who donate four or more times a year. Kotler and Roberto (1989) show how the distribution flow of a social product is conceptualised by Social Marketers in different ways. He identifies three alternate models, outlined in Figure 9:

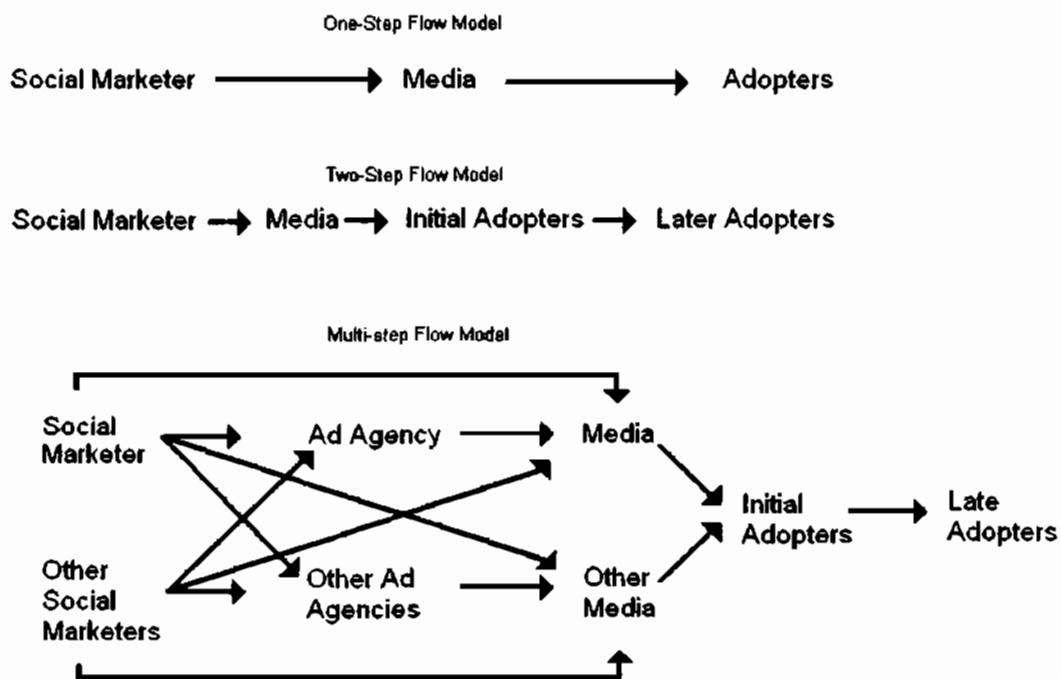


Figure 9: Distribution Flow of a Non-Tangible Social Product – 3 Alternate Models

Adapted from Kotler (1989, 169)

It is apparent that the level of complexity increases from the One-Step Flow Model to the Multi-Step Flow Model. Kotler (Ibid) shows how, in the case of social products, a premium is placed on the exchange and delivery of products by individuals. Thus the conceptualisation of the distribution flow is best achieved using the Multi-Step Flow Model.

Social Marketers “are almost fanatical about conducting research” (Andreasen, 1995, 16). This is a manifestation of the aforementioned consumer centric ethos. Social Marketers put a lot of emphasis on formative research. This can vary from costly, detailed surveys to a number of conversations with customers to learn their thoughts and feelings. Research is also carried out to pre-test components of a programme before rolling it out on a wide scale. This research continues throughout the life of a programme and contributes to the feedback and ongoing refinement of the programme on the go.

Another important defining characteristic of Social Marketing is its tendency to not treat audiences as mass markets (unlike public education and community motivation programmes). Rather, Social Marketers rely on *market segments* which are carefully identified as the key groups of people which the campaign wishes to reach. Distinctive programmes are then tailored to the characteristics of these market segments.

Social Marketers place a great deal of emphasis on competition. Every choice of action on the part of the consumer involves giving up an alternative action. Thus Social Marketers need to identify competing behaviours and show their deficiencies as well as just expounding on the benefits of the desired behaviour.

These definitive features show how Social Marketing differs from other types of marketing. The features are all represented in the framework of practice that Social Marketers use to guide the design and implementation of Social Marketing programmes.

Social Marketing and Road Safety: Two Case Studies.

Introduction

Having presented Social Marketing a viable behaviour change strategy, an analysis of its usefulness for this project should be outlined. This can be achieved by identifying Social Marketing's track record in road safety interventions. This is provided through a look at two relevant case studies. Both studies use Social Marketing to influence road safety related behaviour. The practitioners use different methods and achieve different results.

1. Social Marketing and Seatbelt Use in America: The 'Buckle-up America's' *Click it or Ticket* Campaign.

Buckle-Up America incorporating *Click it or Ticket* is a social marketing campaign that encourages proper safety belt and child safety seat use in the United States. It is coordinated by the National Highway Traffic Safety Administration (NHTSA) with assistance from the Academy for Educational Development (AED), a non-profit organisation that helps organisations operate social marketing campaigns. All information, unless specified otherwise, is obtained from the National Highway Traffic Safety Administration (n.d.).



Figure 10: Examples of the Buckle Up America and Click It or Ticket Branding

Source: NHTSA (2002)

The Click It or Ticket Model

The *Click It or Ticket* programme is an occupant-protection Selective Traffic Enforcement Programme (STEP). The enforcement is supported with intensive paid publicity that focuses primarily on enforcement of relevant seatbelt laws. The programme model includes:

- data collection, before, during and immediately after media and enforcement phases
- earned and paid publicity announcing strict enforcement
- highly visible enforcement each day of the two-week enforcement period
- a media event announcing programme results and thanking all the participants in the community

Click It or Ticket Publicity

The 'Click It or Ticket' model includes both earned and paid media. Seat belt enforcement messages are continually repeated during the publicity period. Messages specifically stay focused on enforcement continuing to remind motorists to buckle up or receive a ticket, i.e. Click It or Ticket.

Earned Media

Earned media occurs when the programme's details and results are developed into newsworthy events that are circulated in the public by broadcasters and newspapers. Earned media begins one-week before paid media, two weeks before enforcement, and continues throughout other phases of the programme. An earned media event, like a press

conference and press release, is typically used to announce the ensuing enforcement programme. Additional created publicity events continue to bring news coverage to the ongoing enforcement effort. Press releases are used to update the public on the latest programme details.

Paid Media

Click It or Ticket paid advertisement campaigns usually last two weeks. During this period, radio and television advertisements air extensively. Paid advertisements are strategically placed at times and places intended to maximise exposure. Paying for advertisement placement is necessary to reach the largest audience and specific target groups. Radio advertisements, timed to run during drive times, attempt to reach motorists when they are most likely in their vehicles. Television advertisements are run at times when most viewers are present. Additionally, some of the television and radio airtime may be strategically placed to reach low belt use target groups (in this case: youth, pickup truck occupants, rural populations)

***Click It or Ticket* Enforcement**

Ideally traffic enforcement stays focused on seat belt violations above all other traffic violations. Various enforcement techniques used during the period of enforcement may include checkpoints, saturation patrols and routine patrols. Checkpoints are ideal because of their high visibility.

Whatever enforcement tactics are used, keeping traffic enforcement visibly present for the entire enforcement period is a central component of *Click it or Ticket*.

Concluding Media Event

Weeks after ending publicity and enforcement, a media event is used to publicise results. Programme results and recognition of contributions from the community are supplied to the media for public exposure.

Why Social Marketing?

The Click it or Ticket campaign, as outlined above, may not seem to be a comprehensive Social Marketing programme, but rather it may seem to be involved in mere information dissemination.

This is not the case however as, if the methods are examined, the principles of the Social Marketing approach become apparent. The campaign targeted market segments which it identified as those needing the most behavioural change. The campaign targeted these markets primarily and used branded material that created involvement at the interpersonal level in these markets. For example, mock tickets with reasons why the ticketer is concerned for the wellbeing of the transgressor were designed for the different market segments. Also, comprehensive messaging in schools using interpersonal and traditional media was used to encourage students to participate. These messages were designed to appeal to the market and were tongue-in-cheek. These techniques and others (see National Highway Traffic Safety Administration, 2002) represented a marketing mix that is distinct to the Social Marketing approach. The campaign's use of branding of materials and the focus on behaviour change further grounds the campaign in the Social Marketing ambit. Interestingly the affiliated website www.nhtsa.org offers interactive tools to help those wanting to promote safety. Here issues of participation emerge which is a focal point of new Information and Communication Technologies (ICTs) especially computer and Internet technologies.

Efficacy

The ten American states that followed the full implementation *Click It or Ticket* model were compared to four states that conducted belt use enforcement but with limited specific paid advertisement placement, and 4 other states that conducted enforcement but without specific paid advertisement placement.

State and No. of Participants	Baseline	Post	Estimated Change
Full Implementation	(N=312,172)	(N=324,895)	
AL (116,064)	70.3	78.7	+8.4
FL (60,705)	66.5	75.1	+8.6
IL (69,025)	70.6	74.3	+3.7
IN (39,491)	69.2	72.2	+3.0
MS (218,347)	53.8	61.5	+7.7
NV (40,000)	70.6	76.4	+5.8
TX (30,016)	80.5	86.4	+5.9
VT (19,779)	66.2	84.9	+18.7
WA (12,089)	80.8	89.5	+8.7
WV (31,551)	56.5	71.6	+15.1
Average	68.5	77.1	+8.6
Other Implement.(non social marketing)	(N=185,173)	(N=188,857)	
CO (291,450)	72.1	73.2	+1.1
MI (30,248)	82.3	80.0	-2.3
OH (44,240)	64.2	70.3	+6.1
RI (8,092)	62.6	68.6	+6.0
Average	70.3	73.0	+2.7
Comparison	(N=118,761)	(N=122,247)	
IA (23,898)	81.4	83.0	+1.6
NY (175,328)	78.3	82.8	+4.5
OR (36,115)	88.5	87.8	-0.7
West MA (5,667)	60.6	57.2	-3.4
Average	77.2	77.7	+0.5

Figure 11: Efficacy of the Click it or Ticket Campaigns and Alternate Implementations

Source: Solomon et al (2002)

This shows that the Click it or Ticket campaign had a significant effect in that it showed an average 8.6 % increase in seatbelt use in the participating states. It also outperformed the other states which did not use the approach which achieved a 2.7 % and 0.5 % increase respectively.

2. Social Marketing and Speeding in Scotland: The Foolsspeed campaign

Foolsspeed is a five-year campaign designed to reduce the use of inappropriate and excessive speed in Scotland. It comprises a focused and structured mass media advertising campaign underpinned by the Theory of Planned Behaviour (TPB), this model explains and predicts behaviour in terms of key psychological determinants. The TPB was used to shape a series of television advertisements, each designed to address a key determinant of behavioural intention. All information is taken from Stead et al (2002) unless stated otherwise.

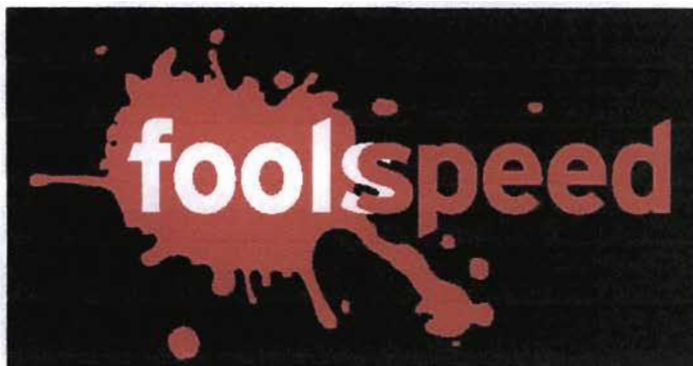


Figure 12: Example of Foolsspeed Branding

Source: Scottish Road Safety Campaign (2000)

The Foolsspeed Model

The campaign started in November 1998 with the introduction of the Foolsspeed logo in television advertising, publicity materials and unpaid publicity. In 1999, a 40-second television advertisement, *Mirror*, designed to address attitudes towards speeding, was developed and screened. A second 40-second television advertisement, *Friends and Family*, was developed and screened in 2000 which was designed to address subjective norms regarding speeding. A third 40-second advertisement, *Simon Says*, addressed perceived behavioural control over speeding. It was decided that in order to increase drivers' identification and engagement with the advertising, a "shock-horror" approach would be discarded in favour of a low-key realistic style depicting everyday driving scenarios. Fear-arousing messages are successful in gaining audience attention, but there is a risk that advertising which portrays extreme threats is either avoided after initial viewing because it is too distressing, or is discounted by viewers as unrealistic, not personally relevant, and lacking in credibility (Snipes et al, 1999; De Turck et al, 1992). As an aside, the media spots used by the Scottish National Department of Transport over the Christmas season in 2004/2005 used such shock/horror tactics. The measured efficacy of these spots was not available at the time of writing.

The campaign is targeted at the general driving population in Scotland. However, a key target sub-group for the campaign is drivers with a known tendency to speed: males between the ages of 25 and 44.

The Foolsspeed advertising was evaluated by the Centre for Social Marketing (CSM) through a longitudinal survey of a quota sample of drivers aged 17-54. The aims of the evaluation were threefold:

- To assess awareness and recall of elements of the Foolsspeed campaign amongst the driving population

- To examine drivers response to the Foolsspeed advertising in terms of comprehension, identification, involvement and perceptions of key messages
- To measure and compare drivers' reported behaviour, intentions, attitudes, subjective norms and perceived behavioural control in relation to urban speeding to assess whether any changes occurred.

Why Social Marketing?

As can be seen from the above, the Foolsspeed campaign can be viewed as Social Marketing as it targets a specified market segment, uses branding and takes as its measure behavioural change (less incidence of speeding in urban areas). However, very little is mentioned about the design of the promotional messages around the beliefs of the target market. Compounding this, the campaign is overly concerned about the psychological processes which inhibit or promote behaviour as outlined in the TPB. Conventionally, Social Marketers would be more interested in behavioural outcomes. Thus this campaign could be viewed as less comprehensive than an ideal Social Marketing campaign (as outlined earlier).

Did it work?

The conclusions generated from the evaluation were mixed in regards to these factors. For example, in one of the target group surveys it was shown that exposure to the media was actually slightly correlated to increased reported incidence of speeding. Overall though, the campaign was seen to be a success in regards to increasing awareness and changing beliefs of the target markets. However, as Figure 13 illustrates, there was no significant decrease in the incidence of reported speeding behaviour:

<i>Base: All answering both stages</i> <i>(1 = Never, 7 = Almost all the time)</i>	Mean	Std Deviation	Paired Differences
How often have you driven over the speed limit:			
• On a road with a 30mph limit?	3.76	1.84	t = -0.581, df = 386 ns
	3.71	1.73	
• Late at night or early in the morning?	4.09	1.87	t = -0.670, df = 387, ns
	4.15	1.76	
• On a motorway?	3.79	2.03	t = -1.776, df = 387, ns
	3.95	1.95	
Reported Speeding Behaviour: Baseline	11.65	5.66	t = -0.923, df = 386, ns
Reported Speeding Behaviour: 2 nd Survey	11.82	4.51	

Figure 13: Reported Speeding Behaviour in the 2nd Foolspeed Survey

Source: Stead et al (2002)

Behaviour change is the core determinant of success in any Social Marketing endeavour and so the campaign as yet has not been successful. This is not to say though that the campaign will not achieve success in the future as one could view the early years of the campaign as serving to 'prime' the audience and move them through the pre-contemplation and contemplation stages in the behaviour change process. The negative behavioural results of the campaign should be used to put in place future modifications to the campaign if the Social Marketing best practice is to be realised. The gap between Social Marketing theory and practice is as large as real life constraints allow it to be and care should be taken not to overlook too much of the theoretical process which underpins the practical undertakings.

In conclusion, having presented two vastly different case studies, each with different outcomes, it can be speculated that Social Marketing has a role to play in the development of road safety interventions. Caution should be taken to adhere to the principles of Social Marketing in order to increase the efficacy of any development endeavour.

Social Marketing: A critique

The preceding discussion of Social Marketing has been predominantly informed by pro-Social Marketing literature. To balance this, some of the criticisms that have been levelled at Social Marketing will be reviewed.

General Criticisms:

Earlier in this report, Social Marketing was located in the Modernisation, or Dominant, paradigm in Development Communication theory. This location has been the source of much of the approach's criticisms. The assumptions of theories in the dominant paradigm have come under fire for numerous reasons. Mody (2002) sets out some of these criticisms:

- That 'rationality' and 'progress' are read as equalling economic rationality and growth determined by the political and economic elite.
- The focus of the dominant paradigm is on 'well-having' not 'well-being' in that it takes as its development indicators such criteria as Income, GNP and per capita consumption of resources.
- The dominant paradigm has claimed to speak the 'Truth' about development often leading to its uncritical acceptance by recipients, discounting other analyses - for example folk-scientific descriptions.
- The histories of developing countries are deemed irrelevant to the process of modernisation, often leading to the countries being stripped of their histories and cultures.
- The dominant paradigm is guided by stereotypical master-geographies with concepts such as 'Third-World', 'North-South' and 'African' emerging to serve

as umbrella terms under which countries are slotted, resulting in inaccurate assumptions.

- The modernisation approach borrows greatly from social evolutionary theory. The strong biological metaphor assumes development to be irreversible and as being guided through set, linear stages.
- Social problems in developing countries are seen as natural and there is no thought to attributing them to outcomes of politics, mismanagement, corruption or the failure of research paradigms and crises of capitalist modernisation ventures.

These criticisms are of development at the macro level but their basic objections are still considered valid when looking at Social Marketing interventions. The identified shortcomings are not levelled at Social Marketing specifically but rather at the paradigm under which it falls. To take these criticisms seriously there needs to be a viable alternative to consider. Detractors of the Dominant paradigm see more participatory approaches as being the way forward in any development context. Thus Social Marketing is criticised for lacking a participatory and dialogical outlook in its theory and methodology. A counter criticism of this may be to denigrate the practicality of participation in campaigns which are often rolled out on a national scale. At best, Social Marketing might benefit from including more participation. Storey (1999) shows how approaches in the modernisation paradigm can be rethought as more participatory. Although he is primarily talking about the “Edutainment” approach of the modernisation paradigm, the argument can successfully be applied to the Social Marketing framework. Some proponents of Social Marketing have tried to show that Social Marketing is more participatory than traditionally thought. For example, Novelli (1990, 349) shows that “the marketing process is circular”. This attempts to indicate that input from targeted communities garnered through qualitative focus groups and in-depth interviews shows the participatory, involving concern of Social Marketers. Thus the process is consumer-driven and not expert-driven (Ibid).

According to Fox (n.d. in Waisbord, n.d.), “problems arose with the Social Marketing approach [...] over the motives of their sponsors, the effectiveness of their applications and, ultimately, the validity of their results”. This criticism looks at how some Social Marketing programmes have been backed by corporations which align their products with the social change strategy in order to garner commercial benefits. Social Marketers would respond perhaps to say that this is bad practice and not in line with the tenets of Social Marketing which only advocate strategic alliances if they will serve the greater good of the social change intervention.

According to Waisbord (n.d.), critics have further lambasted Social Marketing for manipulating populations and for its focus on goals without regard for means. The latter criticism refers to concerns around the ethics involved in Social Marketing programmes. Here detractors argue that Social Marketing subscribes to a utilitarian ethical model which prioritises ends over means. Social Marketers, they say, will justify any means in the name of achieving certain ends. Buchanan et al (1994) go so far as to say that, like commercial marketing, Social Marketing deceives and manipulates people into certain behaviours. Social Marketers respond to this by claiming their methodology is neither intrinsically good nor bad and judgement should be contingent on the goals Social Marketing try to achieve and furthermore the claim that marketing can trick and make people act as they would not otherwise is misinformed and incorrect. Rather, as Waisbord (n.d.) points out, the reluctance of people to change their behaviour to conform to Social Marketing campaigns coupled with the fact that these campaigns need to be adjusted to socio-cultural contexts and mores, show that Social Marketing lacks the power to manipulate audiences. In fact, if the Social Marketing product goes against traditional beliefs and behaviour, it is likely to fail (Ibid).

MacStravic (2000) criticises Social Marketing along different lines. In his article, aptly titled *“The Missing Links in Social Marketing*, MacStravic sees Social Marketing as a useful and successful strategy for social change. However the argument that he sets out posits that Social Marketing should be further developed to increase its efficacy.

MacStravic identifies what he sees as the three primary functions of Social Marketing as being:

- **Research:** Identifying and understanding the determinants of the behaviour to be changed and any barriers to the desired behaviour and the segmenting of distinct prospects for differentiated treatment.
- **Development:** Creating an integrated 'marketing mix' using the 4Ps of Social Marketing
- **Communications:** Creating messages and selecting delivery vehicles to communicate the information and arguments.

To increase the impact of Social Marketing endeavours, MacStravic proposes adding three more functions that will build on and improve the approach:

- **Monitoring:** Checking to see if the intended and communicated value has been delivered to, and perceived by, the audience (or what he labels 'converts').
- **Confirmation:** Reminding or reinforcing converts' awareness and appreciation of the value they have gained from the behavioural conversion.
- **Solicitation:** Encouraging and enabling converts to support the sponsors' continuing efforts to convert more people to the new behaviour.

By adding these 'missing' functions, MacStravic envisions that a more rounded approach to social change will result. This argument is not then a conventional criticism but rather an identification that Social Marketing needs to be further developed if it wants to have more success in the field.

Other scholars, such as Jacobson and Kolluri (1999) attack Social Marketing by criticising its theoretical underpinnings in the form of its relationship to Communicative Action. They argue that any practice which takes Communicative Action as its modus operandi can be criticised in terms of its claims to validity. Ironically enough, this flies in the face of earlier criticisms as Communicative Action is analysed by Jacobson and Kolluri relative to participatory-approach contexts.

Criticisms of Social Marketing & Road Safety Campaigns

One is hard-pressed to find much critical scholarly debate over the use of Social Marketing in Road Safety campaigns. The literature in this field tends to be descriptive and lacks criticisms that deal specifically with Road Safety. However, two articles have addressed the issue and they will serve as the basis for the following discussion.

The first article is by Elliot (n.d.) entitled *Marketing's Potential for Road Safety: Under or Overstated*. This article, while not specifically against Social Marketing – the author is involved in the field of Social Marketing and Road Safety – does point to how marketing safety is different to marketing commercial products. Elliot shows how social marketing in Traffic Safety can be used to package and promote a behaviour with the target audience in mind but cautions against overstating the role that Social Marketing techniques can play in influencing driver behaviour.

The second article approaches the issue from a different angle. Lewis (2001) attacks road safety campaigns from the standpoint of analytical validity. Here he argues that proponents of Social Marketing campaigns around Road Safety may be overemphasising their success. This is not due to theoretical or methodological error but rather lies in the statistical analyses that are used to show the resultant behaviour change. The measurement of such data is able to be manipulated in such a way that it can show both success and failure with equal ease. Pessimistically, the paper claims that no amount of expertise can achieve a reliable result. This seems to render any argument of efficacy

null. The way forward according to Lewis is to revise the way social experiments are viewed in order to render the generated data amenable to a higher level of reliable analysis.

Logically, critics could point to campaigns that have failed as proof that the Social Marketing process is not effective in Road Safety. Social Marketers though neatly sidestep this as can be shown by Andreassen (1995) who claims that Social Marketing works – *if done correctly*. This loophole allows Social Marketers to point to any failures and claim they did not fail because of theoretical shortcomings of the approach but rather due to the fact that the campaign was not carried out correctly.

In summary then, although Social Marketing has been shown to be useful, it should be used with caution and with an understanding of its limitations. These shortcomings may be controlled for only if they are put under scrutiny. This falls under the broader and more problematic area of ethics in research. If the researcher maintains a standard of ethical conduct that is acceptable then many of the preceding criticisms (outside of theoretical assumptions) are overcome.

Information & Communication Technologies in Development

Introduction

Communication is a topic of great interest to sociologists. As Barrat (1986: 14) points out: “communication is a precondition of the very existence of a society”. This is extended to concern over the media that carry the messages between sender and receiver. The past two decades has witnessed an explosion in growth in what is broadly known as the Information Technology (IT) sector. Globally and nationally there is an expanding market for the resultant consumer products such as cellular phones and Internet access. The functions of such products are also expanding at a fast pace, changing the way the world is communicating. A cellphone is now also a camera, a radio, a GPS device, a music player and an Internet browser.

Beyond private use is an increased awareness of the potential role of Information and Communication Technologies (ICTs) in the field of development. This is particularly poignant in Africa. According to the United Nations Economic Commission for Africa (UNECA), “without embracing ... ICTs ... the development gap between Africa and the rest of the world will continue to expand”. Information and knowledge have increasingly become both essential resources and raw materials in the global networked economy. Africa has the opportunity to exploit these technologies to become fully integrated into the global economy and accelerate socio-economic development.

This awareness of the potential role of ICTs in development gives scope to provide innovation and exploration in how development practitioners design and implement their interventions. A common response to the use of ICTs in African development is that of scepticism towards their applicability in an environment of pronounced poverty and lack of access to the information revolution. This gap between those with access to new technologies and those without is known as the “digital divide”.

The Digital Divide: Mapping ICT Access in Africa

Identifying a gap in access to knowledge is not a new idea. According to the knowledge gap hypothesis, first formulated in Tichendor, Donohue, & Olien (1970), there is a chronic gap of knowledge that different sectors of society possess. The subsequent research points to the fact that the gap is smaller in the arena of knowledge about local issues and matters personally relevant to the recipients.

According to Wikipedia (n.d), aptly an online open-access knowledge portal, the gap was also thought to reduce as television replaces newspaper as a source of knowledge. Compared to newspapers, television requires less literacy, and it is considered a more “passive” medium.

The advent of the Internet, and related technologies such as the cellular Short Message Service (SMS) might reverse this change, since they are predominantly text media. It is also the case that users of the Internet may need more skills to navigate through the vast amount of information and misinformation rather than passively receiving information feed from newspaper or television.

Broadly speaking, the access differential is not necessarily determined by the access to the Internet, but any ICTs and media that different segments of society can use. With regards to the Internet, access is only one aspect alongside quality of connection and auxiliary services, processing speed and other capabilities of the computer used among other things (Davison and Cotton, 2003). All new mid-to-high range cellular phones are equipped with standard Wireless Access Protocol (WAP) and General Packet Radio Service (GPRS) which allow limited access to online resources. This obviates the need for an expensive computer to “surf” the net.

The following technology maps, plotted by UNECA in 2001, provide a sense of the state of access to telephony and computers in Africa:

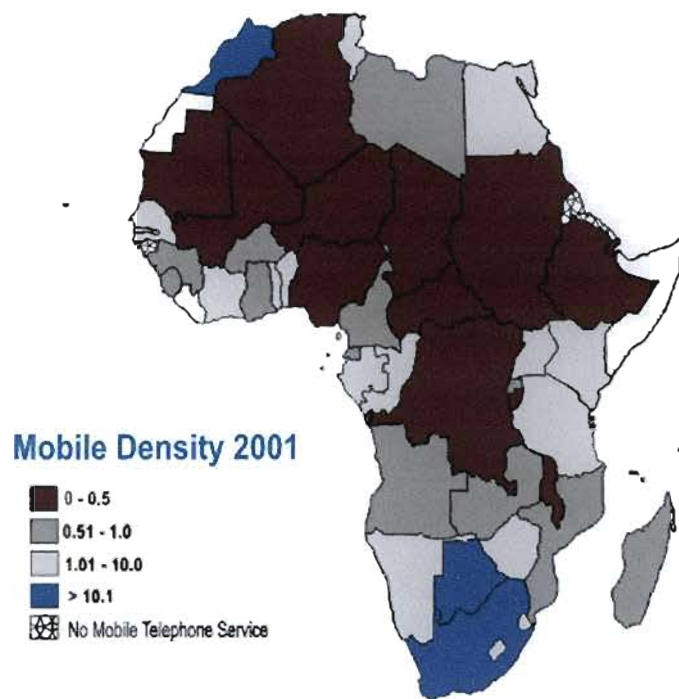


Figure 14: Mobile Density in Africa

Source: UNECA, 2002

This map shows South Africa having a high mobile density of more than 10.1.

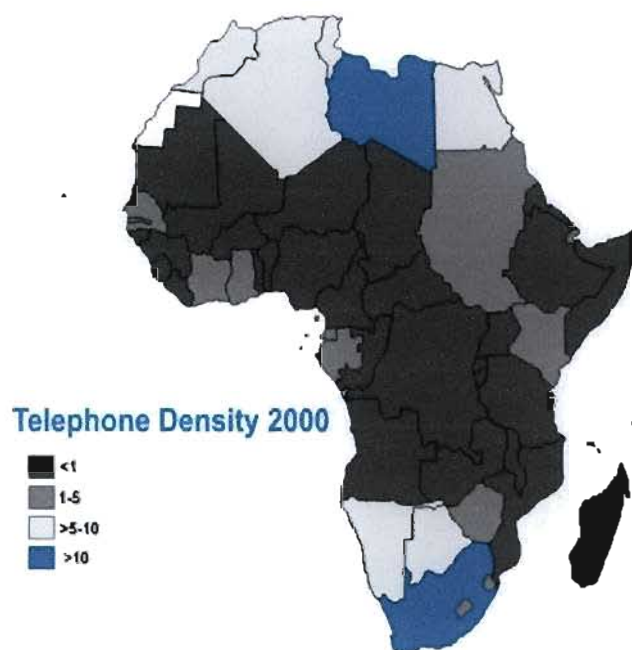


Figure 15: Telephone Density in Africa.

Source: UNECA, 2002

This map shows South Africa having a high fixed line telephone density of more than 10.

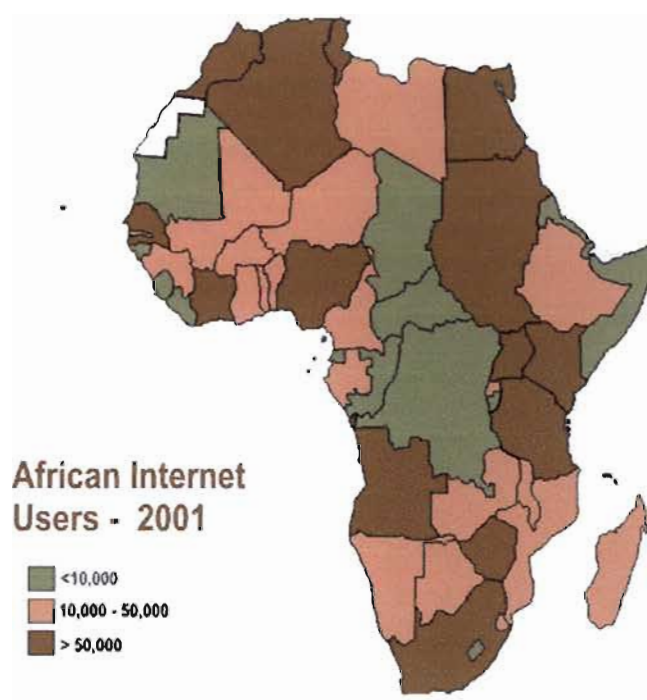


Figure 16: Internet Usage in Africa.

Source: UNECA, 2002

This map shows South Africa having a reasonably high Internet-user base of more than 50 000.

In all cases, South Africa enjoys a high access to telephony and the Internet. It is well placed to lead the way towards ICT access in Africa. However, this does not mean that there is an equitable access to technology within South Africa across socio-political, geographic and income lines. One such concern is that of the Eurocentric nature of the Internet which can exclude non-English speakers. Martindale (2002) points out that navigating the cyber world is daunting enough for first-time travellers, without having to do so in a language that is not their own. The translation of computer programmes into South African languages is virtually uncharted territory. Most computer software is only available in English and poorly supported in Afrikaans. The other nine official languages are not visible in any form of software. This is of concern when one considers that

isiZulu is the most commonly spoken language in South Africa, with Xhosa a close second. This is slowly changing with the increasing popularity of open-source software. Internet Millionaire and social activist, Mark Shuttleworth, is South Africa's most outspoken proponent of this software which is distributed free of charge and is underpinned by a non-commercial and socially responsible ethos. Through this open-source revolution, the African user is able to access source code of programmes and, using programmes such as K-Babel, can translate and access these. The emerging technology market in South Africa is not going unignored by the larger commercial companies. Recently Google™ introduced an isiZulu and Afrikaans version of their homepage.

Thus, although there exists a digital divide in South Africa, it hampers but does not make impossible the use of ICTs in development. Rather it creates a need for a sensitive and cautious approach which keeps cognisance of the targets of development interventions and their needs and limitations. The use of ICTs in development has allowed for some meaningful projects.

ICTs in Development: Three South African Case Studies

This section will briefly present examples of South African development projects that use ICTs in different ways and to different degrees.

1. The Tygerberg Children's Hospital and Rotary Telemedicine Project

Launched in 1999, the Tygerberg Children's Hospital and Rotary Telemedicine Project in South Africa links specialists from Tygerberg Hospital to doctors at regional community or "district" hospitals to improve healthcare in rural areas. The initiative has assembled its own telemedicine system using off-the-shelf computer equipment and software that is more affordable than commercial telemedicine systems.

This project responds to a demand for doctors at district hospitals to treat patients that require special attention or diagnosis that is beyond their training. Tygerberg Hospital specialists must support these doctors but usually do not have the time to visit them on site.

Dr. Etienne Nel and Professor Robert Gie of Tygerberg Children's Hospital set up a telemedicine system that meets the immediate needs of the district hospitals. The system uses a Pentium 4 computer with a 42 cm screen, printer, scanner, software, digital camera, and light-shelf for viewing x-rays. The system is connected to the Provincial Department's network infrastructure, which connects Tygerberg with the district hospitals and gives doctors unlimited access to e-mail. The total cost of the unit based at Tygerberg Hospital was less than R50 000 while the units at the district hospitals cost R45 000 each.

Doctors at district hospitals scan X-rays and electrocardiographs, and e-mail them together with blood test results, digital photographs, and clinical observations to the telemedicine unit at Tygerberg Children's Hospital. At Tygerberg, one person monitors incoming e-mail and directs queries to relevant specialists. The Tygerberg specialists review the information received, send an e-mail reply, and consult remotely with the district doctors about diagnosis and treatment. If a district doctor needs an urgent reply, he sends an SMS message to a specialist's cell phone, alerting the doctor to check e-mail immediately.

This is an example of how ICTs can bridge spatial and temporal gaps and create linked virtual worlds and consultation arenas. This case study requires only the doctors involved to interact with the technology and so does not encounter many problems in terms of need for training as the persons accessing the technology are static and relatively fast adopters of innovation. Thus technology here is a support tool between professionals in the health field. The beneficiaries of this project are ultimately the health care recipients. This project is an initiative of the International Institute for Communication and Development (IICD).

2. Compliance Service using SMS technology for TB treatment

This project was implemented in 2002 by Dr. David Green a medical practitioner and consultant in Cape Town, South Africa; through his company “The Compliance Service”. Dr. Green's Compliance Service uses the Short Message Service (SMS) to alert tuberculosis (TB) patients to take their medication. This commercially driven initiative has led to a significant increase in the recovery rate of patients and could lead to savings for healthcare authorities.

Cape Town has one of the world's highest incidences of TB, largely due to socio-economic and climatic factors. TB patients must strictly follow a difficult drug regime - four tablets five times a week for six months - and they often forget to take their medication. Non-compliance with the drug treatment has exacerbated the high occurrence of TB and has created difficulties for the local, overburdened healthcare service. Precious medicines are wasted when people do not take their medication on schedule, and non-compliance causes the TB virus to become increasingly drug resistant.

Evidence suggests that TB patients often do not take their medication simply because they forget. So, Dr. Green uses SMS (Short Messaging Service) - text message service that enables short messages of up to 160 characters to be transmitted between cell phones - to alert patients to take their medication.

Healthcare professionals were sceptical whether the uptake of cell phone technology was high enough to justify the project. However, Dr. Green found that over 50% of people in the Cape Peninsula had access to cell phones. At the clinic where the pilot study was conducted, 71% of TB patients had access to a cell phone.

Dr. Green enters the names of TB patients onto a database. Every half an hour his computer server reads the database and sends personalised messages to the patients, reminding them to take their medication. The technology that he uses to send out the messages is extremely low-cost and robust: an open source software operating system,

web server, mail transport agent, applications, and a database. Currently Dr. Green charges the City of Cape Town R11.80 per patient per month to send out SMS messages.

Initially the SMS message sent to patients read: "Take your Rifafour now." When patients complained about the boring message, Dr. Green sent them a variety of alerts, including jokes and lifestyle tips with the result that he now has as database of over 800 messages that he changes on a daily basis. Of the 138 patients involved in the pilot, there was only one treatment failure.

The World Health Organisation has cited the project as an example of "international best practice". The City Council of Cape Town has decided to extend the pilot project to other clinics where the cell phone ownership of patients is high, while the South African Government is considering the technology for nationwide use. The system is also being investigated for use with HIV treatment.

The initiative not only uses technology to address a real need effectively, but it does this in a simple, affordable and flexible way.

3. The Judicial Inspectorate of Prisons' online reporting system

South Africa's Judicial Inspectorate of Prisons (JIP), a watchdog body overseeing treatment of prisoners and prison conditions, uses an online system for reporting on prison issues and communicating with independent prison visitors and prison managers. This project was implemented by JIP and the South African Department of Correctional Services and receives funding from the South African Government, and recently by the European Union. This project was established in 1998.

South Africa's prisons are overcrowded. Prisoners have to cope with restricted living space, poor sanitation, the spread of disease, unsatisfactory food, and inadequate healthcare, all of which breeds tension and violence and can lead to human rights

violations. In 1998 the South African Government established a Judicial Inspectorate of Prisons (JIP) to inspect and report on the treatment of prisoners and conditions in prisons. Independent Prison Visitors were appointed countrywide to visit prisons, interview prisoners, and file monthly reports to JIP. As part of prison oversight, it has also become compulsory for prison managers to report all deaths in prisons to JIP and to seek permission from the office before putting prisoners in mechanical constraints, segregating them, or putting them in solitary confinement. These mechanisms are intended to safeguard against mistreatment of prisoners, but instead they often lead to a backlog of red tape. Moreover, the management of independent prison visitors who are dispersed across the country has sometimes resulted in bureaucratic processes for JIP. For example, these prison visitors are paid according to billable hours approved for various job functions, which requires a complex accounting process.

While the JIP reporting requirements help to ensure that agreed prison standards are upheld, JIP has been flooded by reports from independent prison visitors and requests from prisons, which threatened to paralyse the JIP efforts. In addition, the bookkeeping needed for time-tracking and monthly payment of independent prison visitors was an administrative burden for JIP.

In response to this, JIP developed a password protected, online system that enables the JIP office, its dispersed prison visitors, and prison managers to remotely upload information onto a central database and exchange messages with each other. Instead of faxing through paper reports, independent prison visitors submit an electronic version of prisoner complaints and other reports directly into the system using the Internet. An online "Wizard" guides the independent prison visitors through a step-by-step process and allows them to check the entries. This method has not only speeded up reporting, but also improved the comprehensiveness and accuracy of reports. An electronic bulletin board allows two-way messaging between JIP's office and the independent prison visitors. And now the independent prison visitors simply fill in an electronic timesheet that automatically calculates their billable hours. The message system is set up so that independent prison visitors can only bill JIP for their time once they have opened their

electronic messages, thereby forcing them to read important messages from JIP, and also creating a communication audit system that prevents people from falsely claiming they have not received messages. The system also keeps a permanent record of all transactions. The system has a myriad of other functions, including a Short Messaging Service (SMS) utility and an online link to the Department of Correction Service's database, which enables JIP to access the complete history of a prisoner.

In shaping its approach, the South African Government researched the structure of Britain's Inspectorate of Prisons; however, the British did not have an electronic system and JIP had to follow commercial best practice in setting up their online system. The British Commissioner of Corrective Services has recently visited JIP to see how this system operates.

It does not cost much to operate the system. In fact, the system has dramatically cut the human resource needs of JIP. The European Union has been so impressed by JIP's system that they have agreed to provide funding for the continuous training of independent prison visitors. At the moment independent prison visitors have to negotiate their own Internet access. However, if JIP requires them to do more extensive data capturing using the online system, they will have to help independent prison visitors get easier and cheaper online access.

According to Gideon Morris, the director of the Judicial Inspectorate of Prisons, the electronic system produced two remarkable successes. The first and most important was the empowerment of people. The Independent Prison Visitors are all appointed from the ranks of Non Governmental Organisations (NGO's) many of them from rural communities with no computer literacy. During the planning phase of the project many people felt that the project will fail because of lack of skills however, with its implementation the hunger of people to learn and the effectiveness of the system motivated people to acquire the skills needed. The training and new skills lifted the motivation levels of all staff and a strong partnership between the JIP and the independent prison visitors was established. The second success was the savings in staff

cost and increased efficiency. Administrative time it takes to calculate billed hours and pay the independent prison visitors has been reduced from 20 days to less than 5 days. (Bridges, n.d.)

Discussion

Having noted the limitations of the use of technology in development as well as its potential, there is a need to mention that Social Marketing is an ideal vehicle in the push for innovation and exploration of the role of technology, specifically ICTs, in development in South Africa.

A central characteristic of Social Marketing is the idea of audience segmentation. This tailors the methodology and media vehicles according to a well-researched target market. Just as a business would not use media unobtainable to its market, so should development practitioners not use media that their audience cannot reach. Social Marketing allows for a sensitised marketing mix that speaks to a segmented audience.

Action Kits

Introduction

The evolution of Information and Communication Technologies provides scope for innovation in the use of these ICTs in development interventions. One such exploration is that of the creation of “action kits” in this project. These action kits are actual tangible boxed kits that contain “action triggers”. These triggers are any item that results in an action being taken by the participant. These triggers are both low-tech (disposable breathalysers) and hi-tech (CD-ROMs). Despite a search of the literature and dialogue with practitioners in the field, the use of such kits in development communication has not been found. While it would be nice to imagine the concept is a new one, this is most likely due to the fact that Social Marketing reports are not always academically published as the projects are often conducted by Social Marketing consultants in a private capacity.

The Information Pack

This said, the action kit can be viewed as a hi-tech extension of a concept that is oft used in information dissemination - the information pack. The information pack contains relevant information for the participants of a study/intervention/project that help them increase their knowledge about the matter. A typical example of this approach will be given for clarity. The use of such packs is both commercial and non-commercial.

An Example of the typical use of ‘information packs’ - A Tobacco Action Pack by *Quit*[™]

Quit[™] (Quit, n.d.) has developed a variety of fact sheets that are appropriate for primary and secondary students at Australian schools. These fact sheets are collectively entitled the *Tobacco Action Pack* (TAP). The Tobacco Action Pack is designed for students and includes the latest information from Australian and international studies presented in an

easy-to-read format. Ten fact sheets make up TAP, with each fact sheet addressing a separate issue. Together, the units provide a comprehensive resource on tobacco.

TAP helps students research smoking and includes additional activities for students to explore. TAP encourages students to think about the wider impact of tobacco in Australian society. Each pack has ten topics that it explores with the participants. See Appendix B for a detailed list of the information supplied by these packs. Despite being called “action packs”, these packs are exclusively educational with the exception of an activity component which requires no interaction between the producers of the packs and the consumers.

Discussion

As road safety action kits with embedded tangible and virtual resources and with an interactive component are not found in the literature, this allows projects such as this one to make a meaningful contribution to new methods of communicating in development by exploring such options.

This said, it should be noted that kits similar in design to the action kits as described here are already in use in the commercial field with large corporations employing very similar strategies for very different reasons. This gap between the commercial marketing field and Social Marketing leaves a lot to be desired. In summary, the project is by necessity exploratory and hopes to promote interest in the use of such action kits - if appropriate in development, particularly in the field of road safety.

Strategic Framework

Introduction

Having described Social Marketing as a framework for communication and social change, it is necessary to identify a strategic framework within which the research project can be placed. To this end, two of the dominant models for designing a Social Marketing intervention will be presented. Both of these models stem from the work of Philip Kotler and are widely used in Social Marketing projects internationally. These models serve as guiding design templates for any Social Marketing intervention. Both models provide a step-by-step breakdown of the process of Social Marketing. Each of these steps or elements will be discussed and related to the research project.

Towards Best Practise: 11 Key Elements in Social Marketing

When one becomes involved in the practice of Social Marketing, it is important to be aware of what 'makes or breaks' a campaign. It is helpful to recognise the best practice of Social Marketing. To this end, Kotler et al (2002, 51) synthesises the key elements of a successful campaign and presents them in a classic 11 step model.

1. Take advantage of what is known and has been done before.

A successful campaign involves a review of past campaigns in order to learn from both their successes and mistakes. This cuts both time and cost and ensures continual refinement of the Social Marketing process.

No Social Marketing campaigns dealing with road safety could be found in South Africa. A review of literature and discussions with experts around the globe pointed the researcher towards many Social Marketing attempts in road safety dealing with many

issues among many different populations. Drinking, speeding, seat belt use and law awareness were common issues covered by Social Marketing campaigns in road safety. However, as described in the objectives of this report, this research sought specifically to evaluate the use of Information and Communication Technologies in development. None of these projects used incorporated such technologies to any significant degree. Thus the use of “Action Kits” is an original concept in development communication although similar efforts can be found in the commercial marketing field. This led to the project being designed from scratch and in consultation with interested Social Marketing practitioners. Feedback on the intended structure was given at development conferences, such as the 2004 4th International Entertainment-Education Conference in Cape Town, South Africa and Transport Symposia, such as the Eastern Centre of Transport Development Symposium 2004. Consultation also occurred through an electronic Social Marketing Listserve based at Georgetown University and run by Social Marketing theorists and practitioners around the world.

2. Start with the target markets that are most ready for action.

These target markets will ideally have been ‘primed’ and have a want or need which the new behaviour can satisfy. They would have had exposure to information about the benefits of the behaviour. They believe that the behaviour will benefit them and that they can perform this behaviour. They may even be engaged in this behaviour though not on a regular basis. The dominant model of the stages in the progression from belief to behaviour is one provided by Andreassen (1995):

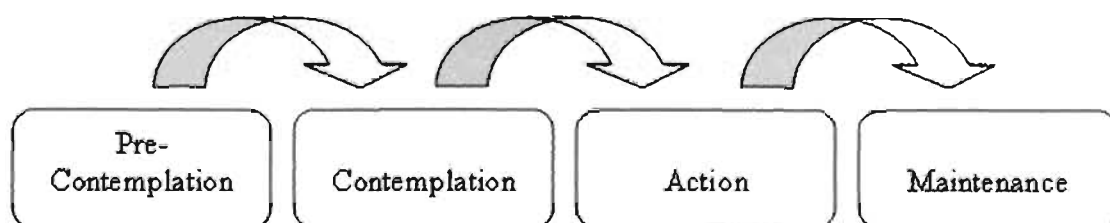


Figure 17: Stages in Behaviour Change.

Adapted from: Andreassen (1995)

The Social Marketer needs to be aware of where in this process the target market is, in order to tailor the programme accordingly.

This step influenced the choice of learner drivers as a target market. These drivers are actively engaged in seeking out information about driving and the driver's test and certainly in a stage of contemplation around driving issues. Also they are largely behavioural "blank slates" with no competing behaviours to fight against regarding driving behaviour as their meagre driving experienced is formalised and supervised. They access the project as they see it as useful in their desire to pass their drivers test and become drivers (the "Test" section of the Action Kits). This creates a useful win-win perception resulting in increased buy-in of the project.

3. Promote doable behaviour, explained in simple, clear terms

The development of a clear, action-oriented message is more likely to result in the adoption, rejection, modification or abandonment of a specific behaviour.

This step guided the development of the action kits in terms of what the kits require of the respondents. Although multiple stimuli are embedded in the kits, both tangible and visual, these stimuli are present in a clear and unambiguous fashion. The use of the stimuli requires little skill and this skill level is a deciding criterion for participant selection - this selection is discussed elsewhere.

4. Try to incorporate a tangible product or service to support the behaviour.

According to Wiebe, "the more a campaign resembles a commercial product campaign, the more successful it is likely to be" (1951, 581). Apart from this, a physical product provides more opportunities for branding and can lead to corporate sponsorship (Kotler et al, 2002; Andreasen, 1995).

The action kits are tangible products that promote real participation and interaction. The contents are viewed as “fun” and the package is branded under the name “PassRight”. This brand is a play on the common South African road law “keep left, pass right” and the idea that the respondents can “Pass [their driver’s test] Right”. Although efforts were made to incorporate the local Department of Transport communication materials into the Kits, there were (ironically) communication problems which led to this idea being abandoned.

5. Understand and address perceived benefits and costs.

What is emphasised here is not an understanding of costs in the economic sense but rather a focus on behavioural costs. This entails designing the campaign to better increase perceived or actual benefits of the desired behaviour while at the same time decreasing the perceived benefits of competing, alternate behaviours.

The kits address several specific road safety issues - drinking and driving, pedestrians and speeding as well as a general road safety ethos. These issues are linked to behaviour e.g. alternatives to drinking and driving.

6. Make access easy.

This element recognises that if access is improved through various techniques, then the behaviour is more likely to be adopted. These techniques for increasing accessibility include providing easy ways to sign up, providing convenient locations to perform the behaviour, and ensuring reasonable hours during which the target market can perform the behaviour.

The enrolment of participants for this project was convenient. The driving school participants were introduced to the project through their instructors and the University participants were recruited through an online call for participation. This was via an email message and listed the criteria and benefits of participation.

The enrolled study participants had easy access to the material as it was presented in an action kit with all the contents easily accessed and understood (computer literacy was a requirement). The second experimental group (literature only) also had everything for the project in one pack.

7. Develop attention-getting and motivational messages

Social researchers have found that a major success factor in the use of mass communications to change public attitudes and behaviour is the use of messages that are attention-getting, memorable and motivational (Kotler et al, 2002; Kotler and Roberto, 1989)

The messages and tone of the action kits was pitched at a friendly and fun level. This is in line with the marketing strategies aimed at this demographic. The CD-ROM and related literature was not too technically grounded but rather aimed to make accessible sometimes complex issues (such as Blood-Alcohol content). The messages, combined with the identified action triggers, were seen as fun by the respondents - see “findings” for data on this.

8. Use appropriate media and exploit opportunities.

To be as efficacious as possible, a campaign should use media vehicles and formats which successfully reach the target market as well as spokespersons to whom adopters will respond. A credible spokesperson allows the campaign to impact forcefully on the target market. Be ever vigilant and identify opportunities to increase exposure to the campaign.

At this level a spokesperson would have been too-much too-soon for a project of this size. However the use of “personal” media such as CD-ROMs allowed the participants to engage with the project on their own terms and for as long a time or short a time as they

wished. This mirrors a shift in the commercial marketing arena towards new and innovative ways to engage with markets using technology.

9. Allocate appropriate resources for media and outreach.

Here importance is attached to the concepts of media reach and media frequency. The former refers to the number of people in the target audience that are exposed to the message and the latter refers to the number of times the audience was exposed to the message. For a Social Marketing campaign to be successful, both of these must be adequately dealt with. This involves ensuring that the budget of the campaign is able to cover the media costs which are often substantial.

The nature of the “personal” media used changes the face of this step. Using traditional media, such as Television or Radio, the Social Marketer is able to reach the audience only at the time of airing and the reach is determined through educated guesses as to the ideal time to air the advertisements. “Personal” media on the other hand penetrates into the world of the participant allowing him/her to make decisions as to the use of the media itself. Thus media reach is more controlled but media frequency is rendered difficult to measure.

In terms of monetary resources, this project was funded through the kind assistance of the Eastern Centre of Transport Development, a subsidiary of the South African National Department of Transport.

10. Allocate adequate resources for research.

As well as ensuring enough money is available to cover media costs, a successful Social Marketing campaign should also have enough resources to carry out market research which is essential to guide the campaign towards meeting the resultant identified needs of the audience.

Similarly, the resources needed to cover the initial formative research were made available through the kind assistance of the Eastern Centre of Transport Development.

11. Track results and make adjustments

Continual evaluation of a campaign as it evolves is important in order to create a situation whereby continual refinement of a campaign can take place according to new information being received on its efficacy.

Due to the relatively short duration of this project, continual refinement was not made an integral part of the research process. There was a feedback mechanism in the kits in the form of a contact e-mail address and cellular number. These were not utilised by participants. The lessons learnt through this project would serve to inform future projects using similar ideals.

The above elements of a successful campaign provide a best-case scenario of the Social Marketing process. The reality of Social Marketing though often makes it difficult or impossible to maintain such lofty ideals and often sees few of the elements carried out. This gap between theory and practice is a shortcoming of any social change model and a determined effort needs to be made when carrying out a social change intervention not to sacrifice too much on the altar of budgets and bureaucracy.

A Second Framework: Designing a Campaign

Alongside a discussion of the key elements of a Social Marketing campaign is included a planning process. The planning process of a Social Marketing campaign has been outlined in an eight-step framework by Kotler (2002). Although there are other frameworks (see Andreasen, 1995 or Fine, 1981), they are all variations around a theme and Kotler's framework is dominant in the literature.

Each step in this framework will be sketched out to illustrate how a campaign is designed. Although the steps will only be briefly dealt with, this is not to suggest they are not complex processes involving much work and planning. For details and practical examples on each of the following steps see Kotler (1989), Kotler (1991) & Kotler (2002).

Step one: Analyse the Social Marketing Environment

In this step the Social Marketer is involved in determining the programme focus, identifying the campaign purpose, involved in a SWOT (Strength, Weaknesses, Opportunities, Threats) analysis and reviewing the past literature and programmes that have been used. Information is compiled to determine target markets, objectives, goals and strategies of previous endeavours.

As discussed in the first step of the preceding model, no Social Marketing interventions in roads safety in South Africa were uncovered through the literature review. However, similar campaigns globally were identified and elements from these borrowed to help create this project. The identification of the target market was driven by convenience as they lend themselves to the technological criteria of this project - see "sampling". As a primary objective of this project was to explore the role of ICTs in development, this forced a selective target market identification - this is not common in Social Marketing but unavoidable for the purposes of this project.

Step two: Select Target Audiences

In this step the market is segmented and one or more target markets are selected to focus the campaign around.

Again similar to the matching step above, this has been covered in some detail in the preceding model (see "2" above).

Step Three: Set Objectives and Goals

Here the Social Marketers identify what it is that they want the target markets to do - i.e. what behaviour modification is required. What the target market needs to know in order to carry out these beliefs is also set out and quantifiable goals are set relative to the stated objective.

This setting of objectives is crucial to the tenet of measurable behavioural outcomes in Social Marketing. For the purposes of this project, the behavioural outcomes desired were around the ability to score high in a “test” around issues of road safety. Added to this is a measurement of the interaction with, and understanding of, the behavioural triggers embedded in the action kits. Also the use and resultant behaviour change of the sub-contents of the kits (stress pack, CD-ROM etc). The information and material needed to reach these outcomes informed the creation of the action kits used in the project.

Step four: Understand the Target Audiences and the Competition

This step is important as it explores current knowledge, beliefs and behaviours of target audiences relative to the goals set in the previous step. Competing behaviours, perceived benefits, and barriers to action are also identified and understood.

This step required the researcher to conduct formative research to tap the knowledge of the target market. This formative research went a long way towards informing the creation of the kits regarding materials, content etc. This research was quantitative and qualitative in nature (see “methodology” for a more detailed outline of this).

Step five: Determine Strategies - the 4P's

At this stage in the process, emphasis is put on how the identified desired outcomes will be met. The “marketing mix” (Kotler et al, 2002, 39), involving interaction between Price, Product, Promotion and Place, is created. These strategies will be integrated to best

appeal to the identified target markets based on their characteristics and the competition that exists.

This step involved identifying the four Ps of Social Marketing and relating them to the project at hand. Each of these will be briefly discussed:

Product: What is it that the project is selling? Here the project is attempting to sell or market road safety. This selling involves the use of a tangible and branded kit. Thus the intangible product is sold through the interaction with a tangible kit.

Price: What is the price that the participants pay in adopting the required behaviour? Here the choice of participants plays a large role. Being learner drivers, the participants have few or no competing behaviours. Thus the 'price' of the behaviours being promoted is little or none.

Place: Where is the interaction happening? How accessible is the product? The project aims at making the kits readily accessible to the target audience. As discussed earlier, once the kits have been received the use of these is made easy due to the nature of the included materials.

Promotion: How was the behaviour promoted? This deals with both the promotion of the project itself and the promotion of the identified behaviours. The former was covered through accessing the relevant market through their driving schools and the University of KwaZulu Natal, Pietermaritzburg; while the latter was covered through making available materials that linked with the behaviour change required for example the inclusion of breathalysers to promote awareness of the role of BAL (Blood Alcohol Limit) and drunk driving.

Step six: Develop an Evaluation and Monitoring Strategy

Here the evaluation and monitoring of the programme is designed so as to create a feedback system which will accurately allow the Social Marketer to adjust the campaign according to prevailing contexts and reactions from the market.

As explained above, a feedback mechanism was included with the kits but was not utilised.

Step seven: Establish Budgets and Find Sources of Funding

On the basis of draft product benefits and features, price incentives, distribution channels, and proposed promotions, the requirement for funding will be summarised and funding sought from available and potential funding sources. An unexpectedly high price tag on a campaign may lead to it being revised along the lines of strategies, target audiences and goals. If it is still prohibitive, it may be abandoned altogether or additional funding and strategic alliances may be sought.

Fortunately this project was funded through the Eastern Centre of Transport Development. The capital intensive nature of these kits required considerable outlay. However, with a larger more visible project, this would be resolved through the creation of strategic partnerships with organisations. Branding and product promotion (if ethical) will be ‘traded’ for financial support. This is the norm in Social Marketing.

Step eight: Complete an Implementation Plan

The final step in the planning process is achieved when all of the above information is gathered into an implementation plan which comprehensively details the campaign in all its facets and provides information on “who will do what, when, and for how much” (Kotler et al, 2002:43).

Once the planning process is complete and all aspects of the Social Marketing campaign are thoroughly planned, the Social Marketer can proceed with the implementation of the programme. Care should be taken not to neglect any of the steps in the process as this could lead to sloppy implementation which can nullify the efforts of the Social Marketing team.

Developing the Action Kits

Formative Research

As discussed earlier, Social Marketing is inherently consumer-centric. This means that the Social Marketing intervention is designed around the target audiences needs and abilities. To access these needs and abilities, research needs to be conducted prior to designing the project. The target market was identified as Learner Drivers under the age of 25 in the Pietermaritzburg area with access to computers and owning a cellphone. The latter two criteria were chosen as the method of interaction was chosen prior to market research due to the nature of the research i.e. interested particularly in the role of ICTs in development. Although this is counter-intuitive to the notion that all methodology is based on consumer traits in Social Marketing, examining the role of ICTs in development communication was considered important enough to waive this criterion.

Before designing the action kits, research needed to be conducted to link the contents of the kits with the needs of the target audience. Both Quantitative and Qualitative methods were used to this end. Each will be discussed.

Quantitative

Sampling

As stated above the study target market was identified to be Learner Drivers under the age of 25 in the Pietermaritzburg area with access to computers and owning a cellphone. However, as access was needed to experiences of the test itself to make the data meaningful to those about to undertake the test, the formative research population was persons under the age of 25 in the Pietermaritzburg area with access to computers and owning a cellphone that have already undertaken at least one attempt at the Drivers

Licence Test at the Mkondeni testing grounds.. This was the formative study population. No exhaustive sampling frame exists for this population. This is primarily because it is an extremely fluid population. Also the addition of the technology access criteria destroyed any meaningful consideration of probability sampling. Probability sampling is ideal as it allows more confident analyses and generalisations around the sample as regards its representation of the study population as a whole. However, probability sampling, by definition, requires that all sampling units have an equal and independent chance of selection (Kumar, 1999). Without a reliable and exhaustive sampling frame, this is impossible. Thus it was decided that non-probability sampling would be used. This was in the form of quota sampling. Quota sampling entails merely sampling those persons that are accessible to the researcher (Ibid). This also means that a characteristic can be sampled for - i.e. the technology access criteria. The sample was drawn from both university students and non-students that met these criteria.

Administration of data collection instruments.

The researcher utilised two methods of data collection. The tool was a questionnaire (See Appendix C). For the non-students, data was collected by administering questionnaires at the local Testing Centre at Mkondeni, Pietermaritzburg. This was a time consuming process that involved approaching anyone that had just completed their driving test. Many people were unwilling to participate as they had just been through a stressful event and wished to leave the grounds - regardless of whether they passed or failed.

For the students, data was collected through the use of electronic questionnaires. These questionnaires were posted online on the local University server. An email inviting students that meet the criteria was sent as well as advertisements posted in and around the LANs (Local Access Networks) at the Pietermaritzburg campus of the University of KwaZulu-Natal. Incentives for participation were provided through the entry of all names into a lucky draw and the drawn winner received a Liberty Midlands Mall voucher valued

at R100-00. Once drawn, the participants' details were removed from the questionnaires, rendering them anonymous.

A Note on Use of Data

Initially the questionnaire also endeavoured to tap into the test process itself. This was done as the kits were being designed to help the learner pass the Driver's Test. This would be the 'hook' that encouraged participation. However, after consultation with role-players, especially driving instructors, this was abandoned. It was felt that such intervention might conflict with the different methods that driving schools use. This would serve to create conflicting advice and the resultant uncertainty might actually harm the respondents' chances of passing the test. Thus the questions in the questionnaire that deal with such issues (i.e. vehicle pre-inspection to blind spots/mirrors) were not used in the creation of the action kits.

Qualitative

In order to provide a richer exploration of the issues learner drivers face while preparing for, and participating in, their Driver's Test, qualitative data collection was also undertaken. It was decided that other relevant role players in the Driver's Test process should be included. This allows a fully picture to be developed as these role players are 'experts' on regard to the Driver's Test. This qualitative data collection took on two forms:

- An interview with a traffic official that administers the Driver's Test.
- A group interview with driving instructors from a local driving school.

Interview with a Traffic Official - Inspector Naidoo

This interview was conducted at the Mkondeni Testing Grounds in Pietermaritzburg, KwaZulu-Natal on the 7th September 2004. See Appendix D for an interview schedule of this interview. As can be seen in this interview schedule, topics related to the Driver's Test were explored, some of them resulting from the (at that time) ongoing quantitative analyses. Emerging topics resulting from the discussion were also developed. The interview was tape recorded. Due to the specific nature of the questions, the transcribed data was not amenable to content analysis or thematic breakdown. The answers obtained from this interview helped shape the action kit development.

Group Interview with Driving Instructors

The driving school as an institution is very influential in shaping the learner driver. The quality of the instruction received impacts on the chances of a learner drivers passing the Driver's Test. As such, a group interview was carried out with a group of driving instructors attending their weekly meeting. See Appendix E for an interview schedule for this group interview. Seven driving instructors attended the meeting although two of these instructors choose not to take part in the interview due to time constraints. All respondents were female. As role players in the Driver's Test process, it was felt that the driving instructors may be able to give voice to their interpretation of the Driver's Test experiences of learner drivers. The group interview was not tape-recorded as such recording is often impossible to transcribe due to simultaneous speech which cannot be separately discerned. The interview was recorded through the use of note taking. The interview lasted approximately 30 minutes. Again, the results of this interview were influential in the creation of the action kits.

Findings

Formative Research - Quantitative

Introduction

The findings from the 52 respondents of the formative questionnaire are outlined below. There were 13 respondents from the Mkondeni testing ground and 39 student respondents from the online questionnaires.

Univariate Analyses:

Demographics

Age

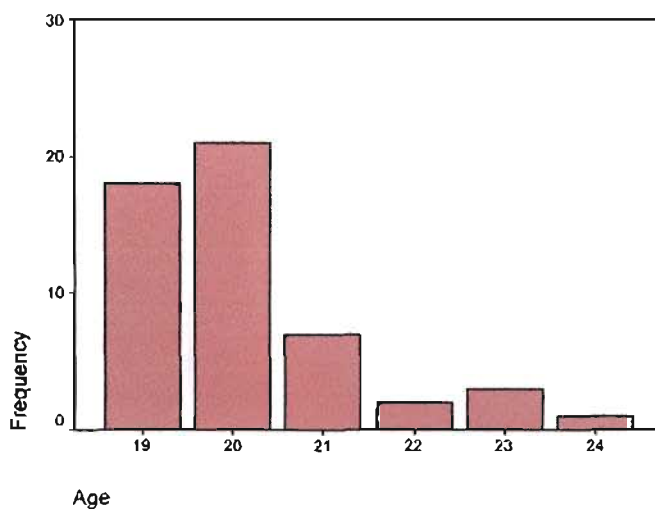


Table 1: Age of Respondents (N=52)

The age of the respondents fell in line with the identified age criteria of “below 25 years of age”. As can be seen from Table 1, the majority of the respondents were aged 19 and 20. This is congruent with national data. Due to the restrictions imposed by the entrance criteria, age is not considered an independent variable as the range is too limited. This also usefully allows the data to be controlled. The usefulness of the age variable is simply

that to ascertain the respondents met the identified criteria. Restricting the age of respondents serves to both identify individuals that have little driving experience and to allow the kits to speak to a more homogenous audience.

Gender

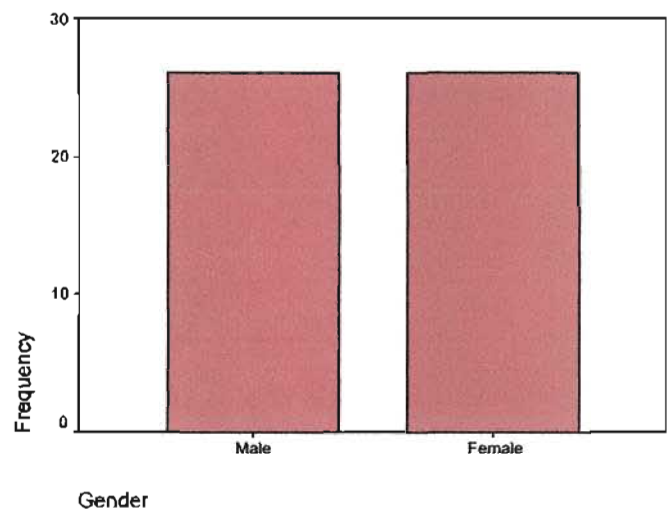


Table 2: Gender of Respondents (N=52)

Interestingly, although the sample was not stratified for gender, the gender breakdown was exactly even with 50% (26) being male and 50% (26) being female. This variable was included to measure the impact of gender on the dependent variables. These relationships will be discussed later.

Race

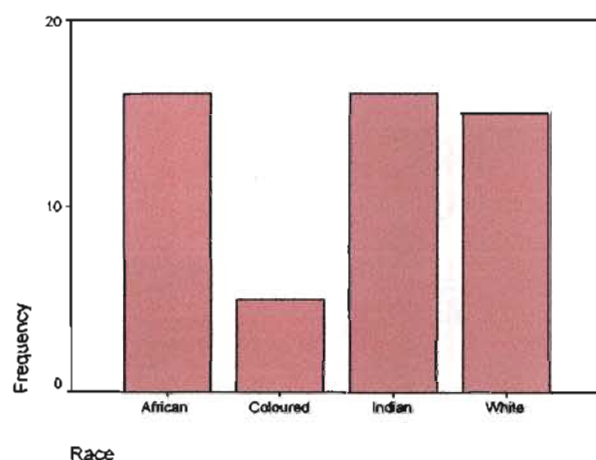


Table 3: Race of Respondents (N=52)

As witnessed by Table 3 above, there was a relatively uniform spread of racial groups across the sample. This is with the exception of the “coloured” population group of which there were 5 respondents. Similarly to the gender variable, race was measured in order to control for any impacts it may have on the data. These impacts will be discussed later.

Preparation for, results in, and experiences of, the Drivers Test

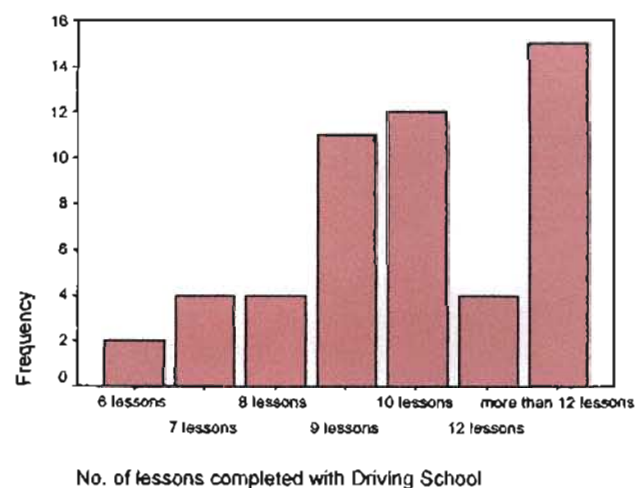


Table 4: Number of Lessons completed before attempting Driver's Test (N=52)

Table 4 shows the number of driving school lessons undertaken by the respondents prior to attempting the Driver’s Test. This Table shows that all the respondents had at least 6 lessons prior to attempting their Driver’s Test. More than 80% of respondents had nine or more lessons and a full 28% reported having in excess of 12 lessons.

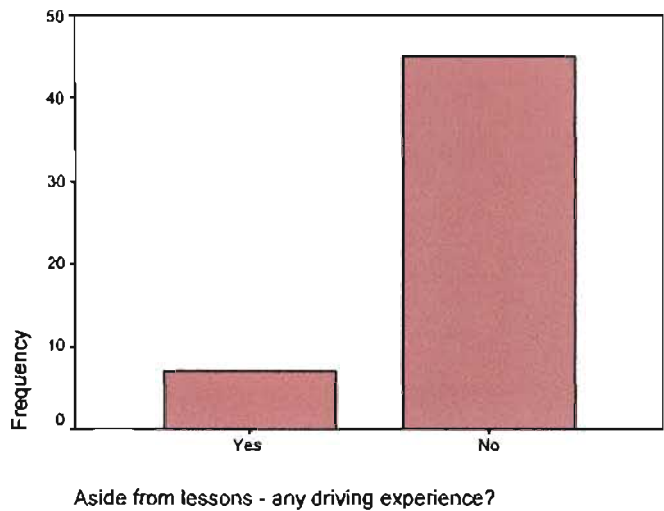


Table 5: Other driving experience of respondents. (N=52)

Aside from lessons with a driving school, 13.5% of the respondents reported that they had other driving experience. When asked to elaborate this translated exclusively into private practice sessions with friends, relatives or boyfriends/girlfriends. The remaining 86.5% of respondents reported only practicing with driving schools.

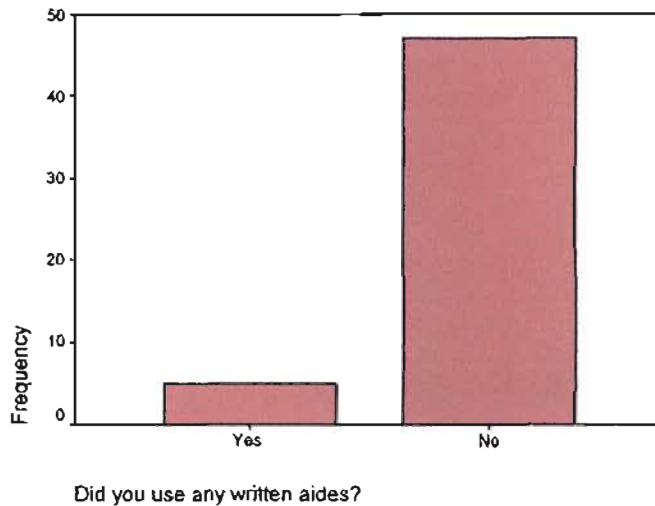


Table 6: Use of written aides (N=52)

Table 6 indicates the number of respondents that reported making use of written aides to help prepare for the Driver's Test. Only 5 respondents (9.6%) of the total reported using written aides.

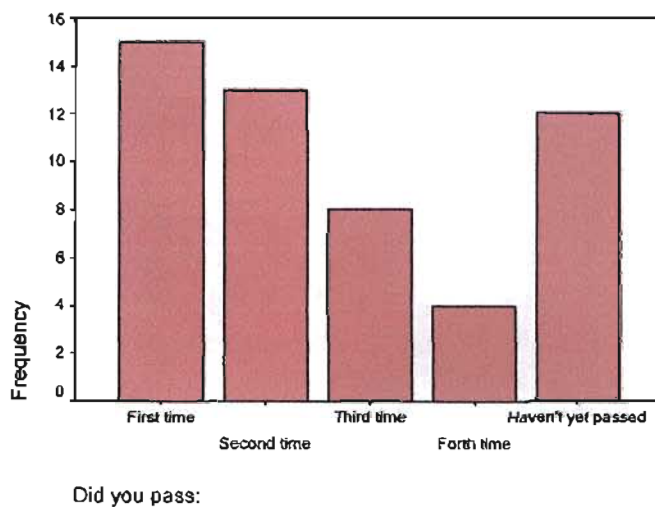


Table 7: Attempts needed to pass Driver's Test (N=52)

Table 7 provides information regarding the results of attempts at passing the Driver's Test. 28.8% of respondents reported passing the Driver's Test first time. This means that 71.2% needed more than one attempt to pass.

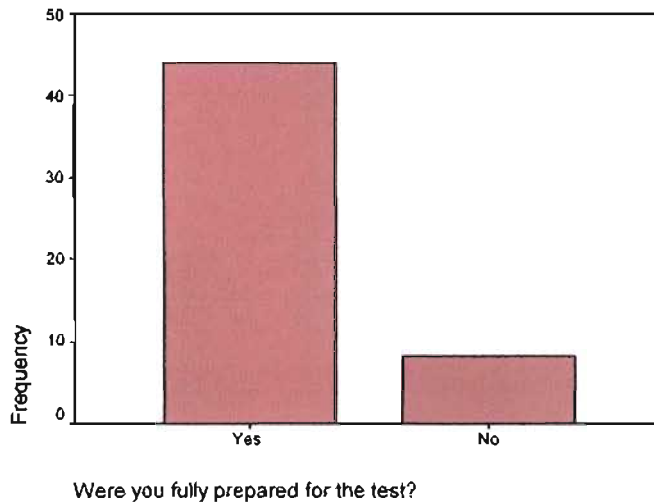


Table 8: Preparation for the Driver's Test (N=52)

When asked whether they felt that they were prepared for the Driver's Test, 84.6% indicated that they were fully prepared while 15.4% indicated that they were under prepared for the test.

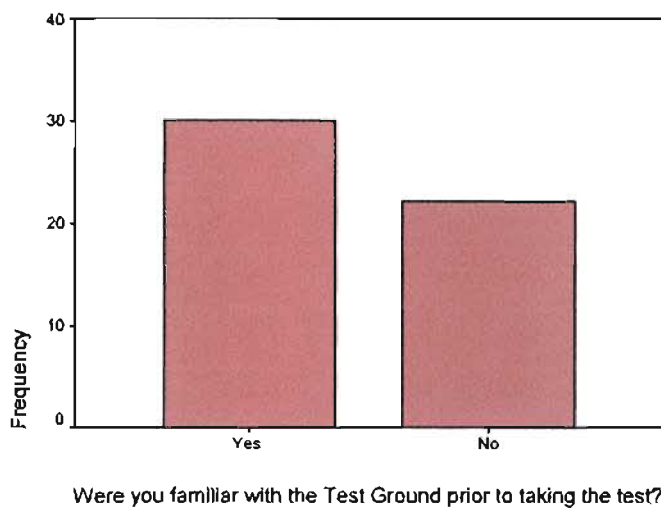


Table 9: Familiarity with the testing ground (N=52)

When asked about their familiarity with the testing ground, 57.7% of respondents indicated that they were familiar with the testing ground prior to taking the Driver's Test.

42.3% of the respondents indicated that they were not familiar with the testing ground prior to taking the Driver's Test.

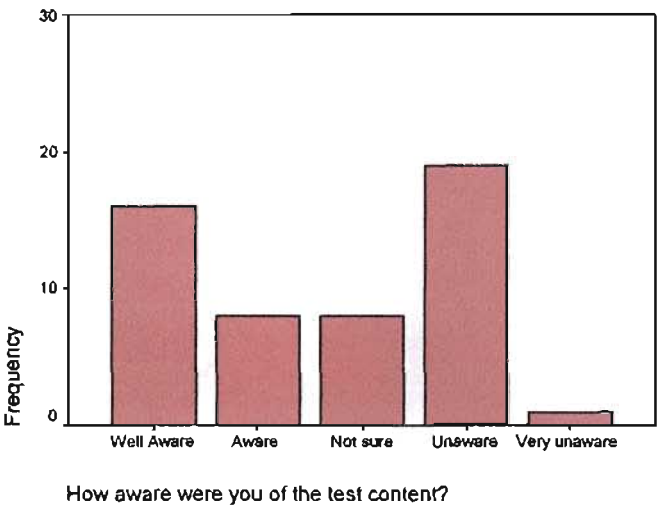


Table 10: Awareness of the content of the Driver's Test (N=52)

Table 10 shows the reported awareness of the respondents regarding the content of the Driver's Test. A cumulative percentage of 46.2% of the respondents indicated that they were either well aware or aware of the test content prior to taking the Driver's Test. This means that over half (53.8%) of the respondents were not aware of the content or unsure.

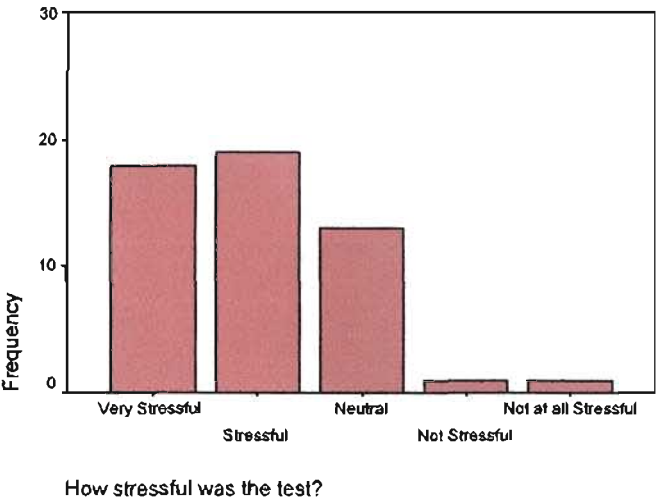


Table 11: Reported Stress levels during the Driver's Test (N=52)

Table 11 shows the reported stress levels of the respondents when taking the Driver's Test. Fully 71.2% of the respondents found the test either Very Stressful or Stressful. Discarding neutral answers, this means that only 2 respondents found the test to be Not Stressful or Not at all Stressful.

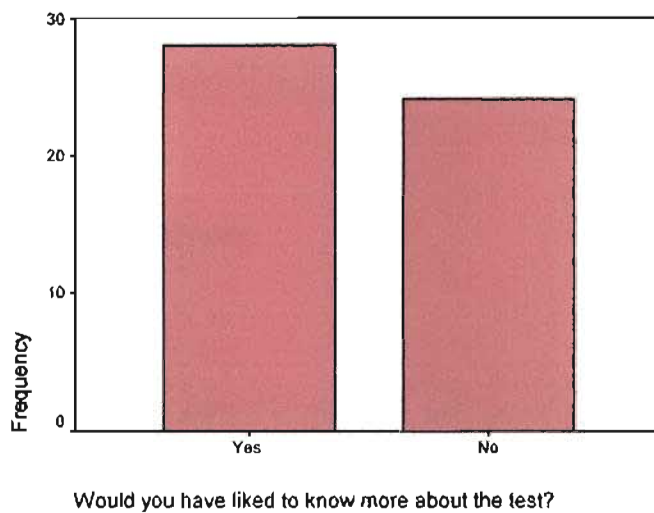


Table 12: Indication of required knowledge about the Driver's Test (N=52)

Table 12 shows the indication of respondents around lack of knowledge around the Driver's Test. As shown, 53.8% of respondents reported that they would have liked to know more about the Driver's Test while the balance of 46.2% of respondents felt they did not need to know more about the Driver's Test.

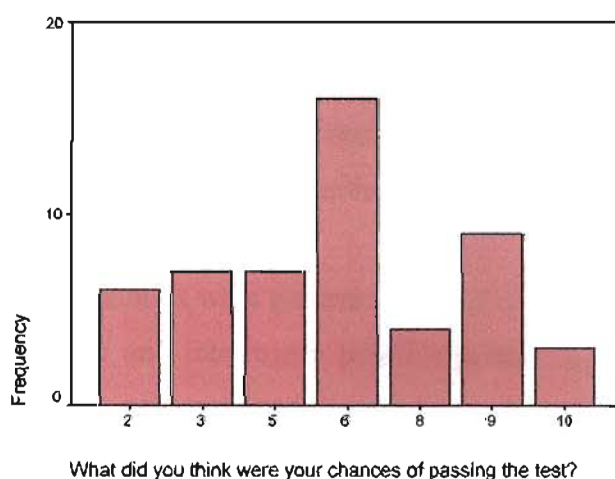


Table 13: Reported, scaled chance of passing the Driver's Test (N=52)

Respondents were asked to rate their chances of passing the Driver's Test on a scale of 1-10 - one being very unlikely and ten being very likely. Table 13 shows the results. As is apparent, a large proportion of the respondents (75%) rated their chances of passing as 5 or more while the remaining 25% were more sceptical and rated their chances as 4 or less. In terms of central tendency, a score of 6 was the mean, median and mode of the data with 30.8% of respondents locating their chances of success here.

Bivariate Analyses:

Introduction

The above data serves to provide univariate descriptions of the data received from the questionnaires. While this is useful in describing the data, it is the patterned interaction of these variables that is interesting in terms of the impact on the creation of the test kits. The pertinent findings of such relational occurrences will be presented here along with their interpretation and action taken in the formation of the kits which is ultimately the end result of such formative research.

Controlling Variables

As mentioned above, variables were included to serve as controls in the analysis of the data. Cross-tabulations were generated to measure the control variables Race and Gender against other dependent variables (such as Pass rate, stress etc.). These analyses showed no significant variation related to the control variables gender and age of respondents. Thus it is possible to rule out these variables as potential "noise" in the data.

Cross-tabulations were generated to explore the relationships between the other variables to evaluate and interrogate possible relationships between the variables. These cross-tabulations were converted to stacked bar charts in order for the data to be graphically accessible. Certain generated graphs were found to be relevant to the function of the formative research – to inform the creation of the action kits. The variables that measured

the Driver's Test pass results and the variable measuring the levels of stress were taken as dependent variables and various potential independent variables were cross-tabulated with these to identify any meaningful relationships.

Stress and the Driver's Test.

The identification of stress as a major factor in the Driver's Test process, with 71.2% of respondents indicating that the Driver's Test was very stressful or stressful, warranted further investigation.

To this end variables that may have bearing on the stress levels of respondents were cross-tabulated with the variable measuring stress. Some of the results are depicted and discussed below.

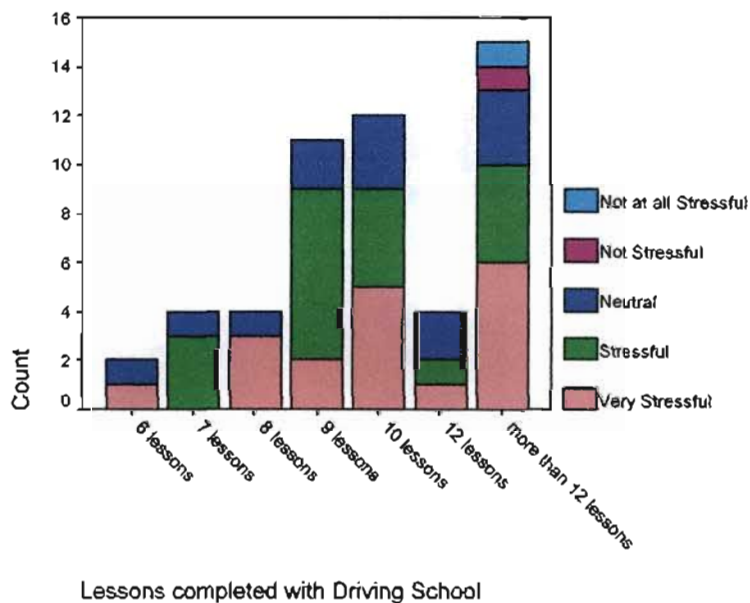


Table 14: Lessons completed with Driving School and Stress (N=52)

Table 14 shows the relationship between the amount of lessons completed with a driving school and the stress levels of the Driver's Test. Taken as a percentage, there is a slight

trend in the data towards a reduced report of stress as the number of lessons increase, although this is by no means significant. As an aside, it is of interest to note that the only respondents to report the Driver's Test as not stressful or not at all stressful had had more than 12 driving lessons prior to attempting the Driver's Test. Number of lessons then can be said to have no significant impact on the amount of reported stress during the Driver's Test.

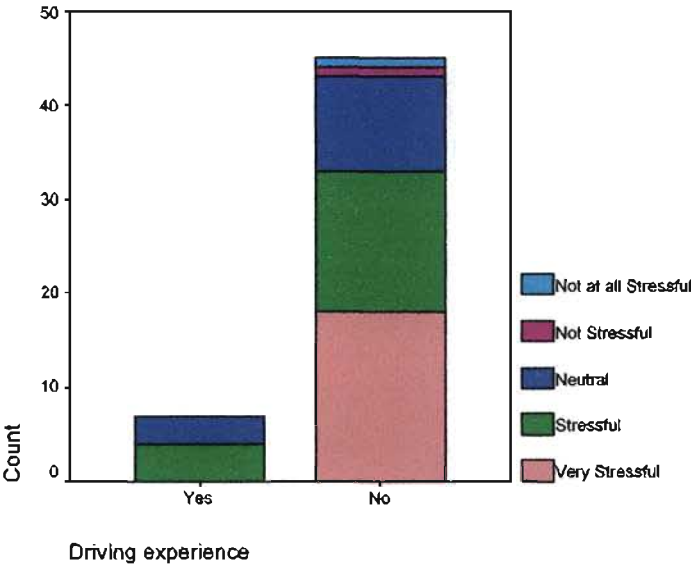


Table 15: Previous Driving Experience and Reported Stress (N=52)

Table 15 breaks down the relationship between previous driving experience (outside of driving schools) and the reported stress of respondents. Of the 7 respondents that reported having previous driving experience, 4 indicated that the Driver's Test was stressful and the remaining 3 gave answers of neutral. If the sample size were larger, and the percentage of these answers were compared, the conclusion could be drawn that having previous driving experience can help lower the stress experienced during the Driver's Test. However at this sample size and level of analysis this result may well be the result of chance. Being a small scale formative questionnaire, a larger sample size was not deemed necessary. A tentative and cautious conclusion may be that driving experience may impact on stress is all that can be drawn at the moment.

Outside of supplementary driving experience, the use of written aides was compared to the reported stress levels of respondents. Table 16 describes this relationship.

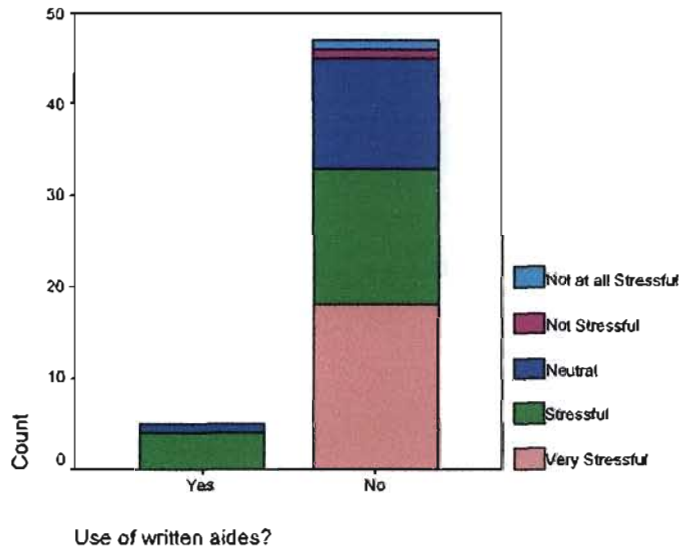


Table 16: The Use of Written Aides and Reported Stress (N=52)

Again, as so few of the sample responded positively to using written aides, the data obtained is difficult to make accurate judgements on. The written aides that the 5 respondents who answered positively were identified as either the “Pass your Drivers Easily” handbook or written notes given to them by their driving school. Had the data been presented in percentage form the conclusion could certainly be made that the use of written aides can help lower the stress experience of the Driver's Test. However the data in count form (as it should be with the sample size) can not be interpreted as easily due to the likelihood of chance interference. Again the tentative conclusion could be drawn that using written aides may be related to a lower stress level during the Driver's Test. Bearing in mind that there is more likely than not an extraneous or even a confounding relationship based on a broader issue of preparedness. For the purposes of formative research, this relationship does not warrant further explication.

In this vein, an analysis of the subjective reporting of preparedness for the Driver's Test will be looked at in relation to the reported stress of the Driver's Test. Table 17 displays this relationship in the form of a stacked bar chart.

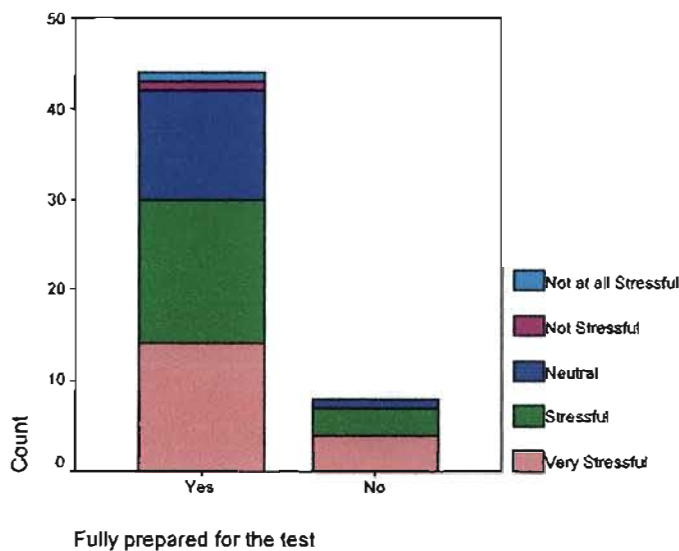


Table 17: Reported Preparedness and Reported Stress (N=52)

This table displays a definite inversely proportionate between preparedness and stress. Of the respondents that indicated that they were not fully prepared for the Driver's Test, 87.5% reported the Driver's Test experience as being very stressful or stressful. The remaining respondent gave a neutral answer. In contrast 68% of the respondents that indicated that they were fully prepared for the Driver's Test reported the Driver's Test experience as being very stressful or stressful. The strength of the relationship, while not strong, is sufficient to link the subjective feeling of preparedness and the experience of stress during the Driver's Test.

Other variables that may influence the experience of stress during the Driver's Test were measured and no notable relationships that might warrant discussion were discovered. The significant number of reported stressful or very stressful experiences of the Driver's Test and the failure to meaningfully explain this through related variables on the questionnaire dictated that the action kits should contain a distinct section that deals with

stress involved with the Driver's Test. This led to the inclusion of a stress guide in the kits which dealt with stress surround the Driver's Test and explored methods to control this. These methods fell under the broad categories of environmental, physical and psychological. This will be elaborated on in greater detail later.

Results of the Driver's Test as an dependent Variable.

A further dependant variable was identified as the Driver's Test results of the respondents. The respondents were asked to identify how many times they had attempted the test before they passed. The results of this question was cross-tabulated with various potential independent variables to measure their relationship. Some of the findings are discussed below.

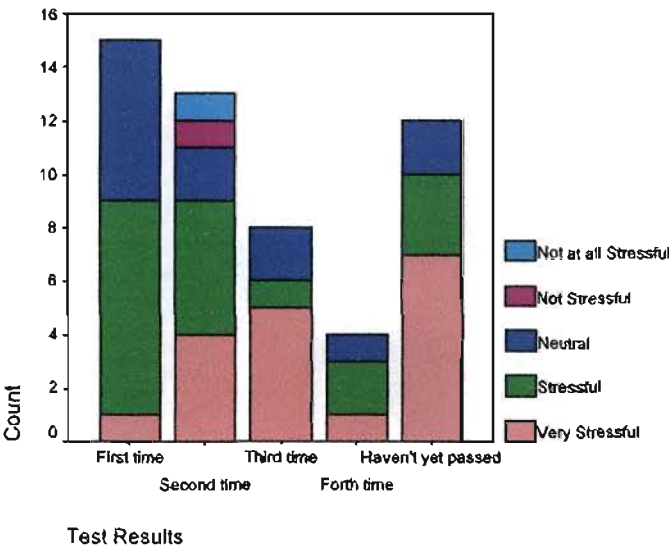


Table 18: Stress and Test Results (N=52)

Table 18 identifies the relationship between reported stress and results of the test. The data shows that the respondents that passed first or second attempt reported proportionately lower stress experiences. This indicates that stress may be a factor affecting the ability to pass or fail the test. This, compounded with the earlier

assumptions, formalised the intent to address stress in the Driver's Test as part of the project's intervention.

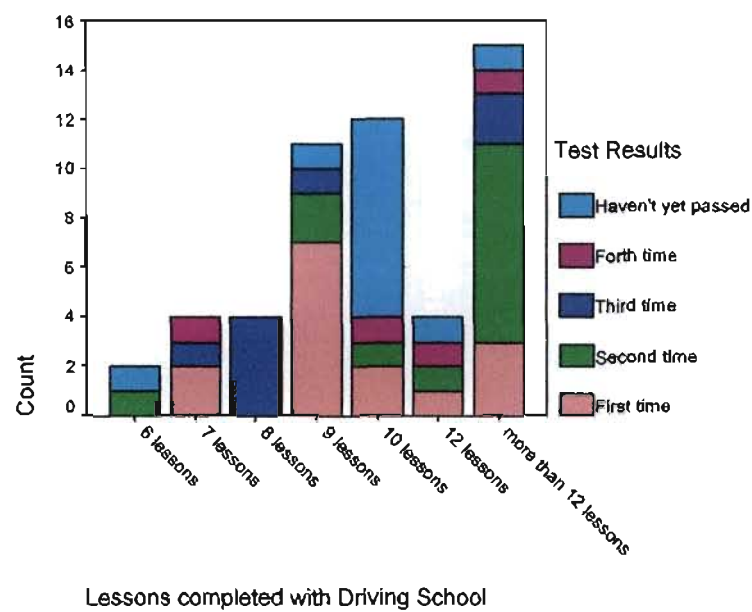


Table 19: Driving Lessons and Test Results (N=52)

Of the respondents that reported passing on the first attempt, 86% had had 9 or more lessons with a driving school. Of the respondents reporting completing 12 or more lessons, a full 73% passed at their first or second attempt.

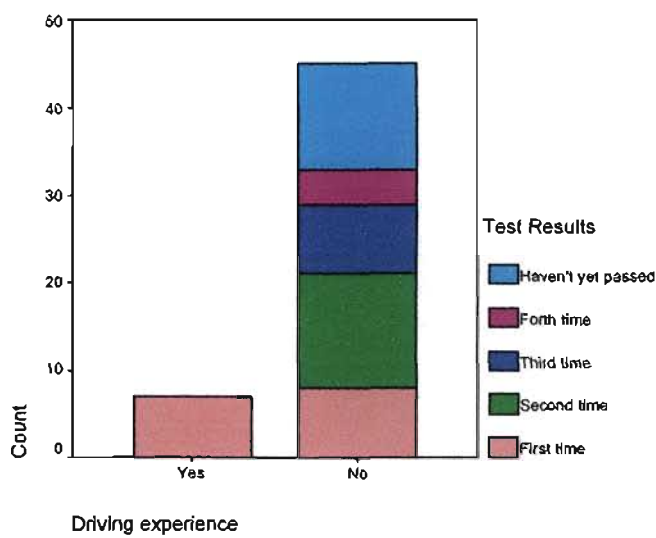


Table 20: Driving Experience and Test Results (N=52)

The formative questionnaire measured whether the respondents had had any driving experience outside of the formalised instruction of the driving school lessons. 13.5% of the respondents reported that they had other driving experience. Table 20 compares this with the test results of the respondents. Interestingly, all the respondents that reported other driving experience also passed the Driver's Test at the first attempt. This was considered an interesting finding that should influence the action kits. However, on discussion with driving school instructors, who indicated that such inclusion may be detrimental to the learner driver by sending the potential message that such experience may replace formal driving instruction, it was decided to discontinue this action.

There is a market in South Africa for commercially published and privately supplied written aides designed to prepare the learner driver for the driving test. Examples are the book “Pass Your Drivers Easily” and supplementary information developed by some driving schools.

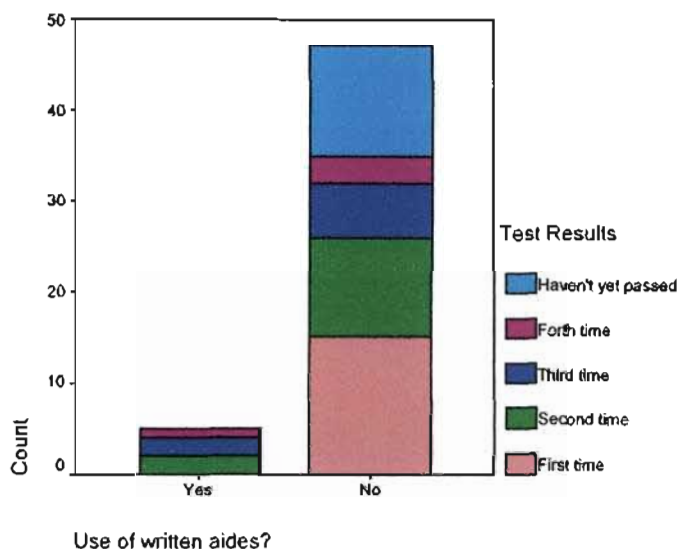


Table 21: Use of Written Aides and Test Results (N=52)

Table 21 explores the relationship between the use of such aides and the Driver's Test results. The results are counter intuitive in that, of the roughly 10% of respondents that indicated they had used written aides, none had passed first time. A tentative conclusion

then that the theoretical awareness of the Driver's Test cannot replace actual practice could be put forward.

The extent to which respondents were familiar with the Mkondeni testing ground in Pietermaritzburg was measured and this was cross-tabulated with their Test Results. The data is arranged graphically in Table 22.

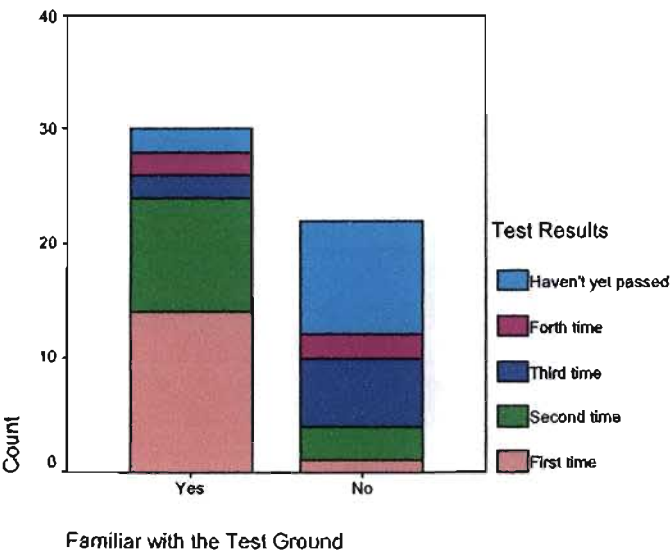


Table 22: Familiarity with Testing Ground and Test Results (N=52)

An interesting relationship emerges. Of the respondents that reported familiarity with the test ground, 46.6% passed first time. Of the respondents that were unfamiliar with the test ground, less than 5% passed first time. The strength of this relationship prompted the decision to include a guide to the testing grounds as part of the action kit.

Related to this, respondents were asked about their knowledge of the content of the Driver's Test. This was similarly cross-tabulated with test results. Table 23 shows the results.

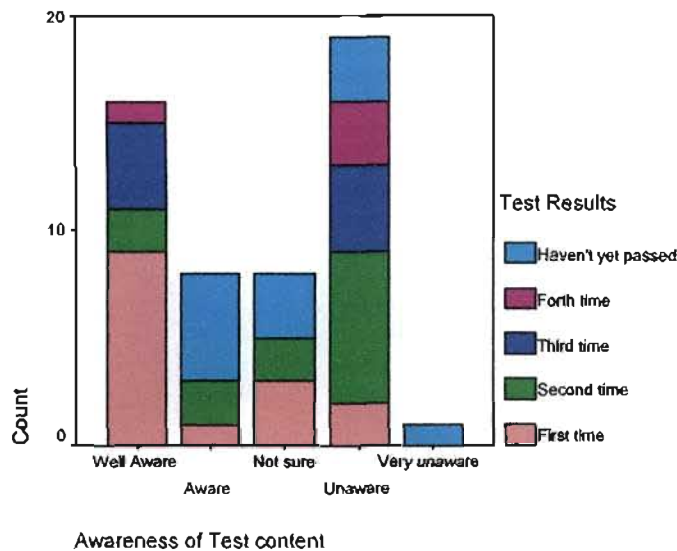


Table 23: Awareness of Test Content and Test Results (N=52)

This relationship has a similar result. The less aware the test taker is of the content of the test, the less likely it is that s/he will pass first time. Second time passes are not considered as the first attempt allows access to test content. Of the respondents indicating that they were well aware of the Driver's Test content, fully 56.3% passed first time. Of the respondents indicating that they were unaware, 10.5% passed first-time. Of the respondents that indicated that they were very unaware, there were no first-time passes. As a cautionary aside, the respondents indicating that they were aware of the test content had a first-time pass rate of 12.5%. Thus although there is a trend in the data, there may exist extraneous variables outside of the scope of such basic measurement. It was decided though, on the basis of this data, to include a checklist of what the Driver's Test involves for inclusion in the action kits.

Formative Research - Qualitative

Traffic Official Interview

The interview with Inspector Naidoo was conducted to more fully develop the information using an expert on the Driver's Test administration and procedure. Although guided by an interview schedule, developed topics were introduced and explored. As discussed, the interview was recorded and transcribed, although only the points deemed relevant were transcribed in full. A discussion of some of the relevant discussions will be presented below.

Replying to a question on the current pass rate for the Driver's Test, Insp. Naidoo was unable to produce exact figures but indicated that it could be improved and that many applicants failed unnecessarily. This developed into a discussion on the laying of blame for failure at the doors of the Driving Schools or the Testing Officers. Insp. Naidoo suggested that there is a misconception regarding the level of corruption in the licensing procedure due to this blame.

Insp. Naidoo felt that the level of difficulty of the current Driver's Test system is not overly difficult. He indicated that it is in line with international standards and that any drop in difficulty may impact on the quality of drivers on the roads. He remarked that although many people view the Driver's Test with apprehension, it is at an acceptable level of difficulty which can be passed with the right training - especially the use of driving schools.

Insp. Naidoo did acknowledge the lay public's perception of fraudulent activity i.e. bribes in the driving test system but stressed that this did not occur at the Mkondeni testing ground. He described the severe penalties awaiting any applicant who attempts to bribe an officer which include a mark against their name which bars them for a long period from attempting the Driver's Test as well as criminal prosecution.

Insp. Naidoo identified stress as a major factor in determining the outcome of the Driver's Test. He described how some applicants shake so violently that they cannot control the vehicle correctly. He also spoke of what he termed "stupid mistakes" being made due to "nerves". Insp. Naidoo felt that stress disadvantaged the applicants but did not see any way of addressing the problem as it is a natural reaction.

When asked about which part of the Driver's Test participants were particularly nervous about, Insp. Naidoo indicated that it varied from person to person. He did suggest though that in his experience the "yard" section in general and parallel parking in specific were most feared.

Regarding the failure of some applicants to sit the test due to insufficient documentation being presented, Insp. Naidoo claimed that this does happen and is frustrating as the administrative workers clearly indicate what is needed. When asked if a check list detailing what needs to be brought on the day might help alleviate this, Insp. Naidoo felt that this might help lower the occurrence of such happenings.

When asked about any prevailing myths or misconceptions about the Driver's Test that might influence applicants, Insp. Naidoo did not know of any that might fall into this category. He did however mention that the applicants should try and book their tests at times that are less busy during the day. He suggested avoiding lunch hours and school outlet times. Mid-morning is ideal.

Insp. Naidoo suggested that prior knowledge of the grounds is essential for any potential applicant. He did identify that most driving schools incorporated this into the training by "walking" the applicants through the test when booking or at other times.

When asked about the perception that some Driver's Test officials are seen as stricter than others, Insp. Naidoo claimed that this is not true. He felt that this arose from some officers being more approachable than others which gives the impression that they are more lenient. Furthermore, he stressed that the test marking is not subjective but rather

based on a points-system which requires the applicant to perform certain actions. This leaves little room for strictness to play a role.

Asked about which gender he felt is more likely to pass first time, Insp. Naidoo said that “it depends on lots of things”. However he said that, if pressed, males seem to fare better in the Driver's Test. When asked why this might be he indicated it may have to do with females being more emotional in the test and more liable to be nervous.

When asked whether performance in the Driver's Test is a good indication of future driving ability, Insp. Naidoo indicated that it measures only the driving ability when concentrating. He identified that many people, once through the Driver's Test, promptly stop doing the required actions when driving, for example checking their blind spots when turning. He also said that young drivers seem to feel that once they get their licence it is no longer necessary to worry about things like the speed limit and drinking and driving. He felt that this is something which is impossible to stop.

Asked about any further issues that may influence the learners chances of passing the Driver's Test, Insp. Naidoo said the applicants should be comfortable with the vehicle they are being tested on and also only take the Driver's Test when both they and their driving instructor feel they are ready to do so. Rushing into the test is a common mistake that can lead to a lack of preparedness or skill and, subsequently, failure.

When asked to give advice to future test takers, Insp. Naidoo reiterated this previous point and added that applicants should “just relax, be calm and listen to the guy taking them”.

Driving Instructors' Group Interview

As discussed above, five driving instructors took part in a group interview. Their answers to questions around the Driver's Test were taken down. The following is a list of the

questions asked and a summarised version of the answers that pertain to the action kit development.

“How eager are learners to take the test before they are fully prepared? Is this a hurdle to them passing first time?”

The instructors did indicate that this happens frequently due to the eagerness of the applicant to “get it over with”. The school does advise against this but cannot stop the applicants if they feel they are ready. Sometimes the applicants have left the test too late and their learner’s licences are near expiration which forces them to attempt the test even if they are not fully ready.

“What role do you feel stress plays in influencing the chances of a learner passing or failing?”

There was consensus that stress does influence the Driver’s Test outcome and the people who are very nervous battle to keep their nerves in check. One instructor indicated that you can sometimes predict that participants will fail based on their demeanour before the test. Interestingly, another instructor also identified that no stress is also a bad thing. If the applicants are too relaxed about the test this can also affect their performance.

“Which part of the test itself are learners most apprehensive of?”

In a similar vein to Insp. Naidoo, the instructors indicated that this is a difficult question as all people are different but in general the “yard” section of the test is most feared among learner drivers. This branched off into a discussion of the problem returning test takers have in repeating the same mistakes made in their previous unsuccessful test. They seem to “talk themselves out of it” according to one instructor.

“Do learners ever come to the test without the correct documentation?”

The instructors said that this does happen and gave an example of a recent case where an applicant lost her Identity Document (required for the test) the morning she was due to take the Driver's Test. They indicated that it also varied between the driving schools as they insist on seeing the documentation before the test. Other schools, they claimed, were not as vigilant. They suggested that the documentation be stored away safe at all times and only taken out when necessary.

“Are financial restraints influential in “forcing” the learner to take the test before he/she is fully ready?”

The instructors replied by saying that although this does happen, it is not the main cause for rushing the test and reiterated the fact that some people wish to rush the process as they are impatient to become independent drivers.

“Are there any myths/misconceptions about the test that learners might be influenced by?”

One instructor mentioned that some girls feel that if they dress seductively this will influence their chances. Another instructor talked about the belief that applicants should apply for their Driver's Licences in smaller towns than Pietermaritzburg as some believe the tests to be easier there. Another spoke of the common practice of applying for the code 10 license instead of the code 8 licence as this does not require applicants to undertake any parking as part of the Driver's Test. There was some heated comment on this last point as some instructors felt this was a loophole that needs to be blocked as it produces inferior drivers on the roads.

“To what extent does prior knowledge of the testing procedure and testing ground layout help or hinder the learners’ chances of passing the test”

The instructors consider such prior knowledge of the testing procedure and grounds as very important. They feel that the applicant needs to be comfortable with the grounds and knowledgeable of what is expected of him/her on the day. They also identified that some schools do not prepare the applicants sufficiently in this regard and it can happen that the applicant sees the testing ground for the first time on the day of the test. This led to a discussion of the licensing requirements of driving schools and the abundance of “informal” illegal driving schools that are not sufficiently staffed with trained instructors or equipped with dual-control vehicles.

“Do some traffic officers seem to be more strict or lenient than others?”

The instructors replied that there is a close working relationship between driving instructors and the testing officials and that one gets to notice that certain instructors have bad reputations as so-called “dragons”. However they claim that there is very little difference in the marking of the instructors although some might be more inclined to overlook minor infractions than others.

“Which gender do you feel is more likely to pass first time (if any) and why do you think this?”

The instructors were divided on this question with three saying that there is no difference and the remaining two split as to which gender does better. This led to an exploration of preparedness for the test with an instructor claiming that males are more likely to attempt the test earlier than females.

“Do you feel that the drivers test is a good indication of a learner’s ability to function responsibly on the roads?”

This question provoked much discussion. The consensus was that once passing the test, drivers don’t feel the need to continue with the behaviours taught by the driving school. One instructor suggested that a solution to this would be to require the retaking of the Driver's Test with any major infraction of the rules of the road.

“Are there any other issues which might influence the chances of the learner passing that are not necessarily related to unpreparedness?”

The instructors gave various suggestions as to how a learner driver might increase his/her chances of passing the Driver's Test. These were:

- Be well rested for the test
- Don’t invite people to watch the test
- Eat before the test
- Try to remain calm and focussed during the test
- Have a driving lesson directly prior to taking the test
- Pay careful attention to the instructions of the traffic officer conducting the test.
- Wear comfortable clothing that does not restrict movement and that is appropriate for the weather conditions.
- Try and book a test time outside of peak traffic hours.

Discussion

Having obtained this data, the job remained to sift through it and determine which data should influence the creation of the project’s action kits. Some data, as indicted above, was not used for various reasons. Some data was deemed too tentative to be influential.

The task at hand was to distinguish what is it that the respondents will need to benefit them and serve the interests of the project.

The formative research focussed almost solely on information about the Driver's Test. This was because the packs need to be bought into by the target audience. They need to have a perceived use and be credible. Thus the packs were marketed as aides for learner drivers wanting to "PassRight". Alongside this practical use is the true importance (from the development communicator's point of view) of the project - road safety products and services. Thus, although the project is designed to help the participants pass their Driver's Test, this is only as a doorway to the target market. The true purpose is to engage the participants in road safety dialogues and actions and measuring their interaction with the action kits. Were the Driver's Test information not useful or relevant the project would lose credibility and would have difficulty attracting the target audience. It would also be deceptive to market the kits as tools to help pass the Driver's Test when they do not carry out this function in a legitimate manner. The following section deals with the action kits' contents and their various geneses in formative research or literature.

Building the Action Kits

Introduction

The kits needed to be developed to cover different areas as well as explore new media. This was a challenging and time consuming process. The help of Social Marketers internationally were enlisted and the researcher has in his debt the many development practitioners that took the time to comment on and help direct the project through the Social Marketing Listserv. This section deals with the various components of the kit and provides some basis for the inclusion of each component. This said, the intangible and interactive nature of certain 'contents' are difficult to measure and describe and this will be dealt with in due course.

Developing a Brand - The Birth of PassRight

As noted in the strategic framework, the development of a brand is important in the Social Marketing environment. To this end, PassRight was born. The name PassRight is a play on words of the primary rule of the road - “Keep Left, Pass Right” and the notion of “passing right” which indicates the dedication to passing the Driver's Test correctly. The sub slogan - “driving ambition” refers to the learner drivers being in a position of aspiration to become fully licensed drivers. It is also a play of words on a common phrase e.g. usage may be “s/he has a driving ambition to become the best”. This brand idea was developed into a logo as can be seen below. Contents of the kit were branded as far as possible with this logo to create a simulation of brand credibility which in a project on a larger scale would ideally lead to brand recognition and trust.



Figure 18: The PassRight Logo

Contents Related to the Driver's Test.

Stress

As seen, the formative research identified stress as a debilitating factor in the Driver's Test process and experience. To this end a “stress pack” was developed that allowed the participants to:

- Accept stress as a factor in the Driver's Test
- Identify what stress is and where it comes from
- Try various methods to alleviate the role and effect of stress in the Driver's Test.

This is a combination of education and action that leads to a better empowered participant. The stress relieving methods were divided into three primary categories i.e. physical, environmental and psychological. This holistic approach pre-empted the impact of stress by both the awareness of its role and through the development of preventative measures. The pack was written for lay usage and the more difficult psychological processes either simplified or excluded. The majority of the information for the stress pack was obtained online with kind permission from MindTools™.

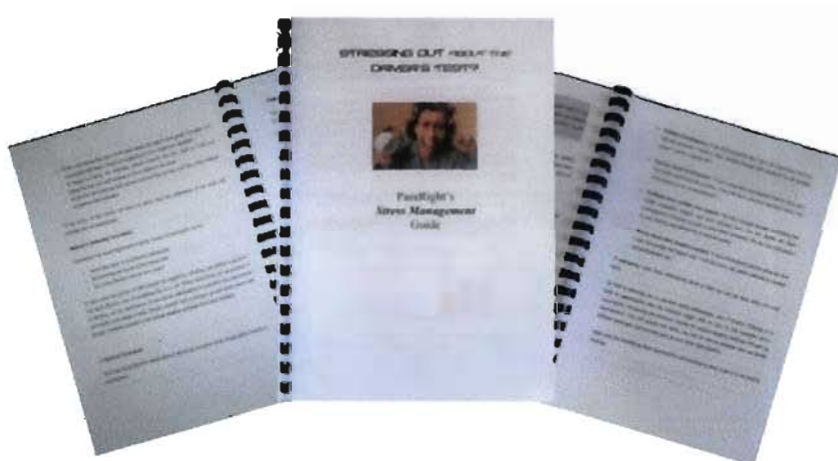


Figure 19: The PassRight Stress Management Guide

The Checklist

As also identified in the formative research, the learner driver needs to ensure that he or she has all the necessary documentation with him or her on the day of the test. This list not only contains this information but also some extra items. The document reads like a to-do list and provides tips and suggestions. All of these were approved by driving instructors who provided feedback on the list. See Appendix F for the list. This list is provided in the kit itself and also contained on the CD-ROM.

The CD-ROM

In line with the objectives of the research regarding the use of ICTs in development, a CD-ROM was developed for inclusion in the kits. This CD-ROM was designed to act and feel like an online website and was designed using Hyper-text Mark-up Language (HTML). Attendance at an HTML course was necessary to develop the skills to develop such a CD-ROM. This website feel was decided on as it would simulate a normal website and there was no difference in function in this regard. The decision to not create an actual website was made for the following reasons:

- Accessing this site would cost money to those non-student respondents with a home “dialup” internet connection whereas with a CD-ROM all that is required is a CD drive - standard on all recent computers.
- The presence of the data on the web would be available to anyone with internet access rather than only the project participants. This may lead to hacking attempts or unwanted external interest in the project which is only valid for Pietermaritzburg. This could be overcome with an encrypted access pathway however this is too complex a system for a project of such short duration.
- To post the website would have required a hosting service. This is costly and impractical for a project of such a short duration. There are free hosts but these post advertisements on the site which would have detracted from the design and function of the webpages.

For convenience this report will sometimes use the term “website” to describe the CD-ROM even though this is not technically correct.

The CD-ROM contained a “homepage” which linked to the various sections of the website. Each of these sections was designed to address the core areas of interest relating

the real and ostensible purposes of the project. Embedded in these sub pages are various downloadable files that the participant can access.

The sections were developed based on the national and international priorities in road safety practice. The core issues regarding road safety were identified as:

- Speeding
- Drinking and Driving
- Pedestrians

Alongside these sections dealing with road safety issues were sections that dealt with the surface purpose of the project - that of the driving test and related issues:

- The Driving Test
- Bribery

Finally, sections dealing with other issues were included:

- What is PassRight?
- Using your Kit
- Links

These pages and related content and downloads formed the whole of the CD-ROM. Each of these sections will be briefly dealt with.

What is PassRight?

This section outlined the project in terms of what it is, its scope, and its use for the participants. It also included a download of the PassRight debriefing form which each of the participants are required to submit at the end of the project.

Using your Kit

This page introduced the idea of an action kit to the participants as well as identifying and discussing the uses of the included items.

Links

This page provided a list of Internet resources the participants might find useful. These resources were in line with the priorities of the project. Examples of included sites include the National Department of Transport's website and the Arrive Alive campaign's website.

The Test

By far the most interesting and challenging webpage in the website, this section was designed to discuss the Driver's Test with the participants. It deals with various issues, some of which were drawn from the formative research. It also includes a copy of the Checklist (see above) for convenient download or print.

Bribery

A fun and brief section dealing with bribery in the Driver's Test. It draws on the information supplied by Insp. Naidoo and merely serves as light relief with an exhortation to attempt the test the legal way.

Alcohol

This section looks at drinking and driving from both a social and legal point of view. The options available to replace drinking and driving as a behaviour are considered. A guide to giving safe parties is included as well as discussing "how much is too much" and "are you drunk?" There is also a brief discussion of prescription medication as intoxicators

and prevention of this occurring. There is also a download of the legal facts about drinking and driving.

Also included in this section is a BAL (Blood Alcohol Level) calculator. This calculator was designed using the Microsoft Excel™ spreadsheet package. The Widmark formula formed the basis of the calculations and participants can input their details and amount of drinks to obtain a BAL calculation.

This allows the participants to interrogate the abstract notion of BAL limits. In South Africa if a person's BAL exceeds 0.05 g/100ml they are considered legally drunk. This figure is often a meaningless abstraction which needs to be translated into a tangible and easy to remember measure.

Speed

This sections deals with speeding while driving. Speeding is driving in excess of the speed limit. The identification of speed as a factor in road accidents is presented as well as statistics. Beyond this normal interpretation, different speeding scenarios under different conditions are outlined with the results of the different reactions compared. The conclusion is naturally around the ability of the participant to make small changes in their behaviour to ensure their safety.

Pedestrians

A large number of road fatalities include pedestrians. This section attempts to recognise the danger that this often ignored population pose to drivers. This section provides a list of actions and precautions to take to avoid pedestrian-traffic collisions. It plays mildly on the theme of culpable homicide although not too harshly as this has been found not to be a major deterrent.

Lottery Scratch Card

An actual lottery scratch card is provided with the action kits. This card accompanies a message to bring home the reality of the chances of being in an accident in South Africa. The probabilities concerned were calculated using the national lottery statistics and current road safety statistics as well as a demographic segmentation of the latter. In essence, the odds of winning the lottery are compared to the odds of being killed or injured in a road accident. This is meant to be a creative and memorable message around road safety.

Measurement Glass

A plastic measurement glass is included in the kits. This glass has markings on it which correspond to the amount of alcohol (beer, wine, spirits) one can consume before being legally over the limit. This is a further attempt to demystify the national BAL limit. A discussion of related issues is included with this glass.

Key Ring

A branded PassRight key-ring that doubles as a licence card holder is included in the kits. These key-rings are popular since the change over to the “credit card” Driver’s Licence. If utilised, the participant will be reminded of the project every time s/he drives - hopefully constantly reinforcing the ethos of PassRight.

Disposable Breathalysers

The kits also contain two disposable breathalysers. The participants are encouraged to take these to situations where there is drinking of alcohol. This will allow the participants to accurately measure their BAL in relation to the limit. This is useful as it not only further interrogates the concept of BAL but also allows reciprocal interaction with their peers around drinking and driving and the difference between the legal limit and feeling

drunk. Such a discussion is included with the breathalysers. Any use of these breathalysers is beneficial as it involves a fun and informative exploration of the subject. This incorporation of action triggers such as these items is essential as behaviour and participation reinforce beliefs far more than a normal educational experience.

SMS Interaction.

As well as the tangible objects included in the kit, intangible, interactive components were also used. A case in point is the use of Short Message Service (SMS) technologies to interact with the participants. The real-time, penetrative and personal characteristics of SMS technology has long been appreciated and appropriated by commercial marketers. Social Marketing has only recently begun to embrace such technology in development interventions. In main stream communication in development in South Africa there is little evidence of SMS usage.

As part of the project three SMSs were dispatched throughout the duration of a participant's involvement with the project. These SMSs were marketed as competitions and the correct responses were entered into a draw to win a voucher for the local mall. This was to encourage participation. The SMSs were sent during off-peak hours on Saturdays in order to increase participation and lower the costs involved for the respondents. Consider that an off-peak SMS only cost around 25c at the time of the project. The SMSs needed to be kept to fewer than 160 characters to accommodate all phone models. A dedicated cellular SIM card was purchased and used for the project. SMSs were cleared about once a week and a voice message identifying the number as owned by PassRight was created with which participants could leave any queries.

These SMSs were used to gauge use of the kits and the associated content by asking a question and providing choices of answers. The participants were required to SMS the correct answer to be eligible for the prize draw. Details about replying were separate due to text space limitations.

SMS 1:

PASSRIGHT > What is the legal blood alcohol limit in South Africa? (A) 0.04 (B) 0.4 (C) 0.16 (D) 0.05 Reply with your answer e.g. "A" <PASSRIGHT

SMS 2:

PASSRIGHT> Going 75km/h in a 60km/h zone increases your chance of crashing by: (A) 100% (B) 200% (C) 500% (D) 1000% Reply with your answer e.g. "A" <PASSRIGHT

SMS 3:

PASSRIGHT> After about how many beers will you be considered legally drunk? (A) 2 (B) 4 (C) 6 (D) 8 Reply with your answer e.g. "A" <PASSRIGHT

Packaging the Kits.

After identifying and developing the contents of the kits these needed to be packaged in a complete unit. This was done by incorporating the contents into a branded box. The CD-ROM was also labelled and its jewel case cover created. This allowed a uniform and professional finish. The process was labour intensive at this scale of project as most items needed to be generated using simple computer programmes and regular materials. On a larger scale this would have been outsourced. Fifty-one kits in total were made although still more had to be manufactured due to reasons described later.

Conclusion

The development of the action packs was a time-consuming and labour intensive task. The contents were designed according to the formative research and priorities identified

in literature. Several sources of information were used. The generous help of the University of KwaZulu-Natal Interdisciplinary Accident Research Centre (UNIARC), the Arrive Alive Campaign and MindTools[™] as well as input from many conference delegates and Social Marketing Listserv members was invaluable. All care was taken to translate the theoretical underpinnings of Social Marketing into practice in the creation of the kits.

Methodology

Quantitative & Qualitative Methods in Social Scientific Research

Quantitative & Qualitative Methods: A comparison

To compare the two methodologies, it is best to contrast them along various aspects. This discussion is necessarily superficial and a more in-depth discussion is available in any reputable research textbook. A particularly relevant discussion of the difference between quantitative and qualitative research methods for South African researchers is presented in Babbie & Mouton (2001).

- The types of data that qualitative methods generate is vastly different to the types of data that quantitative methods generate. Quantitative methods produce measurable, numerical data amenable to statistical manipulation and graphic depiction but which may miss contextual detail. Qualitative methods produce rich, contextually grounded data that is in words, pictures or objects that are impossible to objectively measure (Miles & Huberman, 1994).
- The aim of qualitative analysis is complete, detailed *description* while in quantitative research the point is to classify features, count them, and construct statistical models in an attempt to *explain* what is observed (Babbie & Mouton, 2001).
- In terms of prior knowledge, the qualitative researcher may only know roughly in advance what he/she is looking for while the quantitative researcher necessarily has to know clearly in advance what he/she needs to find out in order to design the relevant instruments (Kumar, 1999).

- In qualitative research the research design commonly emerges as the study unfolds. While in quantitative research all aspects of the study are carefully designed before data is collected (Miles & Huberman, 1994).
- In qualitative research, the researcher him/herself is the data gathering instrument while in quantitative research tools, such as questionnaires, are used to collect numerical data (Durrheim & Terre Blanche, 1999).
- In qualitative research, the researcher tends to become subjectively immersed in the subject matter, while in quantitative research the researcher tends to remain objectively separated from the subject matter (Miles & Huberman, 1994)..

Such a stark contrast of the two methods as presented above seem to indicate an either/or mindset. One is either engaged in quantitative research or qualitative research. A few decades ago this was the case. However, many researchers embrace both methods within a single project in order for the one method to “back up” the other. This is generally referred to as triangulation.

Triangulation

According to Durrheim & Terre Blanche (1999: 430) triangulation is the “use of multiple perspectives to check one’s own position against” in research. It is a strategic combination of quantitative and qualitative methods to acquire a fuller picture of the study population. In this research project, a combination of quantitative and qualitative methods was utilised for just this reason. Quantitative data collection methods were used through the use of questionnaires and qualitative data collection methods were used through the conducting of focus groups and in-depth interviews in both the formative and measurement research.

Research Design

As stated in the objectives of the research project and expanded on in the literature review, a primary objective of this research is to compare the Social Marketing approach (used to develop the action kits) to the convention educational approach.

Such a comparison requires objectivity. This objectivity requires a measurable standard against which meaningful comparisons can be made. To this end the research was designed to allow such comparisons to be made. This involved creating three groups of participants - two experimental groups and a control group. The first experimental group (hereafter referred to as Group 1) received the action kits and took part in the associated activities. The second experimental group (hereafter referred to as Group 2) received information packs with the information that is provided through the “Arrive Alive” campaign. This information was obtained from their website and tailored to represent the same issues that the action kits included. A third control group (Group 3) received no intervention.

Quantitative

In order to reach the sample identified for the project, the researcher drew participants from two sources – registered Students at the University of KwaZulu-Natal and learner drivers at selected driving schools in Pietermaritzburg, KwaZulu-Natal. Added to the population prerequisites already identified, a further criterion was added. The participants needed to have already booked for their Driver’s Test and are due to write in more than 2 weeks. This allowed a smoother running of the data collection procedure as it provided a smaller data collection window which made the process less time-consuming.

The sampling method across both university students and driving schools was quota sampling. This was viewed as a necessary trade-off between the advantages of

probability sampling and the difficulties of obtaining any meaningful sampling frame in this context.

Driving schools were approached and a presentation given to those interested in taking part – See Appendix G for a copy of this presentation. Once enlisted, the driving schools helped identify and approach eligible learner drivers – i.e. those meeting the age, technological access/literacy and testing-time criteria. The driving schools supplied the researcher with this data and the learner drivers were put into one of the two experimental groups. Three driving schools agreed to participate and their help in locating the eligible participants was invaluable.

Once the participants were assigned into either of the two experimental groups – the PassRight group (Group 1) or the Information Pack group (Group 2), they were introduced to the project and asked to supply details allowing the researcher to contact them as well as the date of their Driver's Test and a commitment to participate in the project. The project was marketed as a road safety initiative to all groups with principles of informed consent and the voluntary participation being adhered to.

The project was marketed to potential university student participants through advertisements in the computer LANs (common congregation points) and on noticeboards around the campus. An internal notice was also placed on the University Innerweb – an online notification system. Respondents that met the project criteria were directed to the project co-ordinator who introduced them to the project and detailed what was involved.

Data collection took place in a staggered fashion over a number of months. This was due to the fluid nature of the population with participants entering and leaving the project at different times. At any given time the project had participants in various stages of completion of the project in all three of the groups. A database programme (Microsoft Access) was used to track the participants.

Group 1

The PassRight group received action kits. Over the duration of their involvement they received the PassRight SMSs and interacted with the action kits. When they had attempted the Driver's License test at least once, they were sent a reminder to complete the included questionnaire (See Appendix H) and email it to the researcher. The driving school participants were monitored through the driving schools while the university participants were sent emails to identify the results of their test and take appropriate action. Over 50 participants were involved in the project in this group. For various reasons (see "Problems") only 36 of these participants completed the project and returned usable questionnaires.

Group 2

The information group received information packs. These packs were solely informational and consisted of information drawn from the Arrive Alive campaign (with permission). These participants were only contacted once they had attempted the Driver's Test at least once. They were asked to email their completed questionnaires (See Appendix I) or drop them off with the project coordinator or driving school. At the end of the data collection phase there were 42 usable questionnaires.

Group 3

This group acted as a control group for the research. The participants in this group received no form of intervention. The criteria for this group was the same as for the preceding two except for the obvious amendment that they would have needed to have completed or attempted at least once the Driver's Licence test. Data collection for this group was halted at 40 participants for statistical comparison purposes.

Quantitative Measurement and Analysis

All groups received data collection instruments; however these differed according to the purposes of the instruments. Group 1 was questioned on the PassRight action kit in terms of kit contents and use. Group 2 was questioned on the informational pack in terms of use only. All three groups were also asked to complete a road safety knowledge, attitudinal and behavioural inventory. Both open and closed questions were asked.

This allowed individual analyses within groups as well as statistical comparisons between groups to be drawn. The data from all groups was entered and analysed using the Statistical Package for the Social Sciences (SPSS).

Statistical analyses ranged from univariate measures to bivariate measures using descriptive statistics. The road safety inventory was weighted and scored to create a uniform measure to serve as a meaningful comparative reference point between the groups. It is important to mention that no measurement was conducted to compare the two types of participants (i.e. driving school intake vs. university intake). This was due to the fact that these categories were not mutually exclusive and overlap may occur that would have the potential to distort any findings.

Qualitative

In order to add some richness to the data received, the use of focus groups was included in the research design. The primary purpose of focus groups is usually to measure the “interaction within the group and joint construction of meaning” (Bryman, 2004: 346). The participants in a focus group are usually drawn from the population under investigation. However, for the purposes of the project, the focus group that was held concentrated on an interaction with an external object (the kit). Quota sampling was again used and drew only from university students from the University of KwaZulu-Natal,

Pietermaritzburg that were under 25 years of age, computer literate and that have passed their Driver's Test within the last 18 months.

The primary goal of the focus group was to explore the reaction to the kits from people that have already undertaken the Driver's Test and can provide a fresh point of view. This session lasted approximately 25 minutes. The focus group was not tape recorded but rather written notes were kept. See Appendix J for the topic guide that was used.

Qualitative Measurement and Analysis

The focus group notes were analysed and the resultant data arranged into themes. These themes are then explored individually with relation to the objectives of the research and presented under relevant headings.

Problems Encountered

Introduction

It is useful for any research report to include a discussion of the problems or setbacks encountered in the research process. This allows any future attempts at similar projects by other researchers to anticipate these problems and perhaps overcome them. This section will very briefly identify some of the setbacks encountered in the project.

Action Kit Development

The development of the action kits required a broad base of technical knowledge regarding computer programmes and web design. Due to the nature of the project these skills had to be learned and implemented at great time expenditure. However, if the project were at a larger level with more participants and a more forgiving budget, these tasks should be outsourced to outside professionals. Similarly, the contents of the kits had to be individually created and branded. Again these sorts of activities should be outsourced.

Participant Dropout

There was a considerable drop-out rate in the two experimental groups. Participants simply did not return the necessary information to the researcher. This was sometimes the result of the participants not passing their Driver's Test and leaving the project. This resulted in new kits needing to be produced at some expense to the project. Perhaps an incentive would be effective in promoting a higher return rate.

Third Party Buy-in

Social Marketing usually encourages project buy-in from interested and relevant third parties. This buy-in is usually in the form of the creation of strategic partnerships. Such strategic partnerships allow all parties (and especially the end-consumer) to gain from the relationship.

An attempt was made to enrol the participation of the provincial Department of Transport's communication office in the project. This brand association would have been beneficial to all parties. After phone calls and meetings with the officials concerned there was interest generated in the project and a commitment on the part of the Department to provide any branded road safety materials it felt relevant for inclusion in the action kits.

The provision of these materials never occurred and the delay in attempting to access them set the schedule of the project back a month. It was decided to abandon the partnership. In the future, it is suggested that clear communication channels are set up and agreements reached in considerable advance of the rolling out of the project materials to avoid such a set back.

Attempts to enrol the sponsorship of commercial partners were undertaken although this was not successful due to the low exposure of the brand. In larger projects though, this would be a good opportunity for the research to consolidate these types of relationships to further the project.

Limitations of the Study

Introduction

A core characteristic of good research according to Kumar (1999: 7) is it should be self-critical. This involves a conscious and reflective effort on the part of the research to provide as sound research as possible while being able to identify the limitations of the research being undertaken. This awareness of limitations allows the research to be realistic about what s/he can say about the findings among other things.

In this spirit of good research, the limitations of this study will be briefly outlined.

Generalisability

This refers to the extent to which the results drawn from the study are able to be generalised to the broader population. This general generalisability of this study should be treated cautiously for the following reasons:

- The sampling method utilised was that of non-probability sampling.
- The sample size is too small to generalise findings to a broader context.
- The intervention developed was based on contextually-grounded data.

This being said, this limitation is one which is often found in, and embraced by, Social Marketing. As interventions are necessarily contextually grounded, no claims are made or encouraged as to their usefulness outside of a given environment. This ties in with the identified need for formative research in every intervention. This acknowledges the fact that interventions successful in some countries, when replicated elsewhere, fail. This is

usually due to different social, political, cultural and economic factors between the sites of development.

Replicability

Continuing in a similar vein, Kumar (1999:7) also identifies replicability as key to good research. Replicability is the ability of other researchers to conduct the same research and obtain the same results. For identical reasons as identified above, this is not possible in most Social Marketing endeavours. Again, this is due to the contextual nature of the Social Marketing intervention. In this project, the action kits were developed based on a formative interaction with the target market and related role-players in Pietermaritzburg, South Africa. The issues that were identified in this formative research may not be relevant for other populations spatially or temporally. Temporal changes are in constant effect. An example of this is the current changing nature of the Learner's Licence and the Driver's Licence testing procedures. At the time of submission of this report, the learners' licence testing procedure is moving over to a touch screen test from a paper and pencil test. Also the Driver's Test will soon have to be conducted using a common vehicle fitted with cameras. Both of these changes will affect the nature of the testing procedure drastically and thus a similar project conducted at a later stage would most likely develop a very different kit.

Thus, although this study has limitations as regards generalisability and replicability, these are the nature of such programmes and so not overly detrimental to the soundness of the research. Certainly the usefulness of such research can be seen to outweigh any objections based on these two criteria.

Findings

Introduction

The quantitative and qualitative analyses that are relevant to the objectives of the research will be presented below. An in-depth breakdown of the groups will be presented as well as inter-group comparisons across variables.

Quantitative Findings

Group 1

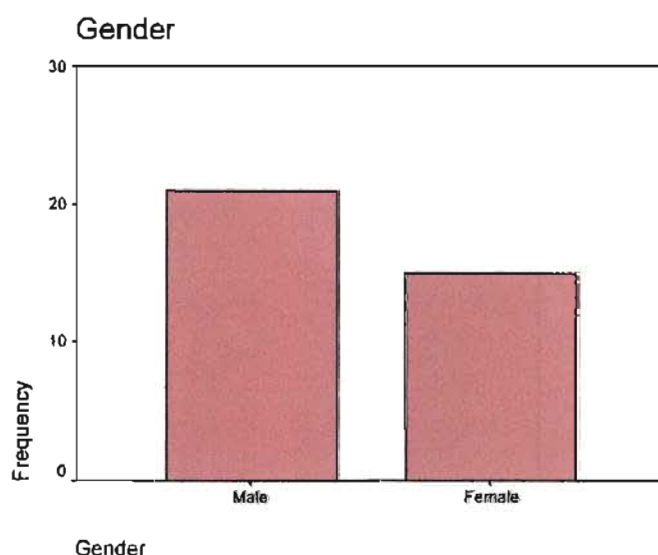


Table 24: Group 1 Gender (N=36)

Group 1 (the group of respondents receiving the action kits) had 36 participants. Within this group there were 21 males and 15 females. Considering that gender was not stratified for in the sampling the resultant distribution is fairly equal. The use of gender as an independent variable was limited to observing any affect it may have in distorting the data. Gender became, in effect, a controlling variable.

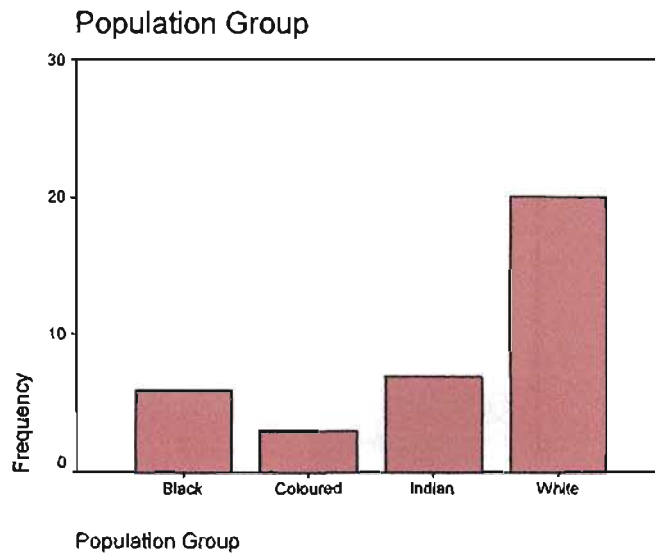


Table 25: Group 1 Population Group (N=36)

Similarly, the race or population group of the respondents was measured to control for any impacts this may have on the dependent variables. The sample was unequal regarding race with 55.6% of the respondents being White and 19.4% Indian. Blacks and Coloureds were underrepresented with a presence of 16.7% and 8.3% respectively.

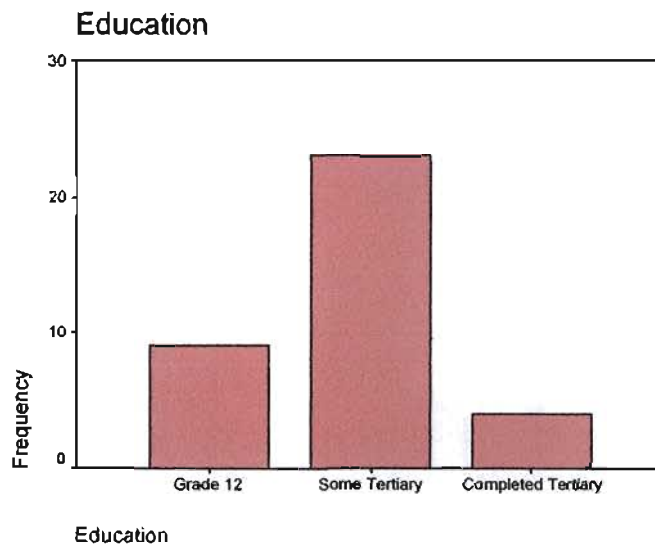


Table 26: Group 1 Education (N=36)

The respondents were, on the whole, well-educated with 25% of respondents having a Matric as their highest level of education achieved, 63.9% currently studying at the tertiary level and 11.1% completed an undergraduate degree.

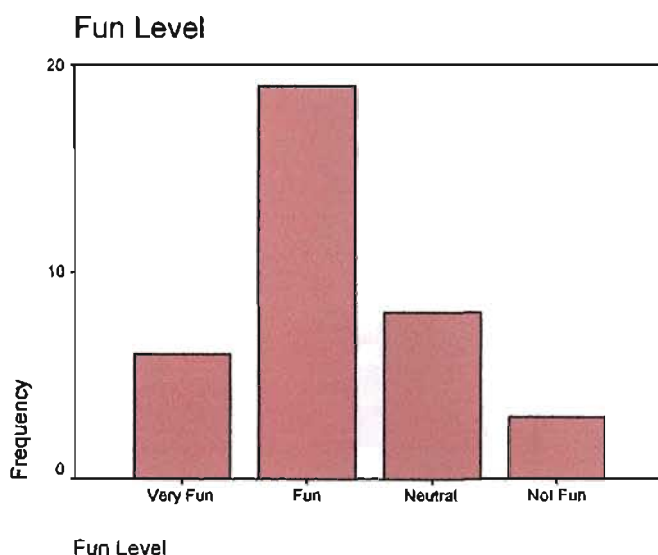


Table 27: Group 1 Reported "fun" level of action kits (N=36)

When asked to indicate how “fun” the PassRight action kits were to use, a cumulative 69.4% of respondents reported that they found the action kits to be either “very fun” or “fun”. Only 3 of the 36 ‘group 1’ respondents indicated that they found the action kits to be “not fun” and none found the action kits to be “not at all fun”.

This indicates that the kits achieved the goal of being appealing to the target market. This appeal is essential to a good development intervention as it promotes interaction with the product.

Responding to the question of how informative the action kits were the respondents also responded positively.

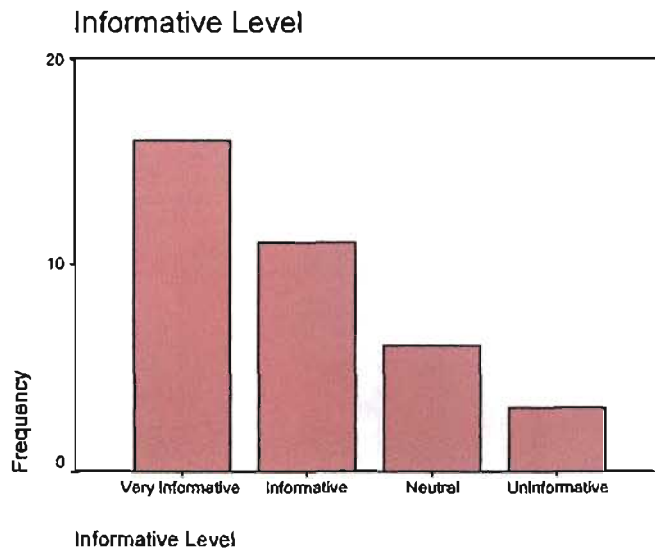


Table 28: Group 1 Informative level of action kits (N=36)

A full 75% of respondents indicated that they found the action kits to be very informative or informative. This clearly indicates that the kits fulfilled their function as information providers. Unfortunately, ranking of all the different components in terms of this variable was not undertaken. This was due to the cumbersome nature of such a measure and the resultant increase in questionnaire length. Only 8.3% of respondents indicated that they found the kits to be “uninformative”.

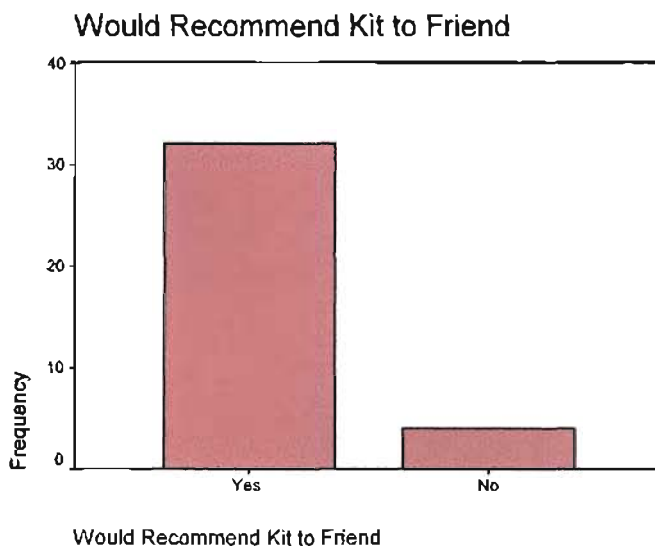


Table 29: Group 1 Recommendation measure (N=36)

The respondents were asked if they would recommend the kit to a friend. Of the 36 respondents, 32 (88.9%) indicated that they would do so. This describes a level of satisfaction with the PassRight approach that is crucial to the establishment of a credible brand. The usage of the various kit contents was also measured and is presented in the tables below.

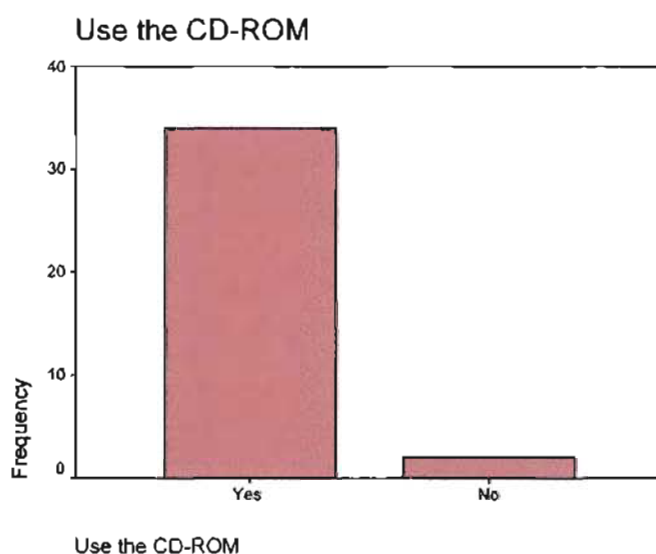


Table 30: Group 1 Use of CD-ROM (N=36)

Table 30 shows that 94.4% of respondents in group 1 reported using the CD-ROM. Table 31 further shows that, of this figure, 50% reported using the CD-ROM more than once. This shows a reasonably high level of repeated use indicating that the CD-ROM contained information that was relevant and necessary for the respondents. This is a tribute to the formative research component of the project in which a tailoring of product to identified audience needs was carried out.

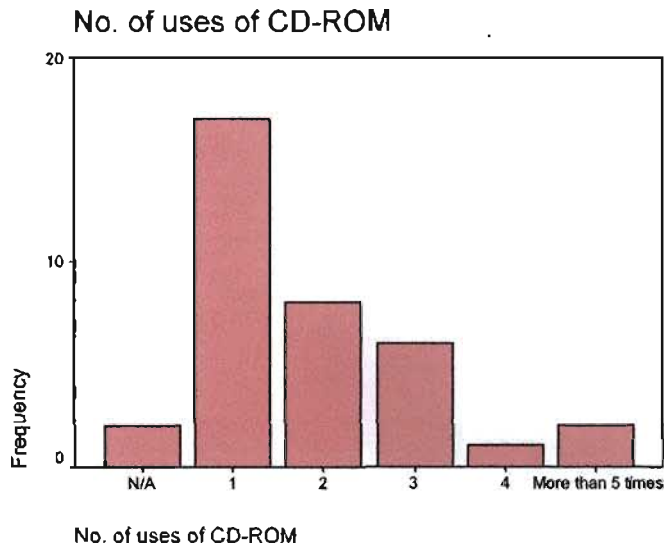


Table 31: Group 1- Number of uses of CD-ROM (N=36)

This high usage of the CD-ROM is also explained by it being considered “fun” by the respondents. As Table 22 indicates, 50% of respondents found the CD-ROM to be either “very fun” (20.6%) or “fun” (29.4%). Only 20.6% of the remaining respondents indicated that the CD-ROM was “not fun” or “not at all fun”.

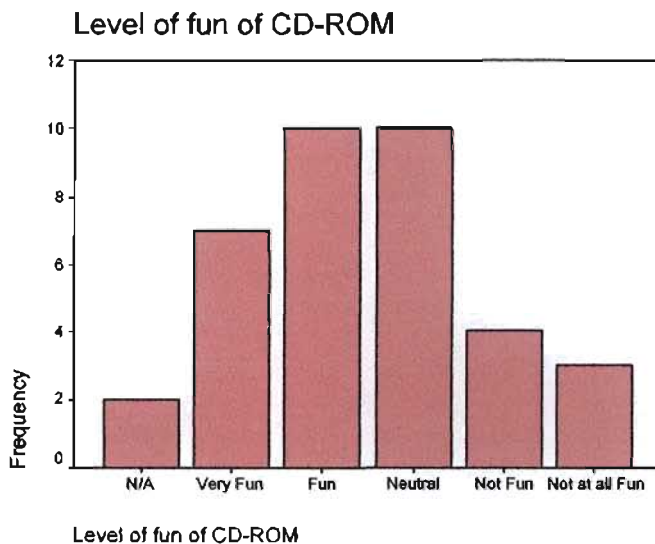


Table 32: Group 1 Level of 'fun' of CD-ROM (N=36)

When questioned as to the most useful section of the CD-ROM (a non-prompting open-ended question), a response rate of 76.5% was achieved.

Of these responses, 1 respondent found the “Speeding” section to be the most useful, 27% of respondents indicated that the “Drinking” section of the CD-ROM was the most useful, and the rest of the 69% of respondents considered the “Driving Test” section to be the most useful. This falls in line with the buy-in of respondents into the project due to the perceived usefulness of the kits for the Driver’s test. In the open-ended question that allowed respondents to expand on this, this was further explored. A common theme was the helpfulness of the Driver’s Test section in terms of preparing the respondent for the events on the day.

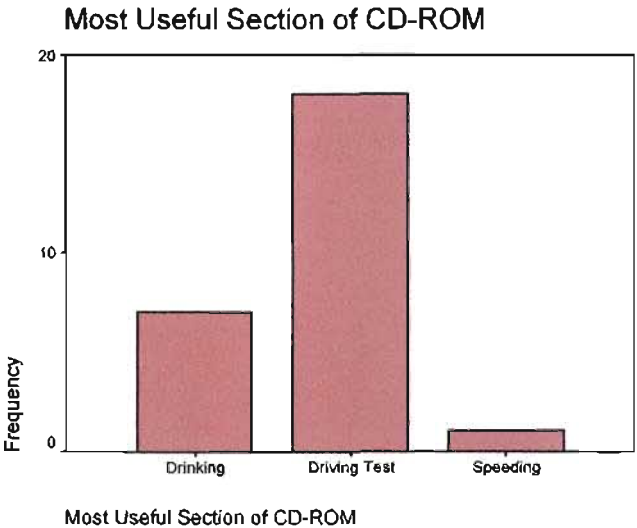


Table 33: Group 1Most useful section of CD-ROM

Table 34 shows the reported use of the breathalysers by the respondents. According to this, a full 94.4% of respondents claimed to have used the breathalysers with only 2 respondents reporting no use. This is heartening as the breathalysers were considered a crucial element of the road safety component of the project as they serve to demystify the abstract drinking limit. Neither of the 2 respondents indicating non-use opted to explain this non-use.

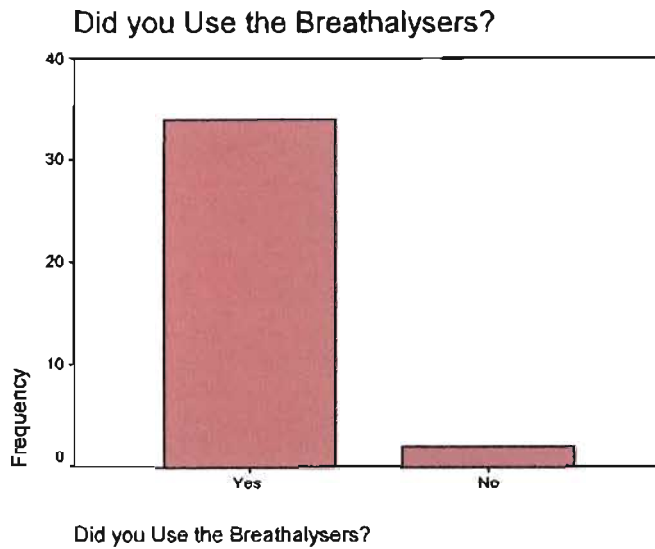


Table 34: Group 1 use of Breathalysers (N=36)

Of these respondents, 70.6% indicated that the use of these breathalysers was either “fun” or “very fun”. Only two respondents claimed that the using the breathalysers was “not fun”.

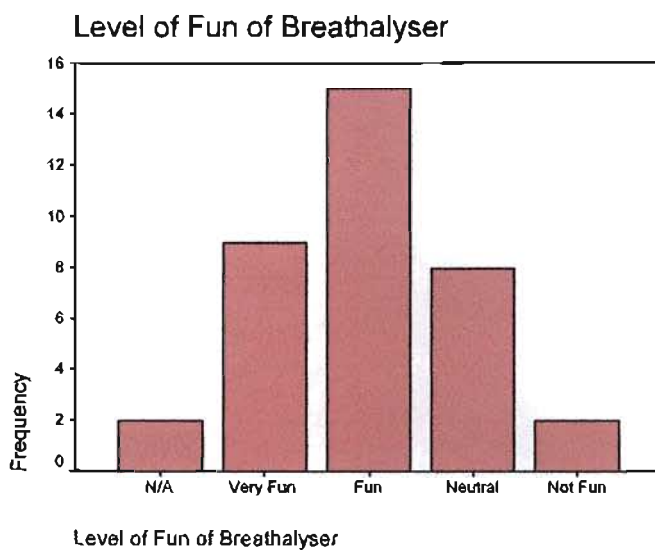


Table 35: Group 1: Level of fun of breathalysers (N=36)

Further interrogating the use of the breathalysers, respondents were asked to describe the setting within which they used the breathalysers. A usable response rate of 55.8% was achieved on this question. Of these 19 responses, the bulk (68.4%) of respondents used the breathalysers in a peer drinking setting (i.e. “party”, “braai”, or “nightclub” environment).

Table 36 shows the amount of drinks that respondents reported having before using the breathalyser. Unfortunately the question was not sensitive to type or serving of drink and so can only serve as a rough guide. As can be seen, the consumption was relatively high in relation to the legal limit which was valuable for the purposes of the breathalyser use. Only 3 of the respondents reported having 2 or less drinks before using the breathalyser. The bulk of the respondents (35.3%) reported having 4 or more drinks before using the breathalyser.

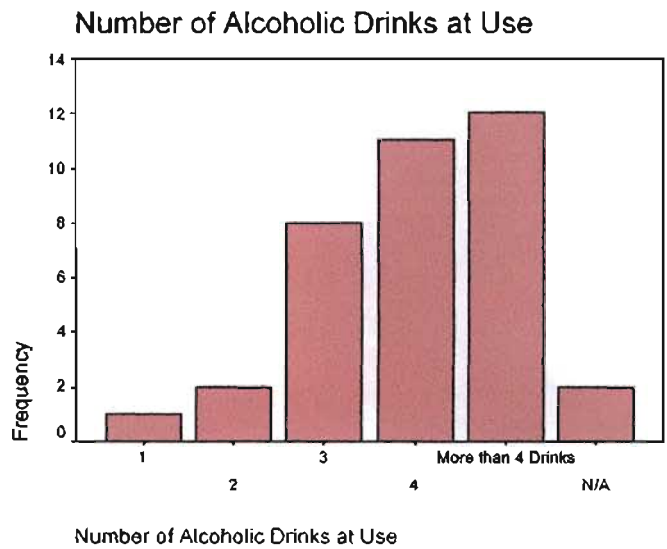


Table 36: Group 1 Number of drinks before using breathalyser (N=36)

The respondents were then asked to indicate whether or not the breathalyser had shown them to be over the legal limit (indicated by a line on the chemical tube). Interestingly, a full 82.4% of respondents that reported using the breathalysers indicated that the breathalyser had showed them to be over the legal limit. This is an important lesson as it

concretises the difference between being legally drunk and considering oneself drunk - a vital distinction.

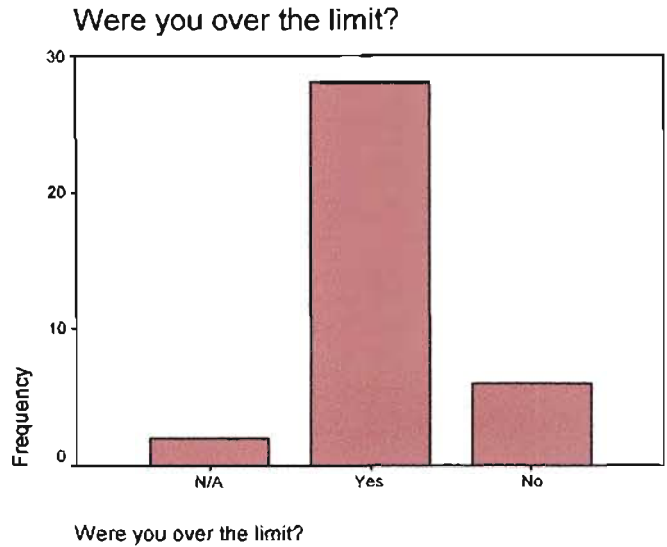


Table 37: Group 1 Over legal limit (N=36)

Respondents were then asked to indicate whether this result was expected and also if they felt they had learnt anything from the use of the breathalysers. Table 38 provides the results of the former and shows that 26.5% of respondents had a result that was unexpected. This means that over a quarter of the respondents were shown to be over the legal limit when they considered themselves to be under it.

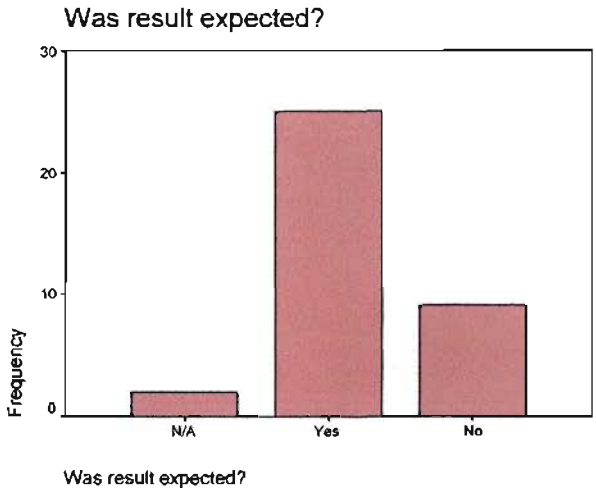


Table 38: Group 1 Breathalyser result expected (N=36)

Table 39 further explores this relationship by indicating how many respondents felt they had learnt something from the use of the breathalysers. Just over half (52.9%) of the respondents reported learning something from the use of the breathalysers.

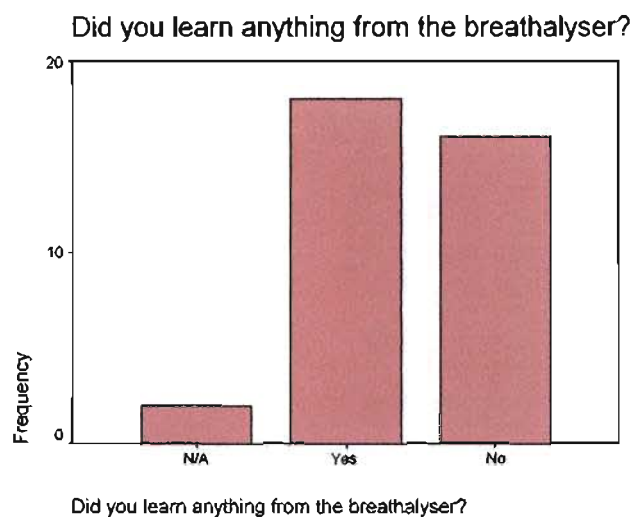


Table 39: Group 1 Learnt anything from breathalyser use (N=36)

This can be further explored by cross-tabulating the results of the previous two tables and presenting the data in the form of a stacked bar chart. Table 40 provides this relationship.

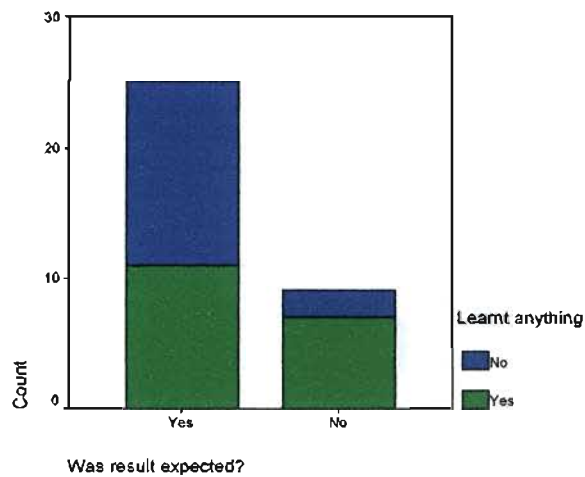


Table 40: Group 1 “Was result expected” * “Learnt anything” cross-tabulation (N=36)

As Table 40 shows, of the respondents that indicated that they had not expected the result, 77.7% reported learning something from the breathalyser. Conversely, of the respondents that had expected the result, a lower percentage of 44% reported learning something from the breathalyser. Thus the unexpected result culminated in a higher reported incidence of learning around the abstract legal limit and the real life drinking context. This is a worthwhile finding for the project in and of itself.

In an open-ended question exploring this some interesting comments were made regarding this learning experience that reinforce this finding.

"I'd just started drinking [...] didn't know I'd go over [the legal limit] that quick..."

"I didn't feel pissed [...] and it [the breathalyser] said I was too drunk to drive."

"The limit is too low you can't expect to only have two drinks at a party"

"We tried to see who was more drunk"

Aside from these specific comments, a general theme showing that the breathalysers had to some extent created an interactive peer dialogue. These participatory results from an essentially modernist project show how the use of action triggers can greatly enhance a development intervention.

The following tables showed the response to the interactive, intangible component of the PassRight project - the cellular Short Message Service (SMS) notifications/competitions.

Table 41 indicates the number of respondents that reported receiving the SMSs. 94.4% of the respondents received at least 1 of the SMSs. The remaining 2 respondents could not give a reason for the non-receipt of the SMSs. A plausible explanation is a cellular number change or administrative error when creating the database.

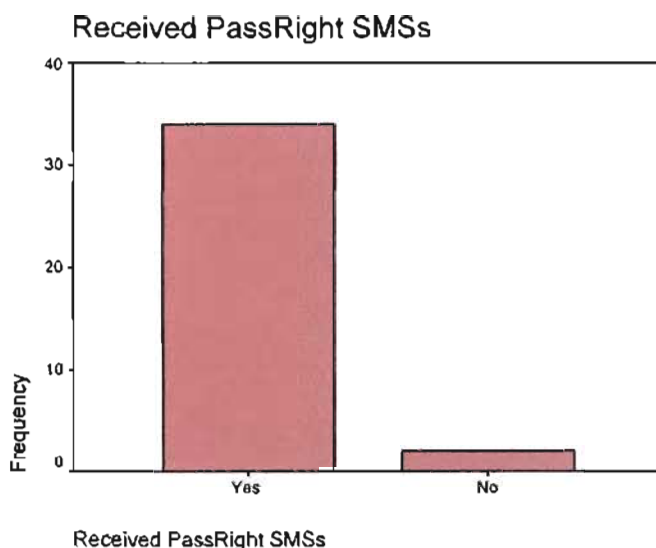


Table 41: Group 1 Receipt of SMSs (N=36)

Of these respondents that received the SMS competitions, 38.2% did not reply to any of the SMSs. Of the remaining 61.8%, at least (not exact due to “unsure” responses) 50% responded to more than 1 SMS. This is a good response rate considering that there is a (albeit slight) monetary cost involved in replying - about 25c. 38.2% of the respondents did not reply to any of the SMSs. Most of these identified that they did not know the competition answer off hand and were unwilling to look it up in the action kits.

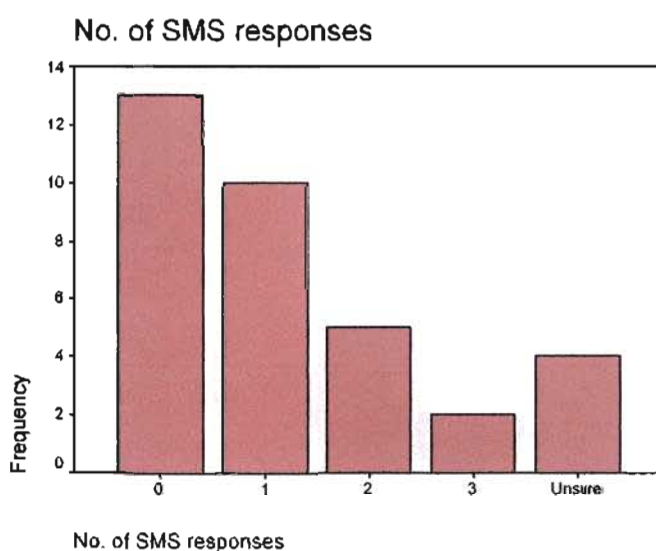


Table 42: Group 1 number of SMS responses

Of the 21 respondents that did reply to the SMSs, 23.8% usually knew the answer before using the action pack, 33.3% usually knew the answer after using the action pack and 19% usually simply guessed at the answer.

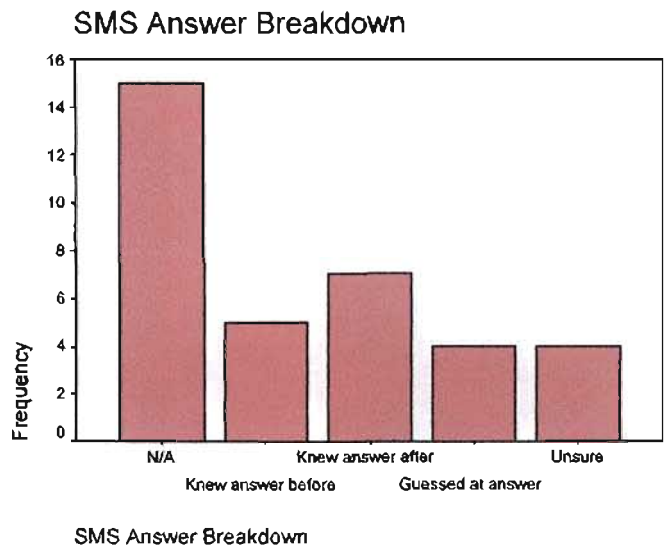


Table 43: Group 1 SMS answer breakdown

This shows that a full third of the respondents learnt the answers through the interaction with the kit. This indicates that an aligned competition can increase kit use in development interventions. This ties in with the results of the open-ended question that explored why respondents replied to the SMSs. All of the usable responses indicated that they responded to win the competition prize. This further dictates that incentives can increase participation in intervention components if managed correctly.

The “hook” that was used to attract participation in the PassRight project was that of the perceived potential to help the participants with aspects of the Driver's Test. This was primarily presented in a “Driver's Test” section of the CD-ROM. It was shown earlier that 69% of respondents found this section of the CD-ROM to be the most useful.

This was further explored in a question asking specifically about the usefulness of the Driver's Test section.

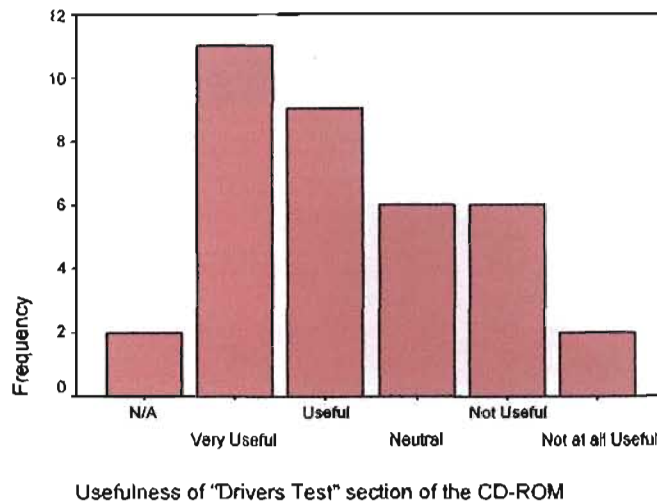


Table 44: Group 1 Usefulness of Driving Test Section of CD-ROM (N=36)

58.8% of respondents found the Driver's Test section either "very useful" or "useful" while 23.5% of respondents found it either "not useful" or "not at all useful".

The use of the other, less interactive, action triggers in the kits was explored. Table 45 shows the reported use of the alcohol measure glass included in the action kits.



Table 45: Group 1 Made use of measuring glass (N=36)

Only 38.9% of the respondents reported using the measuring glass compared to 61.1% that did not use the measuring glass. This result could be explained by pointing to the less “fun” nature of what is in essence a functional guide to alcohol content.

The PassRight key-ring (a licence holder) fared better with just over half of the respondents (58.3%) reporting using it. This slightly increased use can be attributed to the fact that the key-ring is a useful tool for any driver. It was included simply to remind the participant of the PassRight experience once they become road users in the hope that this will keep the road safety learning outcomes in the forefront of their minds.

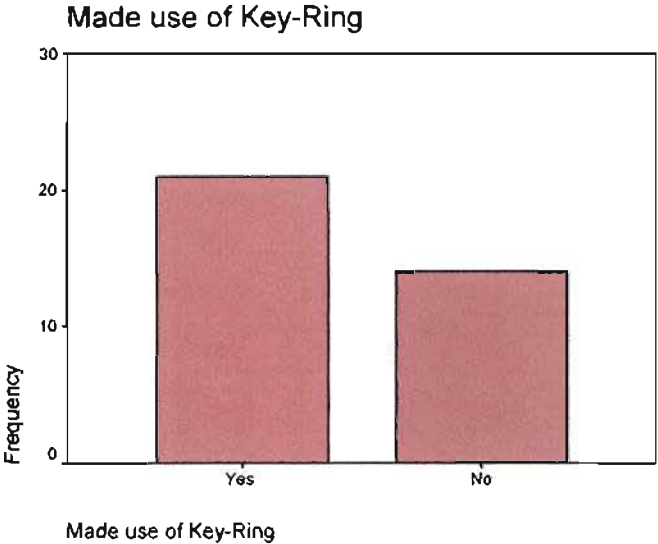


Table 46: Group 1 Made use of key-ring (N=36)

The “stress guide” component of the action kits was included based on the formative research conducted. Table 47 begins to interrogate the role of this guide in the respondents’ Driver's Test experience. As can be seen in the table, 68.6% of the respondents made use of the stress guide to some extent.

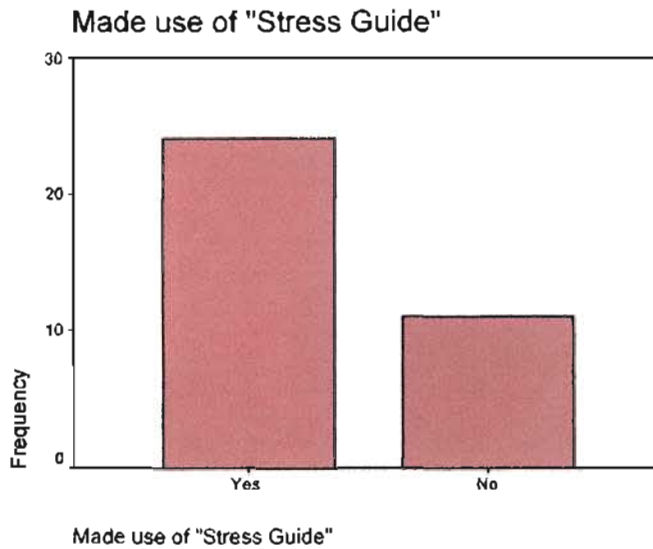


Table 47: Group 1 Use of stress guide (N=36)

Those respondents that had made use of the guide were asked to describe the usefulness of the guide in helping them deal with the stress associated with the Driver's Test. Table 48 gives the findings. Of the 24 respondents that reported using the Stress Guide, 66.7% indicated that they found the guide to be either "very useful" or "useful" in helping them deal with the stress associated with the Driver's Test.

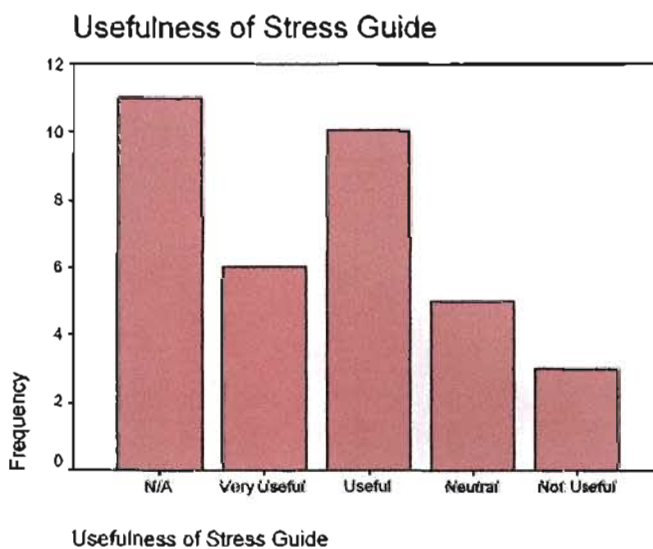


Table 48: Group 1 Reported usefulness of Stress Guide (N=36)

Group 2

Quantitative analyses relating to the second experimental group (group 2) that received informational literature only will be outlined here.

Of the 42 participants in this group, 25 were male and 17 female. As with group 1, gender was not stratified for in the sampling procedure.

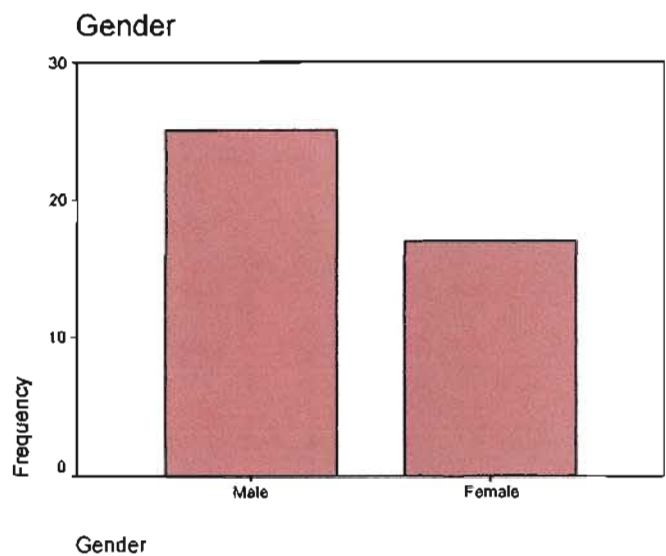


Table 49: Group 2 Gender (N=42)

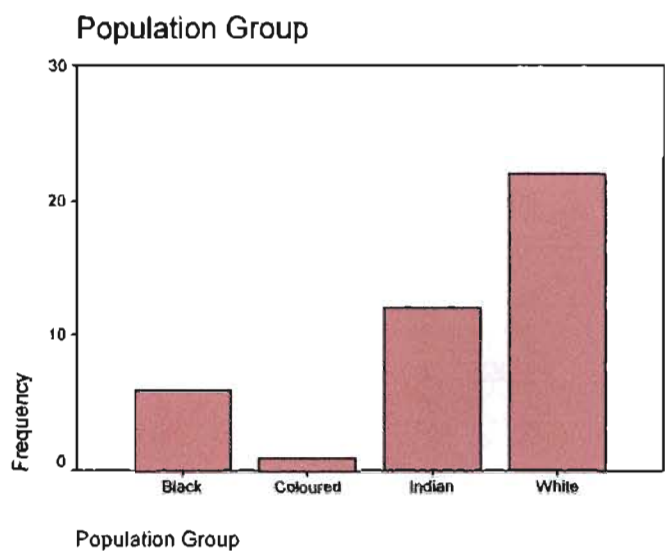


Table 50: Group 2 Population group (N=42)

Table 50 shows the breakdown of the respondents' population groups. As was the case with group 1, the majority of respondents were White and Indian (52.4% and 28.6% respectively).

On the whole, the respondents from group 2 were well-educated. A full 71.4% of respondents had either completed a tertiary degree or were currently engaged in doing so. This can be explained by pointing to the extensive sampling from the University of KwaZulu-Natal students.

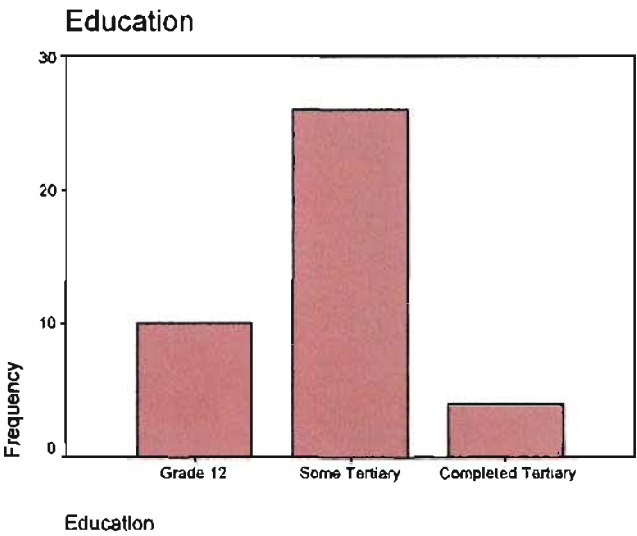


Table 51: Group 2 Education (N=42)

Table 52 below shows the reported level of “fun” of the Information Packs by respondents. This shows that 28.6% of the respondents in group 2 found the information pack to be either “very fun” or “fun”. 41.5% of the respondents reported the information packs to be either “not fun” or “not at all fun”.

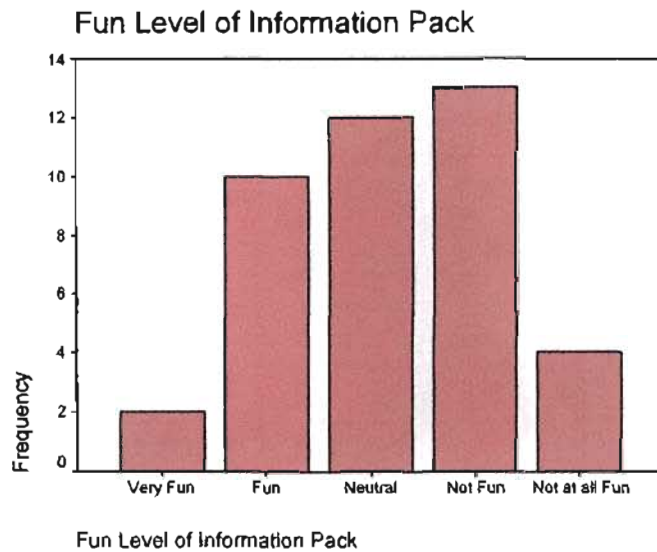


Table 52: Group 2 Fun level of Information Packs (N=42)

Table 53 shows how the respondents ranked the Information packs in terms of how informative they found them to be. This table shows that 41.5% of respondents indicated that they found the information packs to be either “very informative” or “informative” while 26.2% of respondents in group 2 found the information packs to be either “uninformative” or “very uninformative”.

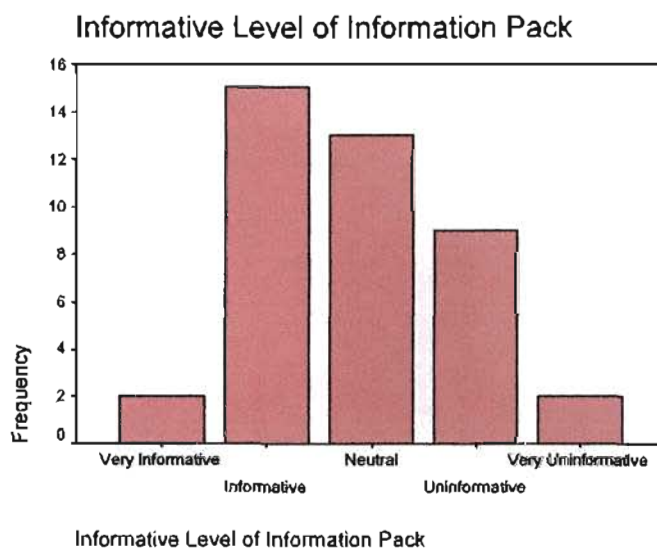


Table 53: Group 2 Informative level of information packs (N=42)

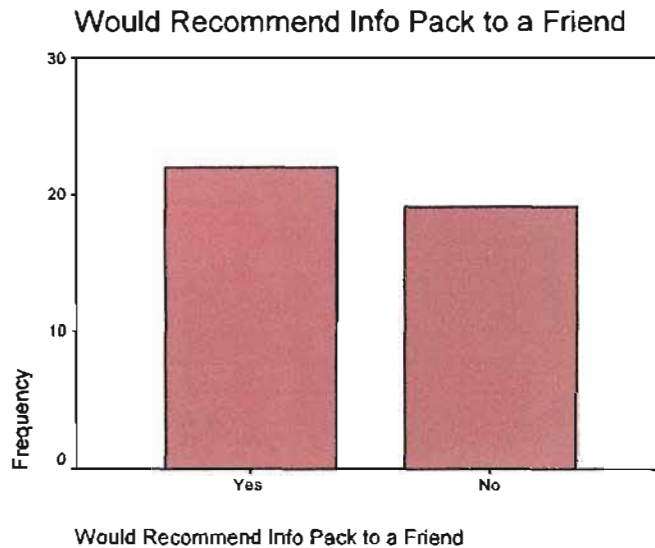


Table 54: Group 2 Recommend to a friend (N=42)

When asked whether they would recommend the information pack to a friend, 53.7% of respondents replied in the affirmative while 46.3% replied that they would not recommend the information packs to a friend.

Groups 1 and 2 Comparisons

The above has dealt with the responses of participants to the action kits (group 1) and the information packs (groups 2) separately. A comparison along common variables relating to these two groups will be made through the provision of stacked graphs resulting from cross-tabulations drawn.

With regards to the reported fun levels of the action kits and the information packs, Table 55 provides a comparison.

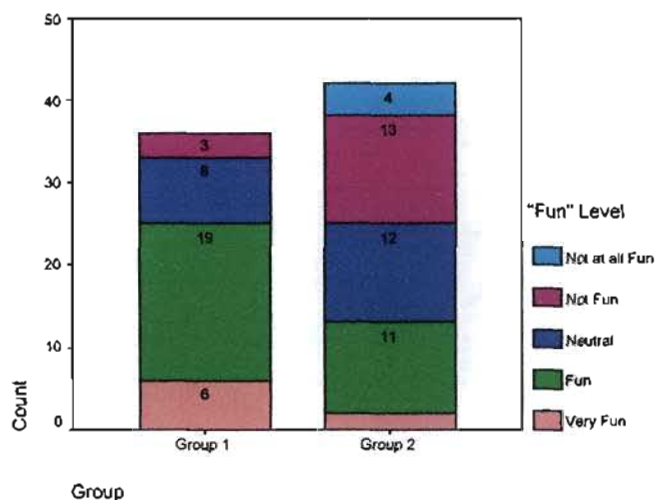


Table 55: Groups 1 and 2 Reported "fun" (N=78)

The difference in the cross-tabulation is striking with a much larger relative percentage of group 1 reporting the actions kits to be “very fun” or “fun” than group 2. This indicates that the provision of the action triggers and related components of the action packs was more appealing than the information only packs.

When comparing the reported informative level of the action kits vs. the information packs, a similar result emerges. Table 56 shows that 75% of respondents in group 1 regarded the kits as “very informative” or “informative” compared to only 40.5% in group 2.

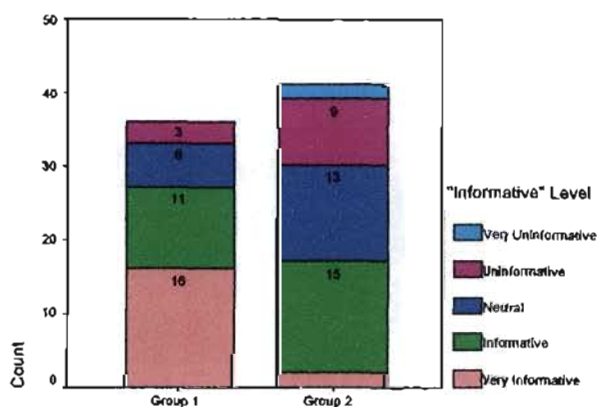


Table 56: Groups 1 and 2 Informative level (N=78)

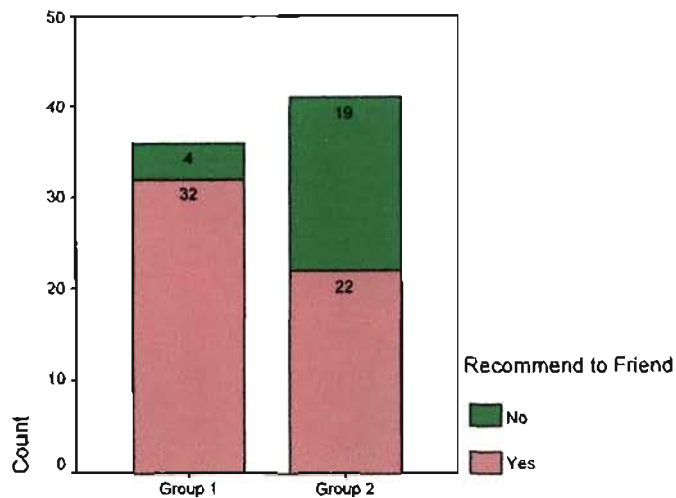


Table 57: Groups 1 and 2 Recommend to friend (N=77)

Table 57 above shows the difference in the number of participants in groups 1 and 2 that would recommend the respective interventions to a friend. Again group 1 fares better with 88.9% of respondents indicating that they would recommend this group to a friend. In group 2 only 53.7% would recommend the intervention to a friend.

The stress kit efficacy was measured by comparing the reported stress experience of the Driver's Test across the three groups. The results are shown in Table 58.

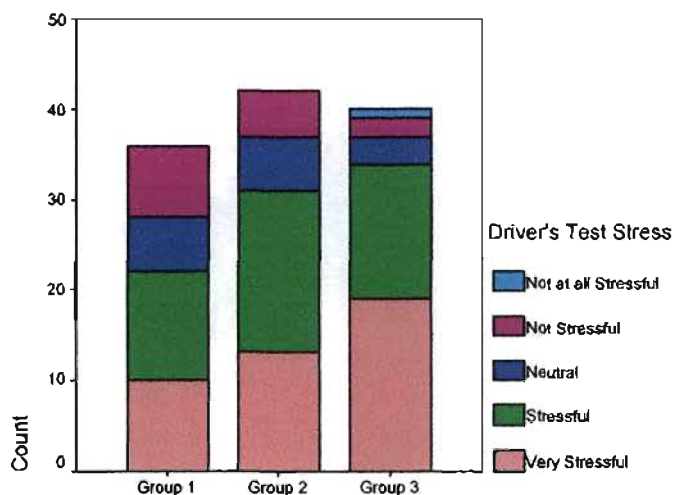


Table 58: Driver's Test Stress - all groups (N=118)

Here it is apparent that Group 1 has a lower reported stress score than groups 2 and 3. 61.1% of group 1 respondents reported the Driver's Test to be either “very stressful” or “stressful” while in groups 2 and 3 the figures were 76.2% and 85% respectively.

This finding indicates that the stress pack included in the action kits may have lowered the stressfulness of the Driver's Test for some respondents. However this finding should be treated as speculative only as the difference between groups 2 and 3 is not able to be explained.

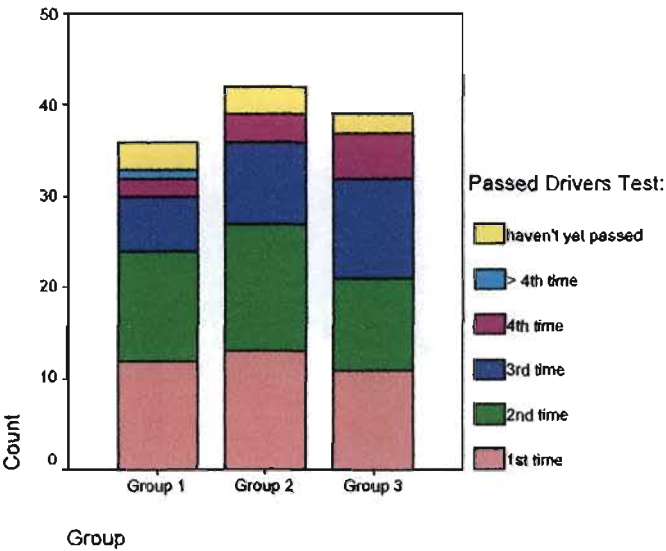


Table 59: Drivers Test result (N=118)

Table 59 compares the results of the Driver's Test in terms of attempts before passing. This table shows no significant difference between the groups. This leads to the conclusion that the action kits do not influence performance in the Driver's Test. This is only a problem in that it can lower the credibility and buy in of participants into the project. The role of the action kits in bettering Driver's Test performance is merely the ostensible function of the projects with the core function being attitudinal and behaviour change around the identified road safety issues.

Attitudinal/behaviour Inventory Comparisons

Across all three groups (two experimental and one control) the participants were asked to complete an attitudinal and behavioural inventory in which they were asked questions about issues of road safety. This section will present the findings of the inventory in three ways - by presenting aggregate data across all groups, by presenting comparative analyses for each item and by creating a scored and inferential measure of the inventory across the three groups.

This section is the core component of the findings of the project as it point to the exacted difference between the groups in attitude and behaviour based on the intervention they received. This will either prove or discard the hypothesis that the action kit group will perform better than the information and control groups in the inventory.

Undifferentiated Results

The results of the inventory will be presented here in an undifferentiated form to identify the answers provided for all respondents.

The first item asks respondents to identify the legal Blood Alcohol Limit in South Africa. A choice of 5 answers was given. The correct answer is 0.05. As Table 60 shows, of the 118 responses, 45 (38.1%) were correct. This was also the answer with the highest frequency.

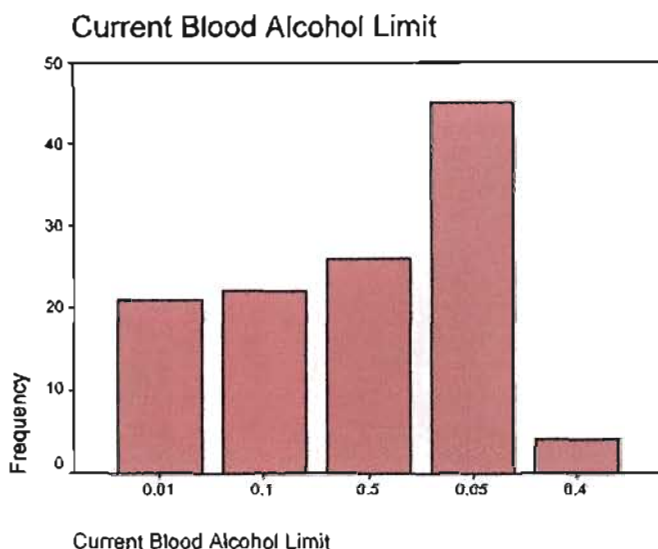


Table 60: Current BAL - all groups (N=118)

The following item of the inventory asked the respondents to identify how many normal (4.5%-5.5% alc) strength beers would cause a person to exceed the legal limit.



Table 61: No. of Beers to Exceed BAL - all groups (N=118)

This is a problematic question as this relationship can be influenced by many external factors (gender, weight, stomach contents etc) however it is an important concept to

capture as it indicates the ability of respondents to translate the abstract legal limit into an behavioural reality.

The most correct and acceptable answer was “2 beers”. Table 61 breaks down the answers given by the respondents. Of the 118 responses, 40.7% of respondents identified the correct answer. This was also the answer with the highest frequency.

The next item asked the respondents whether it was acceptable to drink and drive. The possible responses given were “yes”, “no” and “sometimes”. The correct answer (for the purposes of the study) is “no”. As Table 62 shows, just over half the respondents (55.9%) said that it was not acceptable to drink and drive. This was followed by “sometimes” (22.9%) and “yes” (21.2%).

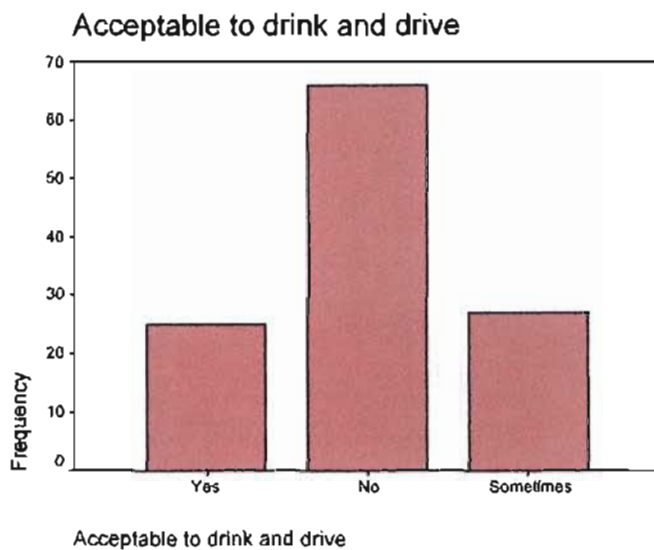


Table 62: Acceptable to Drink and Drive - all groups (N=118)

The next item was a behavioural item and asked the respondents if they had ever driven under the influence of alcohol. Table 63 shows the results.

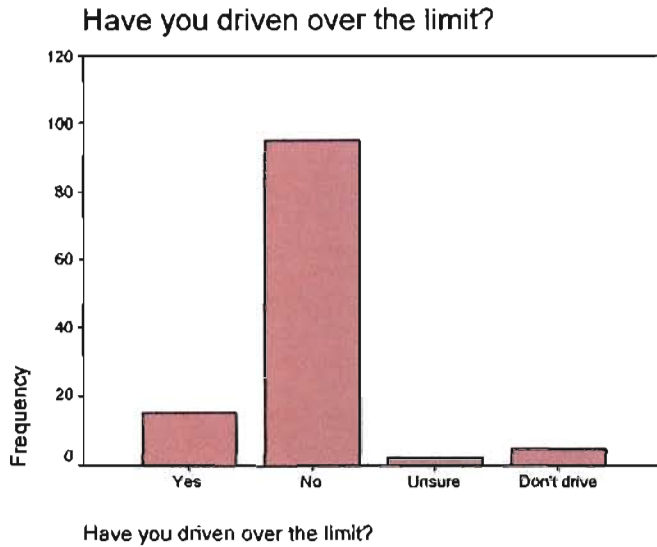


Table 63: Driven over the limit - all groups (N=118)

It is apparent from the table that the majority of respondents have not driven under the influence (80.5%) with 12.7% claiming they have driven under the influence, 1.7% unsure as to whether they have or not and 4.2% indicating that they do not drive.

The next item was also a behavioural item and asked respondents about their speeding behaviour. Respondents were asked how often they exceeded the speed limit.

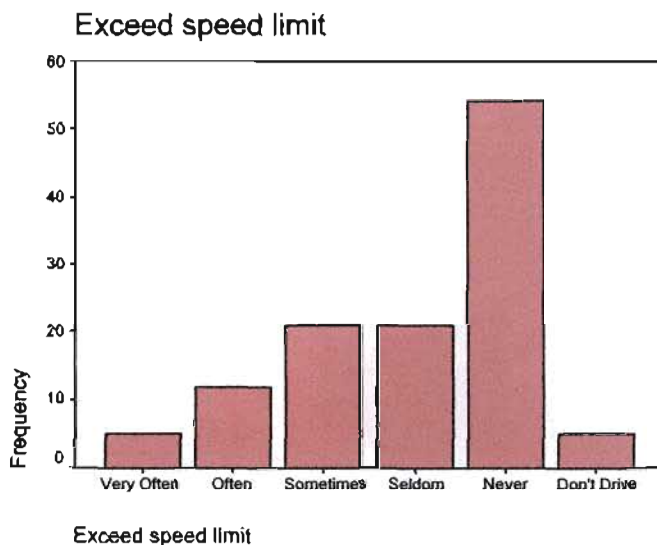


Table 64: Reported speeding behaviour - all groups (N=118)

The data shows that 14.4% of respondents indicated that they exceed the speed limit either “very often” or “often”. A further 35.6% of the respondents reported exceeding the speed limit either “sometimes” or “seldom”. 45.8% of respondents claimed that they do not exceed the speed limit and 4.2% reported that they do not drive.

Respondents were then asked a related attitudinal question regarding whether they consider it safe to exceed the speed limit. Table 65 shows the results.



Table 65: Safe to exceed speed limit - all groups (N=118)

36.4% of respondents indicated that it was safe to exceed the speed limit and 63.6% said that it was not safe to exceed the speed limit.

The next item was a further measurement of belief around speeding. This item asked respondents to indicate their strength of agreement with the statement “Exceeding the speed limit can greatly influence your chances of having an accident”. As can be seen in Table 66 below, the majority of respondents either strongly agreed or agreed with the statement (17.8% and 33.9% respectively). 24.6% of respondents gave a neutral response and 23.7% either disagreed or strongly disagreed.

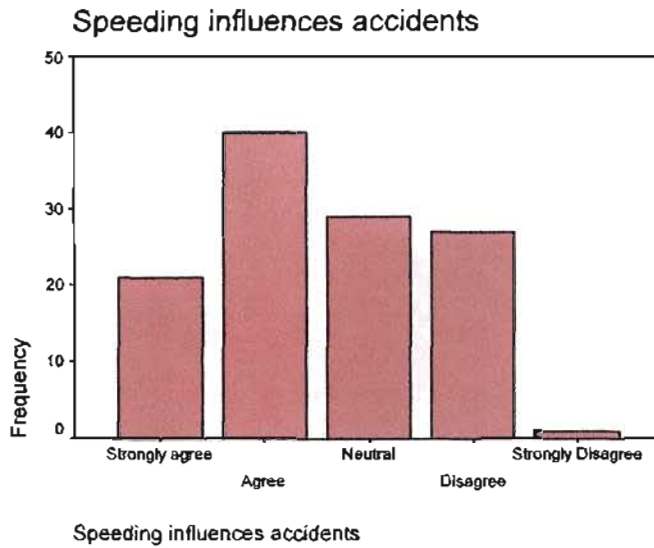


Table 66: Speeding influences accidents - all groups (N=118)

The following item was also an attitudinal measure. It asked respondents to identify the level of importance of “looking out for pedestrians while driving”. As Table 67 shows, a full 72.9% of respondents considered it either very important or important to look out for pedestrians. 9.3% thought it either unimportant or very unimportant and 17.8% were neutral.

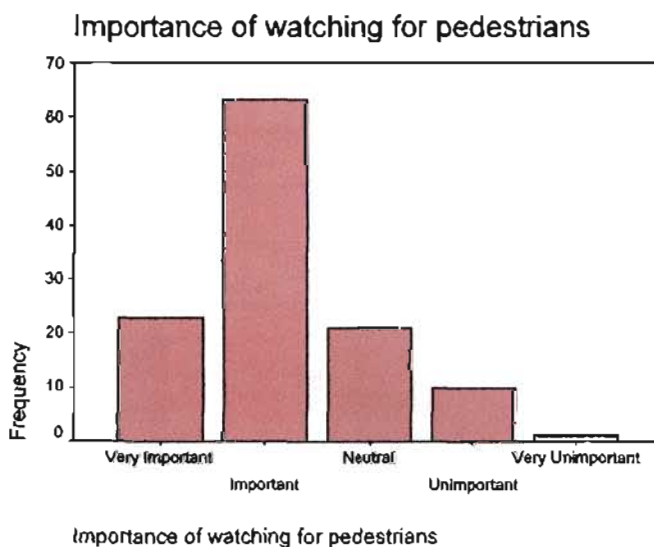


Table 67: Importance of watching for pedestrians - all groups (N=118)

Differentiated Results

The inventory results need to be further delineated by cross-tabulating the results by group. This will allow more meaningful descriptive comparisons between the two experimental groups and the control group.

Table 68 shows the breakdown of the identified BAL by group. The table shows that a higher percentage of group 1 participants (55.5%) gave the correct answer (0.05) than groups 2 and 3 (33.3% and 27.5% respectively). This indicates that the action kits played a role in educating the respondents about the BAL through its use of multiple reinforcing components.

Group * Current Blood Alcohol Limit Crosstabulation

Count		Current Blood Alcohol Limit					Total
		0.01	0.1	0.5	0.05	0.4	
Group	Group 1	5	5	6	20	0	36
	Group 2	5	9	14	14	0	42
	Group 3	11	8	6	11	4	40
Total		21	22	26	45	4	118

Table 68: BAL Limit cross-tabulation - by group

The interrogation of the limit into a realistic measure (no. of beers) also showed group 1 achieving a better result than the other groups. Table 69 shows how 61.1% of respondents in the group receiving the action kits identified the correct answer (2 beers) compared to groups 2 (28%) and 3 (35%). This success in interrogating the legal limit can be linked to the popularity of the disposable breathalysers included in the kit attested to in the previous findings.

Group * No. of beers to exceed limit Crosstabulation

Count		No. of beers to exceed limit						Total
		1.00	2.00	3.00	4.00	5.00	6.00	
Group	Group 1	2	22	9	1	2	0	36
	Group 2	1	12	23	5	0	1	42
	Group 3	4	14	12	8	2	0	40
Total		7	48	44	14	4	1	118

Table 69: No. of beers cross-tabulation - by group

The difference in attitude regarding the acceptability of drinking and driving was measured across the three groups and presented in Table 70.

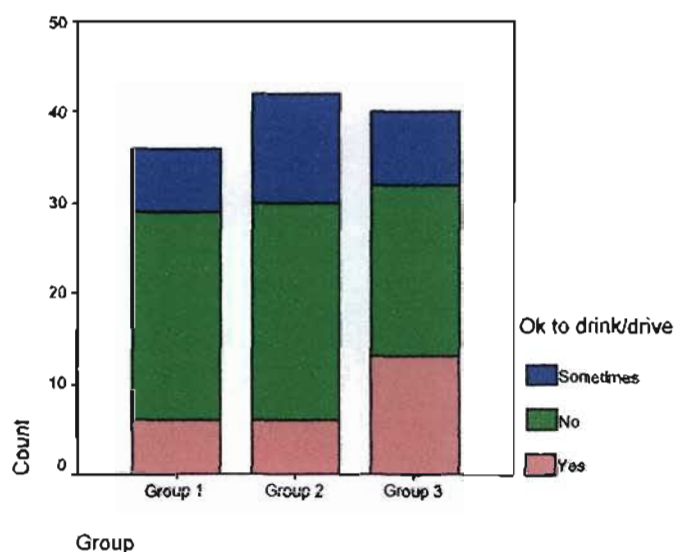


Table 70: Acceptable to drink and drive - by group (N=118)

Group 1 performed slightly better than group 2 with 63.8% of respondents indicating that it is not acceptable to drink and drive compared to 57.3% in group 2. Both group 1 and group 2 fared better than the control group with 49.6% reporting that it is not acceptable to drink and drive. This suggests that both the action kits and the information packs influenced the attitude towards drinking and driving positively.

The behavioural indicator measuring driving whilst over the legal limit was differentiated by group. Table 71 gives the results.

Group * Have you driven over the limit? Crosstabulation

Count		Have you driven over the limit?				Total
		Yes	No	Unsure	Don't drive	
Group	Group 1	4	29	2	1	36
	Group 2	8	31	0	2	41
	Group 3	3	35	0	2	40
Total		15	95	2	5	117

Table 71: Driven over BAL - by group

80.5% of respondents in group 1 have never driven over the BAL. 75.6% of group 2 respondents had never driven over the BAL and 87.5% of group 3 respondents had never driven over the BAL. This result shows that the intervention type has no effect on the drinking and driving behaviour of the respondents.

Cross-tabulating the response to the behavioural measure of exceeding the speed limit by group gives the following data.

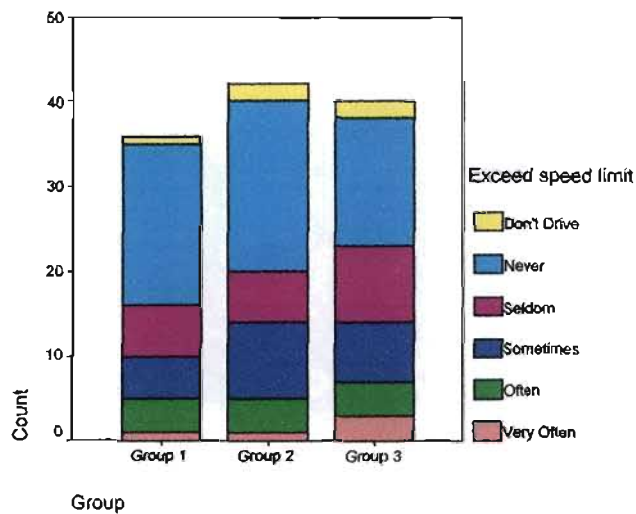


Table 72: Exceeded the speed limit - by group (N=118)

Table 72 shows that there are some minor differences in reported speeding across the groups. The differences are not significant enough to draw any conclusions as to the impact of the interventions on this behaviour.

The attitudinal measure of this issue is cross-tabulated by group in Table 73.

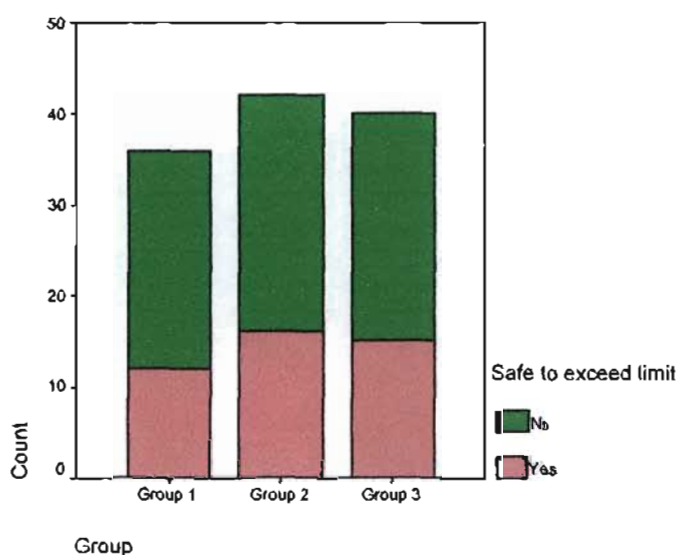


Table 73: Safe to exceed speed limit - by group (N=118)

In group 1, 66.7% of respondents considered it unsafe to exceed the speed limit. This is compared to 61.9% in group 2 and 62.5% in group 3. Thus, although the action kit group scored higher on this measure, the difference is not significant enough to warrant drawing consider the action kit intervention as significantly influential in changing attitudes about speeding.

The next item further explores the belief around speeding and is cross-tabulated by group. Table 74 shows that 63.8% of respondents in group 1 either strongly agree or agree that speeding greatly increases the risk of an accident. In groups 2 and 3 the percentage of respondents either strongly agreeing or agreeing that speeding greatly increases the risk of an accident is 50% and 42.5% respectively. Thus group 1 has a proportionately higher score than groups 2 and 3. Coupled with the results of the above table a conclusion may

be drawn that the action kits may play a role in positively influencing attitudes around speeding.

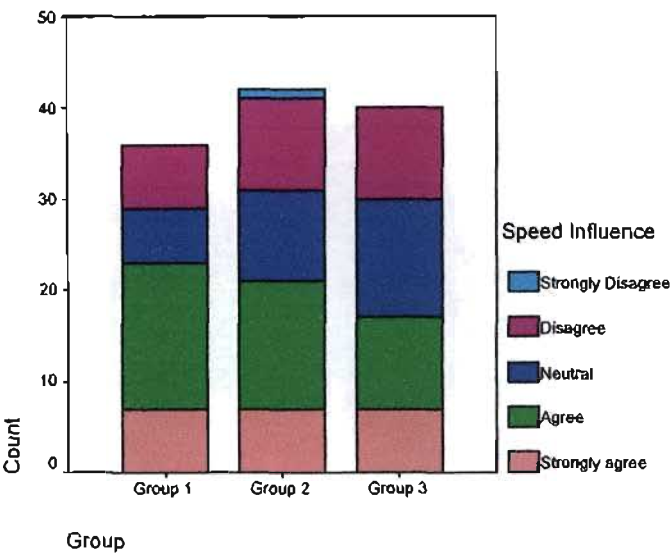


Table 74: Speed influences chance of accident - by group (N=118)

Table 75 below breaks down the reported importance of looking out for pedestrians while driving by group.

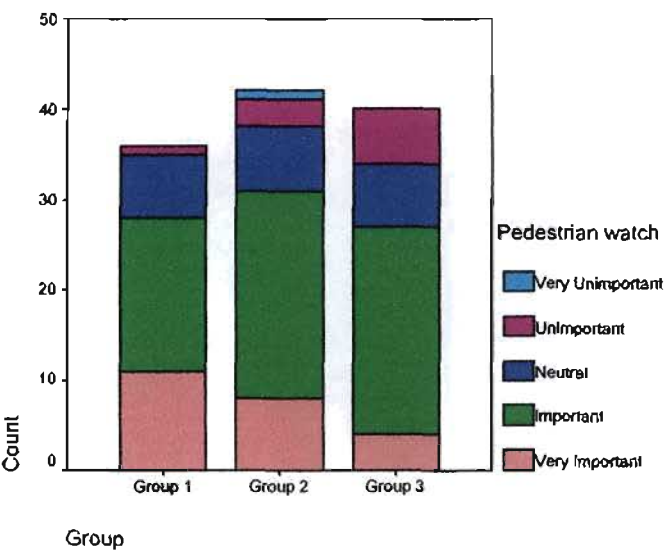


Table 75: Importance of watching for pedestrians - by group (N=118)

This table shows that 77.8% of respondents in group 1 consider looking out for pedestrians either “very important” or “important”. This is compared to 73.8% and 67.5% in groups 2 and 3 respectively. Again a conclusion can be made that both interventions positively influenced the attitudes towards pedestrian awareness with the action kit group being particularly efficacious.

Attitude vs. Behaviour

The findings so far have shown results of respondents to questions measuring knowledge, attitudes and behaviour. However the gap between belief and behaviour is often not as straightforward as imagined. To capture this, the reported attitudes of respondents were compared to their actual behaviour.

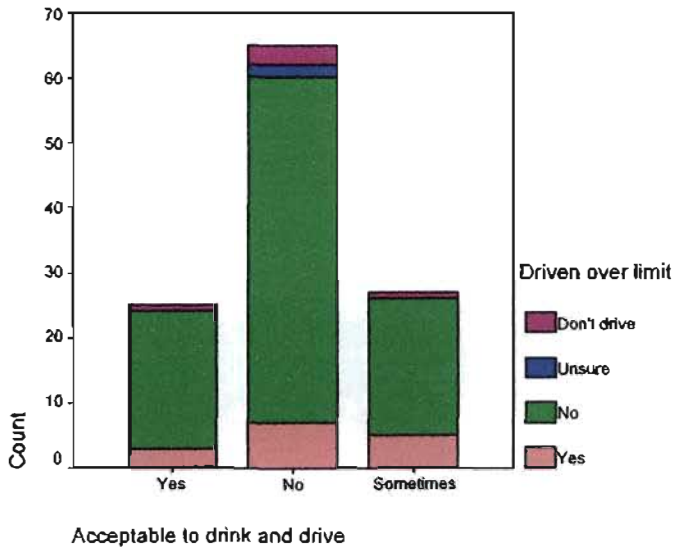


Table 76: Acceptable to drink and drive and reported drinking driving behaviour (N=118)

Table 76 provides a comparison of respondents’ belief in the acceptability of drinking and driving with their behaviour in this regard. The results are interesting in that, of the respondents that report the belief that it is not acceptable to drink and drive, one in ten (10.8%) report doing do. This highlights a problem faced by all development

professionals - the difficulty of translating belief change into behaviour change. The next table continues in this vein.

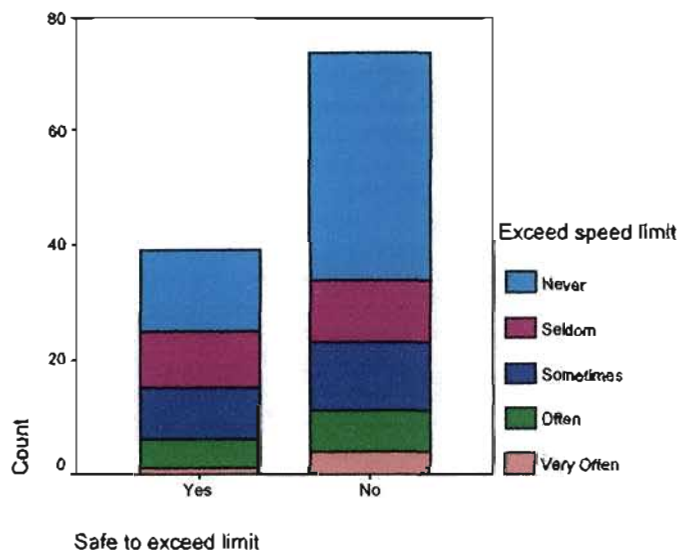


Table 77: Safe to exceed speed limit and reported speeding behaviour (N=118)

Table 77 provides a comparison of the respondents' attitudes towards speeding and their reported behaviour in this regard. Again a difference is found between belief and behaviour. Of the 75 respondents that indicated that it was not safe to exceed the speed limit, 45.3% report doing so to some degree with 14.7% reporting doing so either "very often" or "often".

Scored Inventory Results

In order to provide a meaningful analysis of the results obtained from the inventory, the items were converted to scores. Each choice on every item was given a numerical value based on the relevance to the road safety goals. For some items this was a binary choice i.e. 1 point for a correct answer and 0 for an incorrect answer. An example is the first item asking respondents to identify the BAL in South Africa. The answer 0.05 was given a value of 1 and any other answer given a value of 0. Other items were given scale values of negative and positive numbers. For example the question measuring the importance of looking out for pedestrians was scored as follows:

Very Important	[2]
Important	[1]
Neutral	[0]
Unimportant	[-1]
Very Unimportant	[-2]

The score on all items for each respondent was summed to provide a total road safety inventory score for that respondent. This score had a possible range of between -7 and 11. The score of respondents were calculated by groups and the measures of central tendency and dispersion were carried out. Table 78 provides the results.

Statistics				
	All Groups: Score	Group 1: Score	Group 2: Score	Group 3: Score
N	118	36	42	40
Mean	4.2458	5.3889	3.9762	3.5000
Median	4.0000	5.5000	4.0000	3.5000
Std. Deviation	2.63421	2.67558	2.56133	2.37508
Range	12.00	12.00	11.00	9.00

Table 78: Inventory scores and measurement - all groups

The undifferentiated average score across all groups was 4.24 with a median of 4. There was no great deviation around this mean with a standard deviation of just 2.63.

Group 1 achieved the best result with an average score of 5.38 and a median score of 5.5. Group 2 achieved the 2nd highest result with a mean score of 3.97 a median of 4 and a standard deviation of 2.56. Group 3 respondents obtained a mean and median of 3.5 and a standard deviation of 2.37.

To further explicate this performance, the inventory was broken down into three components - Knowledge, Attitudinal and Behavioural. Each of these components consisted of items in the inventory that tested participants along each of these criteria.

The results are presented in terms of measures of central tendency and dispersion around the mean. To establish a bench mark for results, Table 79 shows the score on each of these criteria across all participants.

	Attitude Inventory	Behaviour Inventory	Knowledge Inventory
N	118	118	118
Mean	2.1017	1.3559	.7881
Median	2.0000	1.5000	1.0000
Std. Deviation	1.71663	1.64616	.72621

Table 79: Differentiated Inventory results - all groups

Table 80 breaks down the attitudinal inventory score by group. Here Group 1 performs better than the other 2 groups. Both group 1 and group 2 performed better than the control group with no intervention.

	Attitude G1	Attitude G2	Attitude G3
N	36	42	40
Mean	2.6667	2.0000	1.7000
Median	2.0000	2.0000	2.0000
Std. Deviation	1.83615	1.66748	1.55580

Table 80: Attitudinal Inventory - by group

Table 81 breaks down the behavioural inventory score by group. Here Group 1 performs better than the other 2 groups. Both group 1 and group 2 performed better than the control group with no intervention.

	Behaviour G1	Behaviour G2	Behaviour G3
N	36	42	40
Mean	1.5556	1.3571	1.1750
Median	2.0000	2.0000	1.0000
Std. Deviation	1.57561	1.60520	1.76704

Table 81: Behavioural Inventory - by group

Table 82 breaks down the knowledge or educational inventory score by group. Again Group 1 performs better than the other 2 groups. Both group 1 and group 2 performed better than the control group with no intervention.

	Knowledge G1	Knowledge G2	Knowledge G3
N	36	42	40
Mean	1.1667	.6190	.6250
Median	1.0000	.5000	1.0000
Std. Deviation	.73679	.69677	.62788

Table 82: Knowledge Inventory - by group

This unequivocally shows that group 1 respondents performed better overall on the inventory compared to groups 2 and 3. The conclusion can be drawn that the action kits achieve better attitudinal, educational and behavioural effects than the information packs. Although the information packs do increase performance along these lines when compared to no intervention (group 3), the results clearly show them to be less efficacious than the action kits.

Qualitative Findings

Introduction

This section will focus on the qualitative findings produced from the focus group carried out to engage in discussion of the action kits by non-participants. The participants were provided with a frank introduction to the background and objectives of the project and asked to comment regarding their thoughts on the usefulness of the kit in achieving these.

Themes

Buy in

The focus group participants were asked to discuss the potential for buy in into the project - i.e. would they have wanted an action kit when they were learner drivers. The responses were positive with many indicating that they would have wanted a kit if they felt it might help them to pass. However some participants noted that (and this was found to be a problem in the project) they would probably just want to get all the “free stuff”. One participant felt she would not want to get a kit because it would add more things to think about while preparing for the Driver's Test.

CD-ROM

Unfortunately, the CD-ROM could only be discussed through explanations as computers were not used. A mixed response was obtained. Some respondents felt that the CD-ROM would not be accessible to students without home computers as the LAN administrators don't like students participating in non-academic activities on the university computers.

Contents - miscellaneous

The breathalysers were seen as novelty items with potential for fun use. One participant said that he would want to get drunk just to see if they work. Regarding the interrogation of the BAL in South Africa, respondents said that there is difficulty getting people to stop drinking and driving even if they know they are over the legal limit - a valid observation regarding road safety interventions in general. Some participants claimed that it is ok to drink and drive if you are careful as the “cops” don’t trap much except for Easter and Christmas. This is a common problem and highlights the gap between knowledge and behaviour found in the quantitative findings.

Much talk around the statistics on the scratch card component was generated. Some participants said that they were not aware of the high chance of being in an accident - giving evidence that the scratch card novelty does give rise to knowledge and thought on accidents.

Most participants said that they would not use the measurement glass as they did not see where it would be useful. One participant said that he would feel like an idiot if he took the glass to a party to measure his drinks.

The stress pack was regarded as useful by some who claimed that the Driver’s Test was very stressful although other respondents agreed that it was “too much effort” to read and learn the techniques.

Communication

The SMS competitions were discussed and some respondents said that a problem is that they sometimes do not have the “airtime” to reply to their friends’ SMSs and so wouldn’t bother replying to the project SMSs. One participant said that they would respond only to win the prize - a mall voucher.

Technology

A discussion was prompted on the role of technology in everyday life and how it can be used to reach people in development. An interesting debate over the future of technology emerged with some participants claiming that soon the world would be over run with technology and others who argued that technology is only useful to those with the money to access it.

Regarding the level of technology use in the action kits, participants were optimistic that it can be used by “most people” as almost everyone has a cell and computer.

Comments/suggestions

Participants were asked to give general comments regarding the kits and suggest changes or improvements. One respondent said that the use of video technology might be explored - i.e. putting video clips of the Driver's Test on the CD-ROM. The same respondent suggested a simulated video game where learner could be walked through the Driver's Test using a simulation that deducted points for making mistakes.

One participant expressed concern about the use of the breathalysers as she felt it would encourage drinking - a valid concern that needs to be revisited in future interventions.

Conclusion

The focus group allowed some issues to be explored in a depth not acquirable in quantitative analyses and gave some food for thought on some shortcomings of the action kits. On the whole, the response to the kits was positive and no major problems or objections to the kit's contents were found that might warrant a drastic change to the kit design.

Discussion and Conclusion

The findings of both the quantitative and qualitative measures were positive. This section will briefly link the findings to the identified objectives of the research.

In terms of the role of technology in development, the project showed that, given correct market segmentation and with sensitivity to the existence of the digital divide, the use of technology has great potential in development interventions. This technology needs to be packaged and marketed in such a way as to make it amenable to buy-in from the target audience. The identification of learner drivers as a market and with the included “Drivers Test” section of the kits this project achieved just that.

The technology used in this project was found to be highly utilised and, importantly, fun for the participants. The SMS component allowed real time penetration and interaction with and into the lives of the participants. The CD-ROM was well received by respondents and considered both informative and fun by the vast majority. Other components all were well utilised. Action triggers generate behavioural outcomes that better cement the required learning goals than other methods.

The comparative analyses indicated that the kits were well developed and relevant as well as influential in achieving educational, attitudinal and behavioural outcomes regarding road safety issues.

The use of Social Marketing as a strategic framework goes some way towards explaining these findings as the approach has been shown to provide a comprehensive framework for innovation in development that is contingent on the needs of the audience. This is crucial to any development endeavour as if the intervention is not relevant to the lives and needs of the market then it will not reach that market to any great extent.

Social Marketing has been shown to be more effective than the education approach as it generated greater change in attitudes, knowledge and behaviour. This said, the difference may move beyond this comparison considering the difficulty of generating large scale buy-in from respondents in using an education-only approach.

The evolving nature of technology allows scope for innovation and invention in development interventions that needs to be further explored. Commercial marketers appropriate and utilise new technologies to reach their audiences in new ways. So too should development practitioners consider the use of these technologies for social gain.

Further research is warranted into the development of action kits for other social issues - the tangible and intangible components link together to create a product that is a potentially powerful tool for change.

Other technologies not utilised in this project need also be explored in development interventions - viral marketing, pod casting, blogs, flash gaming and websites (computer and cellular) are just a few of the new technologies emerging as players in commercial marketing strategies that can be used in development. Given a cautious and consumer centric approach to development that Social Marketing provides, the development of such technologies in an innovative way is achievable in development.

Thus two recommendations of this research emerge:

- *Generate further inquiry and practice regarding technology in development and*
- *Recognition of Social Marketing as a viable and more effective strategy for development in road safety and other issues than the education approach.*

As South Africa struggles to meet her identified development goals, such research is vital to contributing to the notion of “best practice” in development.

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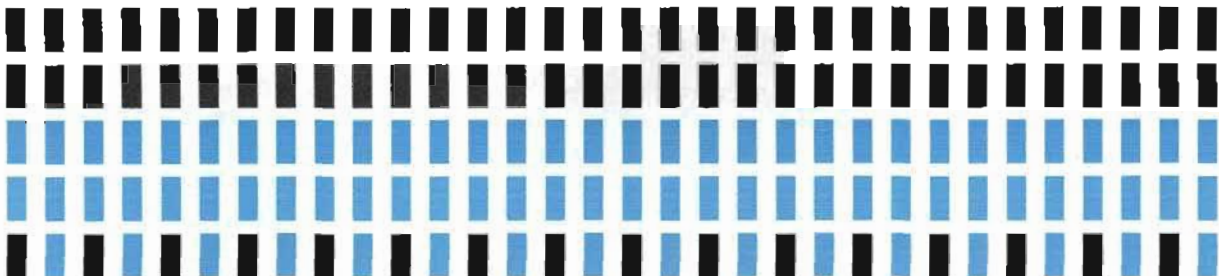
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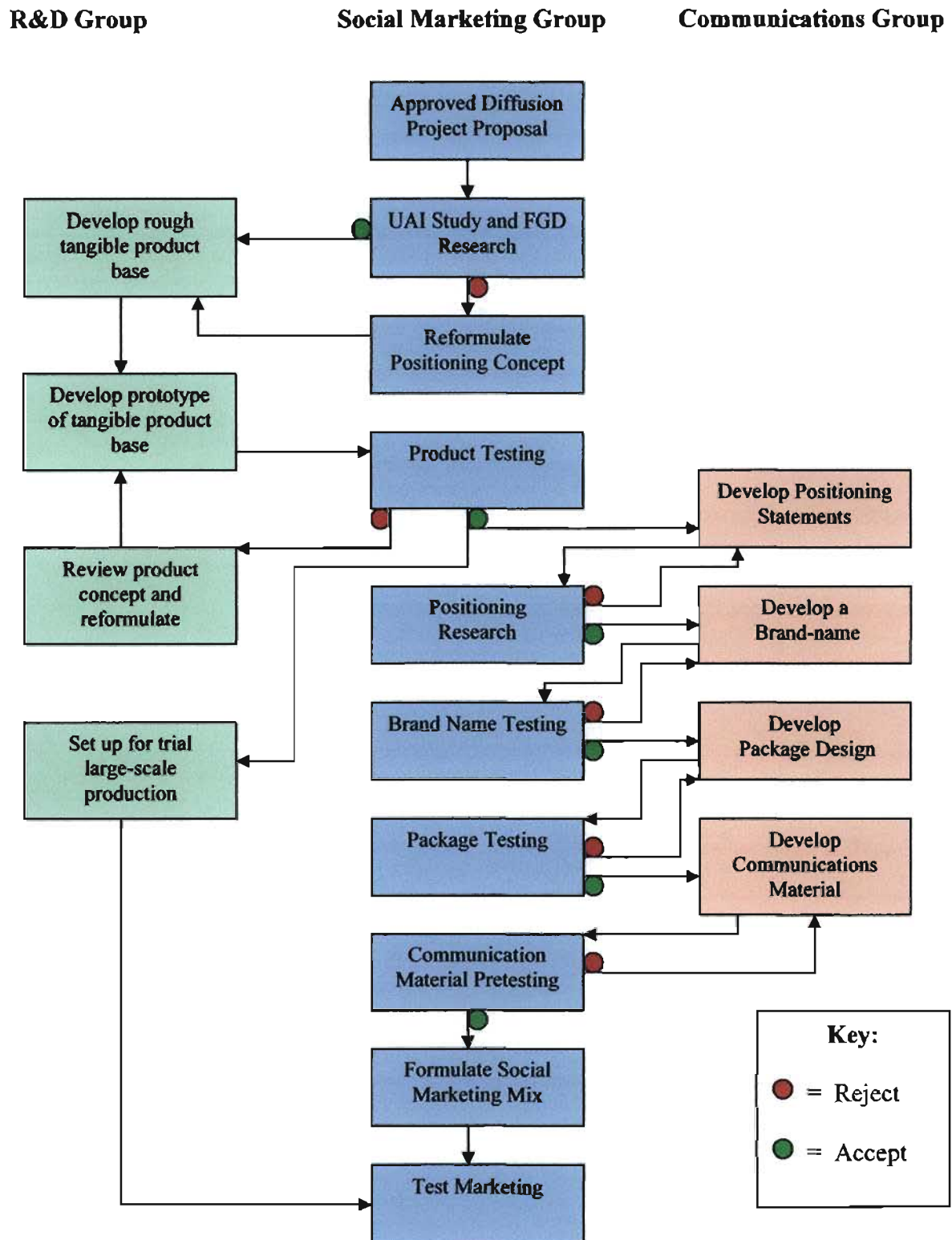
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Appendix A

A Process model for the Development of a Social Product



Adapted from Kotler (1989, 64)

Appendix B

Topics Covered by the Tobacco Action Pack

TAP 1: Tobacco

What is tobacco?

Tobacco arrives in the colonies

A new way to smoke

Tobacco or health?

A healthy response

A battle not yet won

TAP Quiz

TAP 2 : What's in cigarettes?

The ingredients

Tar

Nicotine

Carbon monoxide

Hydrogen cyanide, ammonia, and
formaldehyde

Metals

Radioactive compounds

Other poisonous chemicals

Pesticides and additives

What's in cigarettes - activities

TAP 3: Who smokes?

Who smokes?

Young people and smoking

Who smokes -activities

TAP 4: The health effects of smoking

Many years of research

What does smoking do to us?

Smoking and disease

Low tar does not mean low risk

The final blow

The effects of smoking - activities

TAP 5: Passive smoking

What is passive smoking?

What does the passive smoker breathe in?

Health risks of passive smoking

A public health problem

Solutions

Passive smoking - activities

TAP 6: Tobacco addiction & quitting

Starting to smoke

Why smoke?

Keeping it up...

Habit or addiction?

Deciding to quit

Ways of quitting

Breathing easy

Tobacco addiction and quitting -
activities

**TAP 7: Tobacco advertising &
sponsorship**

Tobacco advertising

About advertising

Rules about advertising

Tobacco advertising in Australia

Should tobacco be advertised?

Tobacco advertising and sponsorship -
activities

TAP 8: The tobacco industry

Growing tobacco in Australia

And around the world

The tobacco manufacturing industry in
Australia

Appealing to the Australian smoker

The tobacco industry's views on the
health effects of smoking

The economics of smoking in Australia

The tobacco industry in Australia -
activities

TAP 9: Smoke free policies

What is a smoke free policy?

A safe place to work - a legal right

People like to be smoke free

Planning a smoke free policy

Smoke free policies - activities

TAP 10: Tobacco policy

Tobacco policy

A comprehensive plan

Putting it into action

Tobacco policies -activities

Appendix C

Formative Questionnaire

Q# :

FORMATIVE QUESTIONNAIRE

I am a Sociology Master's student at the University of KwaZulu-Natal involved in developing kits to help learner drivers pass their Driver's test. As you have just completed this test, any information you can give me will be of great help to those who have yet to experience the test!

Please be honest in your answers and bear in mind that you will remain completely anonymous.

AGE:

GENDER: MALE FEMALE

RACE AFRICAN COLOURED INDIAN WHITE OTHER:

HOW MANY LESSONS DID YOU COMPLETE WITH A DRIVING SCHOOL?

BESIDES THESE HAVE YOU HAD OTHER DRIVING EXPERIENCE? YES NO

DID YOU PASS?	YES	NO				
IF YES, IS THIS YOUR:	1 st ATTEMPT	2nd ATTEMPT	3rd ATTEMPT	4th ATTEMPT	FIFTH ATTEMPT	

DID YOU USE ANY WRITTEN AIDES? YES NO SPECIFY:

WERE YOU FAMILIAR WITH THE TEST GROUND BEFORE YOU WROTE YOUR TEST?	
YES	NO
Please explain:	
<input type="text"/>	
<input type="text"/>	
<input type="text"/>	

WOULD YOU HAVE LIKED TO HAVE MORE INFORMATION ABOUT WHAT TO EXPECT IN THE TEST?	
YES	NO

PLEASE RATE THE FOLLOWING PARTS OF THE TEST ACCORDING TO HOW DIFFICULT YOU FOUND THEM:									
(1 is extremely easy and 10 is extremely difficult) If you did not do one or more of the following, simply leave blank.									
VEHICLE PRE-INSPECTION:									
1	2	3	4	5	6	7	8	9	10
PARALLEL PARKING:									
1	2	3	4	5	6	7	8	9	10
ALLEY DOCKING:									
1	2	3	4	5	6	7	8	9	10
THREE - POINT TURN:									
1	2	3	4	5	6	7	8	9	10
HIGHWAY DRIVING:									
1	2	3	4	5	6	7	8	9	10
INCLINE PULL OFF:									
1	2	3	4	5	6	7	8	9	10
4 - WAY STOP:									
1	2	3	4	5	6	7	8	9	10
TRAFFIC CIRCLE:									
1	2	3	4	5	6	7	8	9	10
GENERAL DRIVING IN TRAFFIC:									
1	2	3	4	5	6	7	8	9	10
BLINDSPOTS, MIRRORS ETC									
1	2	3	4	5	6	7	8	9	10

TO WHAT EXTENT WERE YOU AWARE OF WHAT TO EXPECT IN THE TEST?				
VERY AWARE	AWARE	NEUTRAL	UNAWARE	VERY UNAWARE

HOW STRESSFUL WAS THE DRIVERS TEST FOR YOU?				
VERY STRESSFUL	STRESSFUL	NEUTRAL	NOT STRESSFUL	NOT AT ALL STRESSFUL

WOULD YOU HAVE LIKED TO HAVE MORE INFORMATION ABOUT WHAT TO EXPECT IN THE TEST?	
YES	NO

WHAT DID YOU THINK YOUR CHANCES OF PASSING THE TEST WERE?									
(1 is very unlikely, 10 is very likely)									
1	2	3	4	5	6	7	8	9	10

IS THERE ANYTHING ELSE ABOUT THE TEST THAT YOU THINK WILL HELP FUTURE TEST TAKERS TO KNOW	
Please explain:	
<hr/>	
<hr/>	
<hr/>	
<hr/>	

THANK YOU FOR YOUR TIME

Appendix D

Interview Schedule for Inspector Naidoo

Mkondeni Testing Grounds

7th September 2004

Interview Schedule:

- What is the current pass rate at the testing grounds?
- How difficult would you say the Driver's Test is?
- Have you ever had occasions when you or other officers have been offered money to pass an applicant? If yes, what happened?
- What role do you feel stress plays in influencing the chances of a learner passing or failing?
- Which part of the test itself do learners seem most worried about?
- Do learners ever come to the test without the correct documentation? – ID, learners licence, etc.
- Are there any myths/misconceptions about the test that learners might be influenced by?
- To what extent does prior knowledge of the testing procedure and testing ground layout help or hinder the learners' chances of passing the test.
- Do some traffic officers seem to be more strict or lenient than others?

- Which gender do you feel is more likely to pass first time (if any) and why do you think this?
- Do you feel that the drivers test is a good indication of a learner's ability to function responsibly on the roads?
- Are there any other issues which might influence the chances of the learner passing that are not necessarily related to preparedness?
- What advice would you like to give to learners about to take the test?

Appendix E

Driving School Interview Schedule

- How eager are learners to take the test before they are fully prepared? Is this a hurdle to them passing first time?
- What role do you feel stress plays in influencing the chances of a learner passing or failing?
- Which part of the test itself are learners most apprehensive of?
- Do learners ever come to the test without the correct documentation? – ID, learners licence, etc.
- Are financial restraints influential in “forcing” the learner to take the test before he/she is fully ready?
- Are there any myths/misconceptions about the test learners are be influenced by?
- To what extent does prior knowledge of the testing procedure and testing ground layout help or hinder the learners’ chances of passing the test.
- Do some traffic officers seem to be more strict or lenient than others?
- Which gender do you feel is more likely to pass first time (if any) and why?
- Is the drivers test is a good indication of a learners ability to function responsibly on the roads?
- Are there any other issues which might influence the chances of the learner passing that are not necessarily related to preparedness.

Appendix F

Checklist

DRIVING TEST CHECKLIST



The big day is almost here and you are ready to give it your best - this checklist has been created to ensure that you have all that you need to make your day a success....

Essential Items:

☀ ID BOOK

☐

☀ LEARNER'S LICENSE

☐

☀ ANY DOCUMENTATION RELATING TO YOUR TEST

☐

Tips for a Better Driver's Test Experience:

- ☺ Get a good nights sleep the night before - you will perform better well rested.
- ☺ Eat something before the test - this helps stabilise your blood sugar and keeps you focussed.
- ☺ In pre-test lesson you may make mistakes - relax, that's why it's called practise!
- ☺ Don't invite people to watch the test - this can lead to you losing focus
- ☺ Remain calm, worrying will only make you more likely to make silly mistakes
- ☺ Listen carefully to what the examiner says and traffic officer conducting the test.
- ☺ Make sure your clothes are comfortable and allow you full movement - this is not a fashion show!
- ☺ Make sure your clothes are suited to the weather - check it out on <http://www.weathersa.co.za>
- ☺ If you are able to, try and book a test time outside of peak traffic hours. Mid-morning is ideal.

Good Luck..... PassRight!

Appendix G

Presentation to Driving Schools

SOCIAL MARKETING & ROAD SAFETY PROJECT

2004/2005

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Background

Due to a lack of professionals in the field of transport development, the Eastern Centre of Transport Development (ECOTD) funds post-graduate students in Engineering (Technical) and Sociology (Social) to research issues that will improve the state of transport in South Africa. This centre is a subsidiary of the Department of Transport.

I am currently in my second year of this programme and my area of research is Development Communication, specifically Social Marketing. Social Marketing is, simply put, the use of conventional commercial marketing techniques to improve the quality of life by addressing a social issue. This is a relatively new field and is almost unknown in South Africa. The end goal of my research is to prove the efficacy of the Social Marketing approach over the current educational framework as used by the DoT.

Sampling Method and Kit Development

This research project involves the development of a branded Social Marketing “action kit” for distribution to learner drivers about to undergo the driver’s test. This kit will contain items that will aid the learner in the test situation while not interfering with the driving school method at all. While the contents have not been finalised as formative research is

still underway, such items may include stress reduction aids and checklists for the day of the test.

The kit will be supplemented by a website and CD-Rom as well as sms and email updates. Over and above the driving test aids will be the real reason for the project which is to disseminate road safety information and behaviour triggers using tangible and practical means (for example including breathalyses and branded road safety materials).

Participants will be drawn from the local university and from city driving schools. They will be divided into three groups –

- *Experimental 1:* will receive Social Marketing Kit.
- *Experimental 2:* will receive Educational literature only.
- *Control:* will receive neither.

The participants need to be under 25 years old attempting the test for the first time and with access the necessary technology.

Duration of Study

The study will run from July 2004 to July 2005.

What's in it for the participants?

They will receive incentives for participating (to be determined). The participants in the Experimental 1 group will have the benefit of a fun pack filled with usable items.

What is required of the Driving School?

- To provide a sampling frame of learner drivers meeting the criteria of the study.
- To approach these learners with details of the study and recruit those who are willing to participate.

- To furnish contact details of these learners (with their permission).
- To give the learners a short questionnaire to complete prior to the test.
- To give the learners the kits/informational packs.
- To give the learners a short questionnaire directly after the driving test.

The driving school then would act as a go between for the researcher and the participants.

Thank You

Thank you for your time. I hope you decide to participate in this project as it has the potential to be rolled out at a larger level in the future and that is something with which you could be proud to attach your name.

Appendix H

Group 1 Final Questionnaire

Group “a” Q.No: A-_____

PassRight Debriefing Form

Thank you for participating in our project. We hope that you found the action kits useful! Please take a couple of minutes to fill in the form below. Your answers are completely anonymous, please answer honestly.

Please attach and email this form to the project co-ordinator at: passright@webmail.co.za. If you are unable to email the form for any reason please print this copy out and fill it in by hand. Email us using the address above or ring us on 076 337 0478 to arrange for collection. An SMS reminder will be sent to remind you should you forget.

Highlight your answers by left-clicking your mouse and selecting them. Then apply “Bold” format to the text. This bold format will indicate that that is your chosen answer. In the answers where you are asked to write something simply type your text in. Remember to save the document before attaching to the email.

Section 1: Tell us about yourself:

Gender:

Male: ☐
Female: ☐

Are you:

Black: ☐
Coloured: ☐
Indian: ☐
White: ☐
Other: _____

What is the highest level of education you have achieved?

- Less than grade 10: ☐
- Grade 10: ☐
- Grade 11: ☐
- Grade 12: ☐
- Some tertiary education: ☐
- Completed tertiary education - undergraduate: ☐
- Completed tertiary education - postgraduate: ☐

Section 2: Tell us about your experiences with the project:

1. How fun did you find the PassRight kit?

- Very Fun ☐
- Fun ☐
- Neutral ☐
- Not Fun ☐
- Not at all Fun ☐

2. How informative did you find the PassRight kit?

- Very Informative ☐
- Informative ☐
- Neutral ☐
- Uninformative ☐
- Very Uninformative ☐

3. Would you recommend the action kit to a friend?

- Yes ☐
- No ☐

4. Did you use the CD-ROM?

- Yes ☐
- No ☐ (if no please go to question 8)

5. If no, please explain why not:

6. How many times did you use the CD-ROM?

- | | |
|-------------|-----------------------|
| 1 | <input type="radio"/> |
| 2 | <input type="radio"/> |
| 3 | <input type="radio"/> |
| 4 | <input type="radio"/> |
| 5 | <input type="radio"/> |
| More than 5 | <input type="radio"/> |

7. How 'fun' did you find the CD-ROM:

- | | |
|-----------------|-----------------------|
| Very Fun: | <input type="radio"/> |
| Fun: | <input type="radio"/> |
| Neutral: | <input type="radio"/> |
| Not Fun: | <input type="radio"/> |
| Not at all Fun: | <input type="radio"/> |

8. How informative did you find the CD-ROM?

- | | |
|-------------------------|-----------------------|
| Very Informative: | <input type="radio"/> |
| Informative: | <input type="radio"/> |
| Neutral: | <input type="radio"/> |
| Not Informative: | <input type="radio"/> |
| Not at all Informative: | <input type="radio"/> |

9. Which section of the CD-ROM was most useful to you?

10. Please explain why this was the most useful section:

11. Did you use the breathalysers?

Yes ☐
No ☐

12. If no, please explain why not:

13. How 'fun' did you find the breathalyser?

Very Fun: ☐
Fun: ☐
Neutral: ☐
Not Fun: ☐
Not at all Fun: ☐

14. Please describe the setting in which the breathalyser was used (i.e. location and the people present):

15. How many alcoholic drinks had you had when you used the breathalyser?

0 ☐
1 ☐
2 ☐
3 ☐
4 ☐
More than 4 ☐

16. Did it show that you were over the legal limit?

Yes ☐
No ☐
Unsure ☐

17. Were you expecting this result?

Yes 0
No 0

18. Did the breathalyser teach you anything about alcohol limits?

Yes 0
No 0

19. Please explain the answer above:

20. Did you receive SMSs regarding the PassRight project?

Yes ☐

No ☐

21. How many of the SMSs did you respond to?

0	0
1	0
2	0
3	0
Not sure	0

22. If you did not reply to any of the SMSs, please explain why not:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

23. If you did reply to the SMSs did you usually:

Know the answer before using the kit	<input type="radio"/>
Know the answer after using the kit	<input type="radio"/>
Guess at the answer	<input type="radio"/>
Unsure	<input type="radio"/>

24. Why did you respond to the SMSs?

25. How useful was the “Drivers Test” section of the PassRight CD-ROM?

- Very Useful: ☐
- Useful: ☐
- Neutral: ☐
- Not Useful: ☐
- Not at all Useful: ☐

26. Please explain:

27. Did you make use of the Alcohol measure glass provided in your kit?

- Yes: ☐
- No: ☐

28. Did you make use of the key-ring provided in your kit?

- Yes: ☐
- No: ☐

29. Did you make use of the Stress Guide provided in your kit?

- Yes: ☐
- No: ☐

30. If yes, how useful was this in helping you deal with the stress associated with the Drivers test?

- Very Useful: ☐
- Useful: ☐
- Neutral: ☐
- Not Useful: ☐
- Not at all Useful: ☐

31. Please explain:

32. Please tell us about any thoughts or experiences you wish to share about your experience with the PassRight project:

Section 3: Some quick questions

33. What is the current blood/alcohol limit in South Africa?

- 0.01 ☐
- 0.1 ☐
- 0.5 ☐
- 0.05 ☐
- 0.4 ☐
- 0.04 ☐

34. Roughly, after how many normal strength beers do you exceed this limit?

- 1 ☐
- 2 ☐
- 3 ☐
- 4 ☐
- 5 ☐
- 6 ☐

35. Do you feel it is acceptable to drink and drive?

- Yes ☐
- No ☐
- Sometimes ☐

36. Have you driven while over the legal limit?

- Yes ☐
- No ☐
- Don't know ☐
- I don't drive ☐

37. How often do you exceed the speed limit when driving alone?

- Very Often ☐
- Often ☐
- Sometimes ☐
- Seldom ☐
- Never ☐
- I don't drive ☐

38. Is it safe to exceed the speed limit when driving?

- Yes ☐
- No ☐

39. Exceeding the speed limit can greatly influence your chances of having an accident

- Strongly Agree ☐
- Agree ☐
- Neutral ☐
- Disagree ☐
- Strongly Disagree ☐

40. How important is it to look out for pedestrians when driving?

- Very important ☐
- Important ☐
- Neutral ☐
- Unimportant ☐
- Very unimportant ☐

41. Did you pass your drivers test:

- First time ☐
- Second time ☐
- Third time ☐
- Forth time ☐
- After your forth time ☐
- Haven't yet passed ☐

42. How Stressful was the Driver's Test for you?

- Very Stressful ☐
- Stressful ☐
- Neutral ☐
- Not Stressful ☐
- Not at all Stressful ☐

Thank You for your Time!

Appendix I

Group 2 Final Questionnaire

Group “b” Q.No: B-_____

Information Pack Debriefing Form

Thank you for participating in our project. Please take a couple of minutes to fill in the form below. Your answers are completely anonymous, please answer honestly.

Section 1: Tell us about yourself:

1. Gender:

Male: ☐
Female: ☐

2. Are you:

Black: ☐
Coloured: ☐
Indian: ☐
White: ☐
Other: _____

3. What is the highest level of education you have achieved?

Less than grade 10: ☐
Grade 10: ☐
Grade 11: ☐
Grade 12: ☐
Some tertiary education: ☐
Completed tertiary education - undergraduate: ☐
Completed tertiary education - postgraduate: ☐

Section 2: Tell us about your experiences with the project:

4. How informative was the information pack?

- Very Informative ☐
- Informative ☐
- Neutral ☐
- Uninformative ☐
- Very Uninformative ☐

5. How fun was the information pack?

- Very Fun ☐
- Fun ☐
- Neutral ☐
- Not Fun ☐
- Not at all Fun ☐

6. Would you recommend the information pack to a friend?

- Yes ☐
- No ☐

Section 3: Some quick questions

7. What is the current blood/alcohol limit in South Africa?

- 0.01 ☐
- 0.1 ☐
- 0.5 ☐
- 0.05 ☐
- 0.4 ☐
- 0.04 ☐

8. Roughly, after how many normal strength beers do you exceed this limit?

- 1 ☐
- 2 ☐
- 3 ☐
- 4 ☐
- 5 ☐
- 6 ☐

9. Do you feel it is acceptable to drink and drive?

- Yes ☐
No ☐
Sometimes ☐

10. Have you driven while over the legal limit?

- Yes ☐
No ☐
Don't know ☐
I don't drive ☐

11. How often do you exceed the speed limit when driving alone?

- Very Often ☐
Often ☐
Sometimes ☐
Seldom ☐
Never ☐
I don't drive ☐

12. Is it safe to exceed the speed limit when driving?

- Yes ☐
No ☐

13. Exceeding the speed limit can greatly influence your chances of having an accident

- Strongly Agree ☐
Agree ☐
Neutral ☐
Disagree ☐
Strongly Disagree ☐

14. How important is it to look out for pedestrians when driving?

- Very important ☐
- Important ☐
- Neutral ☐
- Unimportant ☐
- Very unimportant ☐

15. Did you pass your drivers test:

- First time ☐
- Second time ☐
- Third time ☐
- Forth time ☐
- After your forth time ☐
- Haven't yet passed ☐

16. How Stressful was the Driver's Test for you?

- Very Stressful ☐
- Stressful ☐
- Neutral ☐
- Not Stressful ☐
- Not at all Stressful ☐

Thank You for your Time!

Appendix J

Focus Group Guide

Focus Group Activity/Discussion Schedule - September/October 2005

Welcome and Introduction

- Introductions

What is PassRight?

- Background
- Objectives
- Structure of project

The Action Kits

- The idea behind the kits
- Exploring the contents:
 - CD-ROM
 - Breathalysers
 - Scratch card
 - Measure glass
 - Stress Pack
 - Key ring
 - Communication

Discussion Topics

- Technology in our lives
- Any problems with the project
- Usefulness of kits in general
- Brainstorming improvements

Conclusion

- Summary of discussion
- Thank you

Cool drinks and eats