

**VALUES AND ATTITUDES OF PRIMARY SCHOOL
LEARNERS TOWARDS TRAFFIC SAFETY AND TRAFFIC
SAFETY EDUCATION**

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***This work was done to the honour of my
grandfather who passed away just when
I was about to complete this study.
The late Thomas Stanley Phiri***

DEDICATION

*This work is dedicated to Angeline Moipone Bhine, my mom, my grandmother
Ruth Nunu Bhine and my daughter Phemelo Phiri
who was born during this study.*

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ABSTRACT

Title: Values and attitudes for primary school learners towards traffic safety and traffic safety education

The main aim of the study was to determine values and attitudes of primary school learners towards traffic safety and traffic safety education. The role played by parents and teachers in developing positive values and attitudes towards traffic safety and traffic safety education was determined. It was important to find out what can be done by parents and school to teach traffic safety education to learners.

Key concepts like values, attitudes, traffic, safety and education are discussed in details in this study.

A group of learners was selected from fifteen primary schools in Potchefstroom to conduct this study. The main aim was to determine their values and attitudes towards traffic safety and traffic safety education. A questionnaire was developed whereby learners, their parents and their teachers had to fill it out in order to reach the objectives of this study.

From the response of learners, it was evident that learners really value their safety and that it is important for them to be safe road users. They even showed interest in including road safety education in their school curriculum.

The school and parents also showed interest in traffic safety education being included in their children's school curriculum. They even opted to help teaching their children.

The response of the learners, teachers and parents was positive and this indicated how possible it can be to implement/teach traffic safety education in schools.

The study was successful and it is hoped that the teachers can use it to their own benefit and to the benefit of their learners.

OPSOMMING

Titel: Waardes en gesindhede van primêre skoolleerders ten opsigte van verkeersveiligheid en verkeersveiligheidsopvoeding

Die hoofdoel van die studie was om die waardes en houding van laerskool leerders teenoor verkeersveiligheid en verkeersveiligheidsopvoeding te bepaal. Die rol van ouers en onderwysers in die ontwikkeling van positiewe waardes en houdings ten opsigte van verkeersveiligheid en verkeersveiligheidsopvoeding is bepaal. Dit was van uiterste belang om vas te stel wat ouers en die skool kan doen om leerders van verkeersveiligheid bewus te maak.

Sleutelkonsepte soos waardes, houdings, verkeer, veiligheid en opvoeding is in hierdie studie bespreek.

'n Groep leerders van vyftien laerskole in Potchefstroom is gekies om aan die studie deel te neem. Die hoofdoel was om te bepaal wat die leerders se waardes en houdings ten opsigte van verkeersveiligheid en verkeersveiligheidsopvoeding is. 'n Vraelys is ontwerp en leerders, ouers en onderwysers is versoek om dit in te vul ter bereiking van die doelwitte van die studie.

Vanuit die response van leerders is dit duidelik dat leerders werklik waarde heg aan hulle veiligheid en dat dit vir hulle belangrik is om veilige padgebruikers te wees. Hulle het selfs belangstelling getoon in die insluiting van verkeersveiligheidsopvoeding in hulle skoolkurrikulum.

Die skool en ouers het ook belangstelling getoon in die insluiting van verkeersveiligheidsopvoeding in hulle kinders se kurrikulum. Hulle het selfs aangebied om hulle kinders hieromtrent te onderrig.

Die response van die leerders, onderwysers en ouers was positief en dit is 'n aanduiding van die moontlikheid vir die implementering/onderrig van verkeersveiligheidsopvoeding in skole.

Die studie was suksesvol en die navorser hoop dat die onderwysers dit tot hulle eie voordeel asook dié van die leerders sal kan aanwend.

CHAPTER 1

ORIENTATION TO THE STUDY

This study researched the values and attitudes of primary school learners towards traffic safety and traffic safety education. This chapter presents the statement of the problem, problem questions, research aims and objectives, research design or methodology and the programme of research.

1.1 PROBLEM STATEMENT

South Africa has a high rate of road accidents involving mostly children between the age of 6 to 15 and most of them are school children that participate in traffic situations for the first time in their lives without the assistance of parents (South Africa, 2000:16). There are no instant solutions to South Africa's traffic safety issues, except that the participant in traffic needs to be educated from a very young age to behave in a responsible and mature manner (Marx, 1997:iii).

Since education is playing an important role in teaching traffic safety, a curriculum that will include teaching learners to develop positive values and attitudes is needed. Ruhela (1990:41) states that both attitudes and values are the functional aspects of one's personality, which is opted to be greatly influenced by education. Therefore, "It has to be done from the early stage of education in order to have a lasting effect on the future conduct and the way of life of the adult" (Ruhela, 1990:159).

Teaching traffic safety education requires more than merely the correct application of traffic rules. It also requires education of a positive attitude towards traffic safety and the development of those skills that are important to the road user to be a safe pedestrian, cyclist or passenger (Dreyer *et al.*, 1999:32). Parents also play an important role in shaping the values and attitudes of children in traffic safety. Stressing its significance, Van der Merwe (1999:2) states that "parents must guide the child during moral development in a manner that he/she develops an internalised value system and the right attitude towards traffic safety". It is important that the school and parents work together in traffic safety education.

Drotské *et al.* (1999:xvi) developed guidelines for a traffic safety education curriculum and state that "Effective and meaningful traffic safety education will contribute to equipping young road users with the relevant knowledge, appropriate skills and positive attitude in order to attain collision free traffic participation". Therefore, relevant educational programmes should be developed in order to reach the needs of the learners. But before one can develop relevant educational programmes, it is necessary to know what the children's attitudes and values are towards traffic safety and traffic safety education.

Road safety is just one issue within the safety element of health education, but it is an important issue for pupils at primary level who are beginning to make independent journeys on foot, bicycle and public transport. The safety lessons learnt at primary school should establish a sound basis for safer behaviour as pedestrians and cyclists and prepare children for the transition to secondary school and associated freedoms (Anon, 2002:1). As no study has been conducted in this regard, it seems imperative to do this research. Against this background the questions that arose are stated in paragraph 1.2

1.2 PROBLEM QUESTIONS

In view of the problem statement as in section 1.1 the following questions have been posed:

- (1.) What are the values and attitudes of primary school learners towards traffic safety and traffic safety education?
- (2.) What is the role that parents and the school play in developing positive attitudes and values in children towards traffic and traffic safety education?

1.3 RESEARCH AIMS AND OBJECTIVES

The aim of this research was to:

- (1.) determine the values and attitudes of primary school learners towards traffic safety and traffic safety education; and

- (2.) determine the role that parents and the school play in developing positive values and attitudes towards traffic safety and traffic safety education in children.

1.4 RESEARCH DESIGN (METHOD OF RESEARCH)

To achieve these aims and objectives, the following methods were used:

1.4.1 Literature study

A search in the NEXUS DATABASE and a DIALOG SEARCH in the ERIC database was undertaken to select sources that were relevant to this study.

1.4.2 Empirical research

Questionnaires were developed to obtain information needed to reach the objectives of this research.

1.4.2.1 Questionnaire

A questionnaire was developed and given to learners to answer in order to get information needed for objective 1 (see paragraph 1.3).

Learners were also given questionnaires to give to their parents to answer in order to reach objective 2 of this study (see paragraph 1.3).

Teachers were also given a questionnaire to complete in order to reach objective 2 of this study (see paragraph 1.3).

1.4.2.2 Research population

The questionnaire was given to a random sample of 10 learners from one Grade 4 and one Grade 6 class from each of the 15 primary schools in Potchefstroom area (N = 300). These learners had to take a questionnaire to be filled out by their parents

(N = 300). One Grade 4 and one Grade 6 teacher whose classes were selected at random from each school (N = 30) were also given questionnaires to complete.

1.4.2.3 Statistical techniques

The Statistical Consultation Services of the Potchefstroom University for Christian Higher Education were consulted in the construction of the questionnaires and the selection of the appropriate statistical techniques.

1.5 PROGRAMME OF RESEARCH

This study was conducted in the following way:

- * Literature study
- * Permission for research
- * Constructing questionnaires
- * Taking samples
- * Taking down questionnaires
- * Processing data
- * Interpreting of research results
- * Conclusions and recommendations

1.6 DIVISION OF CHAPTERS

This study was divided into six chapters and are as follows:

Chapter 1: Orientation to the study

This chapter was concerned with the statement of the problem, method of research, problem questions as well as aims and objectives of this study.

Chapter 2: Values and attitudes of primary school learners

This chapter dealt with a literature study regarding values and attitudes and how these are developed in primary school learners.

Chapter 3: Primary school learner as a road user

This chapter focused on the child as a pedestrian, passenger and a cyclist.

Chapter 4: Teaching traffic safety education to primary school learners

This chapter defined the term traffic safety education and mentioned the role that the parents and the school should play in teaching traffic safety education to learners.

Chapter 5: Empirical Research

This chapter concentrated on the results and analysis of the questionnaires that were filled out by the learners, teachers and parents.

Chapter 6: Summary, conclusions and recommendations

CHAPTER 2

VALUES AND ATTITUDES OF PRIMARY SCHOOL LEARNERS

2.1 INTRODUCTION

One always needs to make choices in life. The act of choosing emphasizes one's humanity. Teaching should present real rather than simulated life and situations for discussions, which will enable learners to consider the range of choices that exist in difficult situations (Ediger, 1995:56).

The values that enable a person to accomplish his/her goals in life are primarily taught by the family and secondarily by the school education. Accomplishment in any field depends on the attitudes, understanding, decisiveness and values with which the individual acts (Anon, 1994:2).

The school is in a unique position to supplement the home and the church in shaping the moral character of youth. It nurtures the critical thinking and judgment that are required in the weighing of values in every moral situation. It also has the advantage of being able to provide a testing ground for values (Butt *et al.*, 1977:32). Along with this statement, Suh and Traigan (1999:723) remark, "positive values and attitudes are an important part of a school's success."

Parents are the first teachers of children's values and attitudes. They are teaching their children something even if they have not taken a conscious effort to do so (Huxley, 2001:1). The author further continues by stating: "parents must live the values they are trying to teach to their children".

Teaching values and attitudes to children starts with taking into account how children think and what their language tells them about the world (Anon, 1993:67).

Values and attitudes are important in the education of children, therefore, parents and teachers need to know the following:

- What are values and attitudes?
- When are values and attitudes educational?

- How does the child learn values and attitudes?

This chapter will present the following:

- Introduction
- What are values and attitudes?
- Developing values and attitudes in primary school learners. (Concentrating on the role that home and school play.)
- Conclusion

2.2 WHAT VALUES AND ATTITUDES ARE?

2.2.1 Attitudes

Social psychologists have given various definitions of the concept “attitudes”. Some view attitudes as a multiple phenomenon and others as a simple phenomenon as presented below.

According to Rokeach (1989:112) an attitude is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner. Allport as quoted by Warren and Jahoda (1973:24) says “attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related.” Ruhela (1990:170) define attitude from a psychological perspective as an emotional and motivational force towards a psychological object. According to the Gale Encyclopedia of Psychology (2001:1) an attitude is “a predisposition to respond cognitively, emotionally, or behaviourally to a particular object, person, or situation in a particular way”. The Epsychlopedia of Social Psychology (2001:3) defines an attitude as a positive or negative evaluation of people, objects, event, activities, ideas, or just about anything in your environment. Arul (2001:1) defines attitude as an idea or belief charged with emotion predisposing an individual to act in a particular way to persons, things, situations and issues. Eagly and Chaiken, (as quoted by Lord, 1997:216), define an attitude as a psychological tendency that is expressed by evaluating a particular entity with some degrees of

favour or disfavour. Louw (1996), Kruger *et al.* (1996), as well as Lord (1997) examine attitudes in terms of three components. Those are the feeling you have towards the attitude object (affective feelings), a person's action towards the attitude object, as well as toward the presence or imagined presence of others (behaviour/actions) and the thoughts you have towards the attitude object (cognitive/thoughts).

Thomas (1990:279) refers to attitudes as positive or negative feelings that an individual holds about objects, persons or ideas. He continues by saying they are generally regarded as enduring, though modifiable, by experience and/or persuasion, and as learned rather than innate.

According to the above-mentioned information, it looks like attitudes are simply feelings that an individual holds about objects, persons or ideas that can be influenced by good or bad experiences or situations in life.

2.2.2 Values

Everyone has things that he/she values in his/her own life, but it is evident that not everything that a person values counts as one of his/her values. Rokeach (1986:160) stresses this by defining values as "a single belief that transcendentally guides actions and judgments across specific objects and situations, and beyond immediate goals to a more ultimate end - states of existence." Ruhela (1990:11) defines a value as an endeavour, which satisfies the need system, psychological as well as physiological.

Davies (2000:1) states: "values are cherished beliefs and standards for right and wrong".

According to the Oxford Advanced Learner's Dictionary (OALD) (1995:1319) values are moral or professional standards of behaviour, principles: cultural/ family/ social values.

Reber (1995:834) refers to a value as an abstract and general principle concerning the patterns of behaviour within a particular culture or society which, through the process of socialization, the members of that society hold in high regard and form

central principles around which individual and societal goals can become integrated e.g. freedom, justice, education.

Battro (1973:182) defines a value as an affective characteristic of the object, that is, a collection of feelings projected on the object. It constitutes thus a connection between the object and the subject, but an affective connection.

Harré and Lamb (1983:651) refer to values as what individuals consider good or beneficial to their well-being. They further continue by stating that values are not innate but are acquired through experience. Values are the link between needs and actions, they serve to allocate attention and effort to various needs and are the basis for emotions. Wolman (1975:400) sees a value as an abstract concept, which determines for a person or some social group the relative worth of various goals and ends.

According to the above information, values can simply be defined as beliefs that an individual or a group of people consider important in their lives and regards these values as a foundation on which they can build their lives on.

2.3 FORMATION OF VALUES AND ATTITUDES IN CHILDREN

2.3.1 Attitudes formation

According to the definitions of attitudes, attitudes are learned or acquired from other people or direct experiences. Early in life parents are the source of a child's attitudes and as they grow up the sources multiply. Davidson (1997:1) also seem to support the statement by indicating that in a typical family, children observe how their parents respond to life's circumstances, how they establish priorities and values and how they relate to others, how they view and care for themselves, and how they nurture their love for one another. They learn the skills that they will use themselves someday.

It is evident that parents play a crucial role in the development of attitudes in children, therefore, whatever they do or say in front of children, they should always keep in mind that children are watching or listening. Batts (as quoted by National Safe Kids Campaign, 2002) support the statement by saying children do as their parents do. He

further points out that “parents can teach their children that they do not have to model perfection, only that learning and stretching to try more effective ways of coping is perfect enough”.

Attitudes may be perceived in several ways as discussed in the following subparagraphs (2.3.1.1 – 2.3.1.8).

2.3.1.1 Information

Attitudes are in part formed, maintained and modified by information about the attitude object. Information from the communication media plays a powerful role in shaping positive or negative thoughts about an attitude (Lord, 1997:223).

Zimbardo *et al.* (1970:81) also add to this by stating that by listening or reading, children hear people talk about how specific behaviours or consequences are related. Ruhela (1990:140) also stresses that attitude formation depends upon giving information and providing new knowledge. He further continues by stating “adequate information helps the individual change his/her attitude in a better way.”

It is therefore evident that information plays a crucial role in developing attitudes in children. Encouraging children to read, watch television and listen to radio will also contribute to develop attitudes. Parents and teachers though, should make sure that children watch television programmes or listen to radio programmes that are educational.

2.3.1.2 Classical conditioning

Classical conditioning is built on creating relationships by association over trials to describe one type of associative learning in which there is no contingency between response and reinforcer (Anon, 1996:1).

Classical conditioning involves coming to like or dislike an attitude object because it has been previously associated with pleasurable or unpleasurable events. People can be conditioned through experience to associate pleasant or unpleasant feelings with words and ideas (Lord, 1997:224).

Baron and Byrne describe classical conditioning, as “when one stimulus regularly precedes another, the one that occurs first may soon become a signal for the one that occurs second” (1994:131).

According to the information above, classical conditioning simply mean trying to associate, connect, bond or link new information with the old one.

2.3.1.3 Instrumental or operant conditioning

Instrumental conditioning is used to describe one type of associative learning in which there is a contingency between the response and the presentation of the reinforcer (Anon, 1996:2). Whitlow (2000:1) describes instrumental conditioning as a procedure in which learning occurs with respect to a three-term relationship of stimulus, response and reinforcer. Anon (2000:1), mentioned in his study that in life children learn through reinforcement of their behaviour those attitudes that are acceptable to their parents. They learn to practice those behaviours, which yield positive results and avoid those, which produce negative consequences.

Lord (1997:226) describes instrumental conditioning as behaving positively or negatively toward an attitude object because doing so has previously been rewarded. He further continues that all organisms do more of whatever they are rewarded for doing and less of whatever they are punished for doing.

Baron and Byrne (1994:135) describe instrumental conditioning as learning to state the right view. Kruger *et al.* (1996:154) refer to instrumental conditioning as taking place when a response (attitude/behaviour) is positively or negatively reinforced in a particular situation.

According to instrumental conditioning, it seems as if rewarding children with smiles, agreement, or approval for stating the right views helps in shaping their positive attitudes.

2.3.1.4 Modeling or imitation

Children do not only develop their attitudes by being rewarded or punished, but also learn indirectly through imitating other people. According to Anon (2000:1), they also learn their attitudes through language – what they are told by their parents and by observing, watching the rewards and punishments other people reap from their behaviour as well as deducing from their behaviour what kind of behaviour on their part is likely to be viewed positively by them, thus gaining them acceptance.

Lord also states that “modeling of attitudes involves adopting an attitude vicariously by watching others and imitating what they do when what they do seems successful”(1997:226).

Baron and Byrne (1994:135) refer to modeling as acquiring new forms of behaviour merely through observing the actions of others.

Zimbardo *et al.* (1970:80) also agree with the other researchers that people can see how other people's behaviour is followed by specific consequences, learned by looking.

According to modeling or imitation, adults should set good examples to children as they take everything they see as being good.

2.3.1.5 Direct experience as a way of acquiring attitudes from life

It seems as if not only indirect experience does help to develop attitude but also direct experience can do that. Baron and Byrne (1994:136) proves the statement by stating that sometimes people merely assume that they will react negatively to various experiences and so avoid actually having them. These authors continue by quoting Fazio and Zanna (1981) suggesting that attitudes formed through direct experience with attitude objects are stronger in several respects than the kind of “anticipated” attitudes just described or attitudes borrowed from others.

Zimbardo *et al.* (1970:80) state that people can directly experience the consequences of their own behaviour.

2.3.1.6 Homogeneity

Anon (2000:1) states "an important factor in the acquisition of attitudes is the homogeneity of the attitudes and values likely to be expressed in a child's environment. Clearly, in the home environment, the child will be exposed to the same set of attitudes and values constantly, but, even outside the home, this is likely to continue. The child's exposure will be selective because of such factors as class, ethnicity, geographical location, level of income, education, parents' occupation etc. And that selectivity, on the same grounds, will continue in adulthood".

2.3.1.7 Identification

According to Freud, as quoted by Anon (2000:1), children identify themselves with the same sex parent and thereby acquire their attitudes.

Accordingly, it seems that if a child is a boy (for the fact that he realizes that he wears a trouser like his father) he will simply identify himself with his father and therefore observe what his father is doing and start to imitate him. Gender seems to play a crucial role in identification.

2.3.2 Value formation * ✓

A person is not born with values, there are forces that mould his personality and those forces are the school and the family. Webster (1997:2) suggests that character education is not an "add on" subject for teachers to teach; instead, it is an integral part of the life of the school, affecting the atmosphere not just in the classroom but everywhere. However, the National PTA states, "teaching character education in public schools alone will not guarantee acceptance of basic core values by children and learners. In order for them to become a reality in student's lives, consistent, day-by-day practice of these values must start in the home and continue in the school" (1994:1).

Rath's *et al.* (as quoted by Attarian 1986:41-44), identified seven criteria on which the process of creating values is based:

- Being free to choose without coercion. Actively selecting a value gives it more meaning;
- Choosing from alternatives. Decisions are more meaningful if options are available;
- Making choices after considering all the options. Forethought reduces the chance of undesirable or unexpected outcomes;
- Prizing and cherishing. By developing values, learners can become more aware of what they cherish;
- Publicly affirming. Speaking out publicly about their values and beliefs in socially acceptable ways helps clarify their values to others;
- Acting on their beliefs is a way to realize their own values; and
- Acting without order and consistency means that their actions are based on choices.

It is evident in the information above that values need to be taught to children, as they are not born with them. Parents or teachers should give children a chance to develop values by giving them freedom to observe, to help them make right decisions, correct them when they make mistakes, let them talk about their feelings and reward them if they have done a good job, as this will motivate them to develop and choose the right and important values in their lives.

2.3.2.1 The ways to foster values in children

2.3.2.1.1 Fostering values in children through home environment

“Before a child is even old enough to be in a classroom, he/she is learning, and as a parent, you are his/her first teacher”. Along with this statement, Huxley (2001:1), Davies and Keyser (1997:1) as well as the National PTA (1994:1-3) came up with ways and steps to teach children values.

Huxley (2001:1) states his steps as follows:

- The first step is to decide what is negotiable from what is not negotiable. Parents should give children a freedom to decide.

- The second step involves participating in community events and services that support parents' beliefs. Events like boy scouts or girl guides can help to create a feeling of identity as a family or as an individual. The community participation helps parents reinforce the values they find to be the most positive.
- The third step is to encourage communication, to talk to children about one's values in an open and natural manner. How something is said, can create defenses and resentment in children if it is said in a lecture or scolding tone and style. If parents have unfairly lectured or acted judgmental of children when they expressed opposite opinions, they'll be hesitant to have an "open conversation" with their parents.
- The fourth step is to create empowerment for the children to make important life decisions on their own, and suffer the consequences of their actions without parental rescue. Parents should let children take divergent views and experience the ramifications of those views but it does not mean that children are allowed to do something that will hurt themselves, others, or property.

Davies and Keyser (1997:1), state that every interaction with children provides an opportunity to teach values and describe their six ways children learn values as follows:

- Children learn about their parents' values through daily interactions with them. Each time parents talk to their children, they instill values in them.
- Children learn through the example of their parents. Whatever they do in front of their children, it is a lesson to them. If a child sees his/her father cleaning up somebody else's dirt, that teaches him/her a value of cleanness and he/she will grow up with it.
- Children learn through the values their parents strive toward. Each individual have some values that are woven into the very fabric of whom he/she is and values he/she is newly adopting, that he/she haven't practiced or integrated. Children learn through what their parents model and thereby can strive toward a vision they haven't yet attained.

- Children learn values through the way their family do things. If a family spends most of the time together, share their problems and play games together a child starts to see his/her family gathering as a priority.
- Children learn values and beliefs through their exposure to the larger world. Through friends, extended family, books, TV and the experiences they have in their community, children absorb values and societal norms.
- Children learn values through our explanation of the world. Parents can't always control their children's environment, whatever they hear or see outside, if they talk about it at home it gives them a chance to share their perspective on what happened.

2.3.2.1.2 Fostering values in children through school environment

Wards as quoted by Cairns *et al.* (2001:31) states that "education is tuning towards values. As soon as values are deleted, education is deleted."

Rath's *et al.*, as quoted by Bauer (1987:2-5), suggest "teachers should not try to impose values on learners, rather should try to flush out or clarify learner's own value system and be concerned with the process of valuing and not particularly with the product."

The National PTA (1994:1-3) came up with practical suggestions for teachers to follow in teaching children values, which are:

Respect/compassion

Teachers should use courtesies such as "please" and "thank you", in their daily interactions with their children. Show respect for them and their friends and treat them, as they want to be treated in the everyday routines of home life. For example, teaching them to respect the people they do not know personally.

Honesty/courage

Teachers should demonstrate a sense of honesty to their children. For example, teach them to tell the truth always even if the outcome may be unpleasant.

Self-discipline

Teachers should help their children to delay gratification. For example, when you are tempted to buy something you cannot afford, postpone buying by actively saving for it. They should demonstrate self-control and discipline by expressing your anger appropriately and constructively.

Responsibility/Loyalty

Teachers should encourage their children to be responsible for their tasks. They should match each child's level of understanding and ability to their responsibilities. By so doing, it will help the child to discover the joy of investing time and personal energy in achieving goals.

2.3.2.2 The role of values in education X

Cairns *et al.* (2001:3) outlines the role of values in education as follows:

- First it is a necessity for human subjects to participate in the realization of values in order to achieve and enjoy them, and value realization is an educative process and necessarily involves people in growth and development that is educational at its heart.
- Second is the nature of school as a value-realization institution. Individually, education begins with the individual pupil as he/she is at any given stage in his/her growth and nurture and seeks to convey him/her into a stage of development and value achievement that is now real.
- Third is the necessary relationship between educational objectives and value theory. Any objectives that can be conceived for any phase of life are expression of value judgments. And when objectives are proposed for education, whether by anyone, some answers on value problems are implicit in these objectives. And those objectives cannot be adequately conceived without being formulated in the light of value theory.
- Fourth is the significance for children and youth of their value problems and decisions. Value problems are the first reflective steps of maturing youth. They

provide the first occasion for reflective decisions, therefore value concerns in education is of unique importance with all children.

2.4 CONCLUSION

According to the information that was presented in the previous sections of this chapter, attitudes and values are things that play a very crucial role in the life of an individual. The decisions that one has to take in life, relies on what he/she values most or the attitude he/she has towards that object.

It is evident that for young children to have positive values and attitudes, the school and parents must play a major role in their development. The school and parents should provide children with a language for talking about values and the skills to solve the tough decisions they face now and will face in the future.

Parents and teachers should set good examples to children as they can imitate them and they should also be good role models to children. Since children learn through information, the school should also provide learners with relevant information that will enable them to develop positive values and attitudes. Good communication with children enables them to develop good communication skills with other people.

Positive values and attitudes help a child to understand the difference between what is right and wrong and also to learn how to face difficult times in future without the assistance of parents or teachers.

It is clear that it is the responsibility of parents and teachers to foster positive values and attitudes in children that will help them to make right decisions in future. Fostering positive values and attitudes to children will help them to develop a good personality and also to be responsible for every act they make in their lives. Values and attitudes also play a crucial role in the lives of children when facing traffic situations. In the next chapter, the main concern will be the child as a road user and it is whereby, if a child has been taught positive values and attitudes at an early stage, he/she will not have difficulty using the road with other people.

CHAPTER 3

THE PRIMARY SCHOOL LEARNER AS A ROAD USER

3.1 INTRODUCTION

Annually more than eleven thousands lives are lost and hundreds of thousands of injuries caused as a result of accidents on South African roads. The victims are young children below secondary school age (an average of three children per day). Motor vehicle accidents are the greatest single cause of unnatural deaths on South African children (Anon, 1999:1).

The above-mentioned information is proven to be true as Illingworth (1974:283), Jolly (1984:4), Dreyer *et al.* (1999:105) and Kidsafe Connection (2000:1), agree that accidents are the most common cause of death and injuries in children.

Children mainly use the roads as pedestrians, cyclists and as passengers in cars, buses or taxis. This chapter will focus on the child as a road user.

3.2 PRIMARY SCHOOL LEARNERS AND TRAFFIC SAFETY

As Du Plooy (1983:8) has indicated, "Children at primary school level are inclined to turn their backs on adults and to join in communities of children. They take their own peer group as their main yardstick with regard to things such as social structure, leading and following, justice, loyalty, etc. At this level, acceptance of the group's values, customs and speech patterns sets in. The group serves as an immediate point of reference, with each member supporting and boosting the others. The child at this stage is continually investigating and discovering things, he is eager to learn to ride a bicycle, choosing shortcuts through properties on his way to school and not following a way home that parents taught him before, plays on the pavements and in streets. The child is very lively at this stage but irresponsible".

It is evident according to the information above that children at the primary school stage know or can remember what they are taught, but can't practice it properly. For example, most primary school children have heard or seen people using a pedestrian

crossing, but when they are supposed to cross alone, it seems as if it is difficult to do that without being helped out. Piaget as quoted by Santrock (1998:213) stressed that children actively construct their own cognitive world, information is not just poured into their minds from the environment but organization and adaptation underlie an individual's construction of the world. To make sense of the world, children organize their experiences. For example, by separating important ideas from less important ideas, children connect one idea to another, they do not only organize their observations and experiences, however they also adapt their thinking to include new ideas because additional information furthers understanding. Piaget also believed that children adapt in two ways: through assimilation, when they incorporate new information into their existing knowledge and through accommodation, when they adjust to new information. According to Piaget's theory, it seems as if parents and teachers should make sure that what they teach children should be put into practice. They should not just teach children things and let them practice on their own. For example, if children are taken to streets to see traffic lights or pedestrian crossings that they see in books or on television and have a chance to use it, it will be practical to them and the information will stay on their minds and it is likely that they won't forget how to use traffic lights and pedestrian crossings.

It is absolutely clear that there is a need to teach children on how to take care of themselves when faced with traffic. It seems as if the implementation of traffic safety education into the school curriculum as a daily school subject or integrated into other subjects will be the only solution to teach children the information they need to know concerning traffic rules and their safety. It also includes developing in children positive values and attitudes towards safe traffic participation as is mentioned in the previous chapter. It is never too early to teach a child positive values and attitudes and also traffic safety as they should grow with these in their lives.

3.3 THE CHILD AS A PEDESTRIAN

In South Africa approximately 300 children between the ages of 7-12 years annually die in traffic related accidents and between 2 000 and 3 000 children are seriously injured, most of which are pedestrians (National Department of Transport, 2001:59).

Dreyer *et al.* (1999:105) and Sandels (1975:12-15) both indicate that children are among the highest group at risk of pedestrian injuries, especially when taken into account the amount of walking done by them. The injuries and the risk of being injured are directly related to the number of roads children cross. "The greater the number of the roads to be crossed, the higher the risk of pedestrian injuries".

Statistics show that pedestrian injury remains the second leading cause of unintentional injury-related death among children ages 7 to 12. Children are particularly vulnerable to pedestrian death because they are exposed to traffic threats that exceed their developmental abilities based on handling traffic (National Safe Kids Campaign, 2002:1).

3.3.1 Who is at risk?

It is a clear fact that children have to walk to school daily without the supervision of parents and that is where they are faced with danger.

Dreyer *et al.* (1999:106) support the above statement by stating that children who are just starting school are the most at risk age group because of their particular limitations in the traffic situation.

According to Kidsafe (1997:1), Kidsafe Connection (2000:1) and Pitcairn and Edlmann (2000:3) children at this age are at risk because of their limited knowledge of traffic and because they have not yet developed the abilities to do so.

The fact that children cannot focus on one thing at a time, for example, puts them in a dangerous situation.

3.3.2 How do pedestrian injuries occur?

According to research done by Tight (1991:138), Preston (1995:187), Dreyer *et al.* (1999:106) and Anon (2000:1) pedestrian injuries occur on areas with high traffic volumes, higher than average speed and fewer crossing signals; children darting out into the street without warning; driveways, and mostly near the child's home when coming from school or the shop or playing in the street.

Pitcairn and Edlmann (2000:2) point out that the other contributing factor to accidents occurring is that children's lack of knowledge lead them to make overcautious rather than risky decisions when faced with traffic situation. Therefore, it is the responsibility of parents and teachers to ensure that children are given proper lessons on how to make the right decisions when facing traffic.

3.3.3 When do pedestrian accidents occur?

Accidents involving child pedestrians typically happen at certain times of the day. A study on the statistics for South Africa showed that accidents are highest during December, March and even October, which are school holidays and have long weekends. During the months of June and July collision rates are relatively high as it becomes dark very early in the evening and the sun rises later in the morning. Children in rural areas are also affected as they have to walk long distances to school and have to start early and during winter it is often still dark at that time.

3.3.4 Injuries sustained by children

According to Dreyer *et al.* (1999:109-10), child pedestrian accidents are more likely to result in death than any other type of accidents. Injuries sustained are caused by:

- direct impact with the hard surface of the motorcar at speed;
- being flipped up and onto the bonnet or windscreen;
- landing on his head (being top heavy);
- being dragged along under the vehicle; and
- being flipped sideways onto the road or pavement or onto roadside object or into the path of another vehicle.

Head injuries and/or multiple internal injuries are often the cause of immediate death. Typical injuries sustained are:

- head injury with a fracture of the skull and internal bleeding;
- multiple fractures of pelvis and/or spine;

- injuries to abdominal and chest organs;
- fractures of the legs or arms;
- road burns and grazes and;
- deep lacerations, contusions and sprains in any part of the body;
- joint effusions, especially of the knee; or
- superficial grazes and lacerations.

The human body, and particularly that of a child, is fragile in comparison with the hardness of the vehicle. The result of a pedestrian traffic accident is mostly more serious than for any other form of accident and main permanent disabilities following childhood pedestrian accidents may be brain damage, loss or deformity of a limb and spinal injury with paralysis.

It is clear there is a need to reduce pedestrian accidents in the country as some of the injuries may lead to permanent disabilities.

3.3.5 Reducing pedestrian accidents

Anon (1999:2) states that parents should set a good example to children when they are using traffic, by following the rules and that they should not see children as small adults. Just because a child can name traffic signs does not mean he/she knows the purpose of it.

If parents and teachers encourage children to wear bright colours in the daytime and that at night they should carry flashlights or wear reflective materials every time they participate in traffic, it will help to reduce accidents among children.

Anon (1999:2) further mentions that children need safer places away from traffic to play, such as fenced playgrounds and yards.

The National Safekids Campaign (2002:3) identified the following ways that can help to reduce pedestrian injuries:

- Children should have practical skills based on pedestrian safety training.

- Setting low speed limit in residential areas.
- Prohibit play in driveways, street, parking lots and unfenced yards adjacent to streets.
- Teach children to cross the street at least 10 feet in front of a school bus and to wait for adults on the same side of the street as the school bus loading/unloading zone.
- Advocate for the implementation of traffic calming measures, walkways that separate pedestrians from traffic, limited curbside parking, reduced traffic in residential neighbourhoods and lower speed limits.

Preston (1995:188) states that the introduction of "Traffic calming" in many countries has shown a great success as it is intended to reduce speed to about 20 mph and this would reduce the number and severity of casualties to children crossing the road.

Preston further suggests that the introduction of home zones will reduce casualties to young children in residential areas and allow them to play outdoors in safety, as within home zones, vehicles would have to travel very slowly in order to stop in time if children were playing on the road.

Preston (1995:188) adds that school journeys for children should be made safe as many casualties occur near the schools. Crossing patrols should be provided on some main roads near to primary schools and also on busy roads where many pupils cross.

It seems as if substantial changes to our current urban environment need to be considered so that restrictions can be placed upon the traffic in certain parts of the urban environment and particularly the speed at which vehicles are travelling.

3.4 THE CHILD AS A CYCLIST

Approximately 25 children below the age of 12 are killed annually in South Africa, and 292 are seriously injured or at least attend casualty wards at hospitals because of cycle accidents. Accurate figures are not available for injuries, however, because statistics rely on returns of police statistical records, which only cover accidents involving other road vehicles. That is, any accidents involving a bicycle and another

road vehicle are recorded, but those involving two bicycles or solo accidents when a child falls off his own bicycle are not recorded. It is estimated that only about 20 per cent of cycle accidents are reported to the police.

Such low reporting rates reflect difficulties in officially recording slight injury cycle accidents that did not involve another vehicle, particularly involving children on minor roads.

3.4.1 Who has bicycle accidents?

Dreyer *et al.* (1999:111) mention that children most likely to have bicycle accidents are boys in the 10 to 14 year old age group. Also, children as young as 7 to 8 years are permitted to ride around without being trained or able to cope with the dangerous situations in the road. Many children at the age of 9 to 10 years old and more often boys, are riding to and from school by bicycle as well as for recreation. Dreyer *et al.* suggest, "It is important that any child riding on the road should take and pass a cycling course just like car drivers".

3.4.2 When do bicycle accidents happen?

Dreyer *et al.* (1999:) indicate that cycle accidents happen all year round, but occur far more in the summer months than in winter. There are clear indications that peak rates are associated with the times of journeying to and from school. Weekends, Saturdays, Sundays and holidays show a more even distribution around the middle of the day, which relates to cycling for leisure and recreation.

In the Full Force Marketing (2000:2), it is suggested that "some accidents are caused by lack of familiarity with surroundings," for example, when visiting friends or relatives, or in holiday accommodation you are likely to be involved in an accident as you are not familiar with the roads. These researchers further indicate that most cyclists are involved in accidents when turning right, emerging from a driveway, failing to give way at a junction, young cyclists falling off cycles (no other vehicle involved), being struck from behind, or a motor vehicle failing to give way at a junction.

According to the SWOV Research Activities (1997:1) most cyclists get involved in accidents during twilight or conditions of darkness where they do not have their lights on. Some accidents could have been prevented if they had put their lights on.

Dreyer *et al.* (1999:112) point out that about 65 per cent of bicycle accidents in which children are involved occur in solo riding on the road, usually in cases where the child loses control of the bicycle.

These researchers further state that most of the accidents happen in residential areas, often on main roads, but are far more likely to happen on urban roads than in rural areas. The vast majority of accidents take place within a kilometre of the child's home or in the driveway of the child's own home or in a playground.

3.4.3 How do bicycle accidents occur?

Dreyer *et al.* (1999:112) identified factors that can cause accidents. They are as follows:

- *The state of the bicycle* - Poor maintenance of the bicycle, the state of the brakes and tyres not being in good condition.

The design of the bicycle, e.g. a bicycle with high handlebars, can cause instability and lack of handling; different wheel sizes causing centrifugal force of the wheels to differ; elongated saddles will encourage more than one rider to travel at a time (illegal); rounded front of saddle can cause the rider to slip onto the gear change lever and damage the genital area; seat over rear wheel, etc.

SWOV Research Activities (1997:1) suggests that accidents also occur when bicycle passengers get snagged (feet between spokes). Many bicycles are not fitted with a wheel spoke cover.

- *Size of the bicycle*: The wrong size bicycle for a specific size child can lead to accidents, therefore parents should take care to choose a suitable size bicycle for the size of the child.

According to Chiles, as quoted by Rosien (1999:2), the child's feet should be able to rest lightly on the ground when the bicycle's seat is in the lowest position.

Have the child stand over the crossbar with both hands on the handlebars, and if the bicycle fits, there will be a 2-inch clearance over the crossbar.

- *Competence of the rider:* The main concern is the lack of basic training for the type of bicycle ridden. Failure to recognise dangerous situations through poor judgment, over-confidence and inexperience to handle the bicycle safely, distractions by friends, riding with a group of friends, or with a friend on either the handlebars or saddle, showing off to friend, doing stunts and racing each other, are other concerns.
- *Consciousness of the rider:* It is of great importance that cyclists make sure that other road users can see them. In poor weather conditions, particularly in overcast conditions, at dusk and during rain, cyclists must take extra care and ensure that they wear brightly coloured clothing with fluorescent (by night) or luminous (by day) additions such as armbands and strips on their shoes and caps. Lights must be used on bicycles in all conditions that will put them at risk at night or in rainy darkness and reflectors should in any case be fitted to bicycle pedals and mudguards.
- *Dangers on the road:* drivers do not consider cyclists as road users and this puts them in serious danger. Dangers that cyclists face include intersections and junctions. Further more poor weather conditions, especially rain, fog and ice, greatly increases the risk of cyclists' accidents.

Illingworth (1974:286) suggests that accidents can also be caused by allowing a raincoat to become caught in the spokes. The drain hole in the drive way is also a danger to the child on a bicycle.

3.4.4 Injuries sustained by cyclists

Children often sustain very serious injuries in bicycle accidents.

Dreyer *et al.* (1999:113) noted that head injuries are the most common amongst young cyclists fatalities. Injuries like head and facial injuries often include severe grazes, fractures of the nose and loss of teeth; limb fractures are most likely to be wrists, hands, elbows and shoulders and less commonly fractures of the legs.

According to research done by SWOV (1997:3) 23 per cent of all fractures sustained by cyclists and 54% of the entire road racers' fractures involved the collarbone.

The researchers continue by stating that in a crash, the hands of a cyclist remain on the handlebars leaving the elbow and shoulder as initial points of impact. The force from the fall is transferred to the clavicle. The cyclist may also sustain significant orthopaedic injury fracture, dislocation or sprain.

3.4.5 Prevention of injuries

Cyclists can prevent collisions and other bicycling accidents by following safety precautions. The safe behaviour will also make cycling in traffic more enjoyable.

Keifer (2000:2) suggests that riding safely in traffic involves more than just obeying the traffic laws but also to be alert at all times; to be visible day and night by using bright colours; by also taking the least travelled way and by keeping the bike in good repair.

SWOV Research Activities (1997:2) suggest that cyclists should use proper wheel spoke covers and better cycle seats; promote the wearing of a bicycle helmet and to heighten road authorities' awareness of the condition of the road surface.

Rosien (1999:2) and American Academy of Pediatrics (2000:1) suggest that parents should take safety matters when purchasing bicycles for their children and offers a few safety tips:

- visit a bicycle shop and get the proper size for a child;
- make sure the bicycle has a bell, reflective tape and lights. A bell notifies pedestrians as well as other cyclists that someone is behind them;
- when fitting a helmet, make use of the pads provided by the manufacturer;
- do the tap test on the child's helmet. Walk the child around while wearing the helmet, tapping on both sides and front and back. If the helmet moves, it is not sized properly;
- supply sunglasses and gloves and remind the child to wear them when riding;

- make sure that the child understands the rules of the road and common courtesy,
- look for classes that reinforce proper bike operation and offer lessons on how to look after a bike.

3.5 THE CHILD AS A PASSENGER

Each year in South Africa about 300 children are killed as a result of car accidents in which they are passengers. Additionally 3 031 children are injured. With improved driving standards, we might assume that many of these accidents could be prevented, and certainly with increased use of safety restraints many of the deaths could be avoided and injuries minimised (South African Statistics, 2000:16)

Dreyer *et al.* (1999:115) point out that “children at any age can be involved in accidents. The number of deaths of children in South Africa as car occupants is more than those of cyclists and well below pedestrian statistics”.

3.5.1 Who has car occupant accidents?

All people are at risk in cars. It might be argued that children from the more advantaged class are likely to be more involved in accidents because their parents use cars more frequently while children from the less advantaged class are involved because they would use less roadworthy vehicles, cars without safety belts or no safety seats. Also children may be involved in accidents as they travel to school by buses and which may be overcrowded.

3.5.2 How are children injured?

Primary school children may be involved in accidents due to reckless driving of the drivers or drivers being under the influence of alcohol or drugs. Also children may be tempted to release hand brakes while left in a car alone and are likely to be involved in an accident as they would not know what to do when the car is moving.

Dreyer *et al.* (1999:116) suggest that drivers should not allow children to stand up and move around in the car or bus as this will obscure the driver's vision and distract his/her attention on the road. The researchers further state that the design of the car, inflexible steering wheel, mirrors sticking out and unlaminated windscreens are also likely to cause injuries.

As a result of not using seat belts, children can get injured or killed if a car would be forced to stop unexpectedly. Therefore, it is of great importance that all occupants in a car use seat belts.

3.5.3 Injuries sustained

Children sustain serious and severe injuries as passengers. They are likely to injure their heads, might experience internal bleeding, internal chest injuries, abdominal injuries and many injuries. Although most of the children recover well, about five percent are left with miscellaneous disabilities which are brain damage with intellectual impairment, epilepsy or paralysis, spinal injury, limb deformity, disfiguring scarring or long term psychological changes (Dreyer *et al.*, 1999:116-17).

3.5.4 Preventing passenger accidents among children

It seems that to prevent passenger accidents, firstly car drivers should reduce road accidents. Therefore, parents should be responsible to see that children are safe in cars and the drivers of buses should also make safety of children their responsibility.

Children can be taught simple rules for the car and school buses that will ensure their safety and provide the groundwork for a lifetime of safe and responsible travel. Parents and teachers should make sure that they explain the rules clearly to children and that they are followed every time, no matter who is driving or how short the ride may be (American Medical Association, 1997:1).

3.6 CONCLUSION

According to the information above, it is evident that there is an absolute need to reduce and prevent accidents all over the world. It seems as if lack of knowledge and skills among children are the main cause of traffic accidents.

Children should be taught at an early age the appropriate reactions in a traffic situation and this should include role-playing and continuous interaction between the participants over a period of time. Negative role models concerning traffic situations, instead of showing good traffic usage, surround children, therefore parents should emphasize positive skills and reaction as it will help children to behave well in traffic.

It seems as if teaching children traffic safety will be the only solution to reduce and prevent deaths and injuries. Developing positive values and attitudes to children as it was stated in the previous chapter, should do this.

SWOV (1997:3) suggested activities that should be implemented by the school and parents in order to teach traffic safety education, things like traffic clubs, campaigns by means of intermediate parties, television programmes including both open network and educational television should be developed, where parents can register children to receive lessons on traffic and whereby parents will be contacted on the progress of children.

The above activities show that the choices have to be made with respect to the designated objectives, the degree of integration with safety information in general, the target age groups and the stability and composition of the various projects. It is contended that objectives concerning the current state of children's attitudes and the suitable involvement of parents in education should also be aimed for.

The next chapter will focus more on teaching children traffic safety education at school and home.

CHAPTER 4

TEACHING TRAFFIC SAFETY TO PRIMARY SCHOOL LEARNERS

4.1 INTRODUCTION

Traffic accidents are among the most serious threats to the life and health of primary school children. Accident statistics shown in the previous chapter clearly indicate that there is a serious need to start working on the problem. The annual costs in terms of money spent on hospital treatment and rehabilitation appears to be considerable and is incalculable if expressed in terms of human suffering. According to Rothengatter (1981:1), this threat does not have impact only on the direct victims, but also have its effect on the daily life of children and their parents in the form of worry, fear, anxiety and restriction of movement. He further argues that in terms of its primary objective – mobility - traffic is counterproductive for children and that it is the plague in modern disguise.

According to the information in the previous chapter, it is clear that there is an absolute need to teach children about traffic safety. Children need education on how to behave in traffic situations when they are alone. The school must meet its obligation to the community by equipping children with the knowhow to stay alive and live efficiently.

This chapter will focus on teaching traffic safety education to primary school learners focusing on what is traffic safety education and the role of the home and school in teaching traffic safety.

4.2 WHAT IS TRAFFIC SAFETY EDUCATION?

Dreyer *et al.* (1999:38), see traffic safety education as a combination of three independent elements or components, which are: traffic, safety, and education. Therefore, in order to have a clear meaning of what traffic safety education really is, these elements need to be defined individually first.

4.2.1 Traffic

According to the concise Oxford dictionary (1995:1478), traffic is either the movement of vehicles in a public highway, especially of a specified kind or density; or the transportation of goods; or the coming and going of people or goods by the road. Alswang and Van Rensberg (1984:933), support this by defining traffic as the movement of vehicles along the street.

The above statements simply refer to traffic as the movement of vehicles or people on the roads. This movement include children as pedestrians, cyclists and passengers, therefore it is crucial that they also be taught how to be good traffic participants. Pretorius (1989:11) seems to support this statement by stating that this movement of people and cars makes certain demands on road users and these demands have to be met through education, training and experience.

Dreyer *et al.* (1999:38), argue that there are three components contained in the concept traffic, and these are:

- The static component (like roads, pavements, traffic lights, kerb stones, other road signs, e.g., the yellow light or traffic signs such as the stop sign).
- The dynamic or movement component (vehicles, pedestrians). Safety in traffic depends, among other things, on the roadworthiness of vehicles, the clothing of pedestrians, motorcyclists and the cyclist also play a role, as well as the speed with which the components move in the traffic.
- The traffic participant, with his/her qualities like knowledge of traffic rules, observation speed, personality factors, knowledge of vehicles and other people's behavior, as well as willingness to take responsibility. Things like the development level of the participant, previous experience, cognitive level, social orientation, as well as obeying traffic rules, also influence the knowledge of traffic rules. A breakdown of the factors that cause traffic collisions clearly indicates that the human being is the primary cause of the problem of traffic collisions.

Dreyer *et al.* further point out that these three components are constantly in interaction and must therefore not be perceived as separate components. Perceiving traffic interactions between the elements out of which road traffic exists, shows the

interactive character of traffic: the human being as street and road user (pedestrians, cyclists, motorcar drivers and passengers), the vehicles (also bicycles) and the road (with its environment and circumstances).

4.2.2 Safety

Safety is referred to as the condition of being safe, as freedom from danger or risks (COD, 1995:1214). According to OALD (1995:1036) safety is the ability to keep or make somebody or something safe.

It is clear according to the definitions above that safety simply means to be kept away from danger. This suggests that keeping children away from danger by teaching them safety skills to protect themselves against traffic danger. Children have the right to live, therefore rules and laws that organize the safe movement of traffic is of absolute necessity. Dreyer *et al.* (1999:40) point out that positive perception of law enforcement could make a large contribution to the voluntary compliance with traffic rules and laws, and an eventual decrease in the extent of traffic offenses, as well as the resultant road accidents. The researchers further state that an important component of safe traffic participation is therefore to prevent traffic collisions and offenses by being on the look out for dangerous situations.

4.2.3 Education

Education is the process of training and instruction, especially of children and young people in schools, colleges, etc., which is designed to give knowledge and develop skills or the process of teaching somebody about something or to do something (OALD, 1995:365). According to Cole and Cole (1989:439) education is a form of socialization in which adults engage in deliberate teaching of the young to ensure the acquisition of specialized knowledge and skills.

Education can be referred to as applying knowledge to children or adults and acquiring new skills that will help in future.

Children have the right to learn; therefore it is the responsibility of parents and the school, working together to teach children about traffic safety education. It is their responsibility to equip children with necessary skills on traffic.

4.2.4 Traffic safety education

According to Dreyer (as quoted by Anon, 1996:8), traffic safety education is that educational action through which the road user, particularly the child from the toddler stage, acquires knowledge concerning traffic safety, traffic safety rules and traffic situations these rules apply to, and also develops skills for the effective application of traffic and road safety rules.

Dreyer *et al.* (1999:43), view traffic safety education as a special type of education, an area of specialty, like art education or music education because it consists of components "traffic" and "safety". These researchers argue that a distinction must be made between traffic safety education in **general**, as part of moral education whereby traffic safety education is described a deliberate and purposeful concern of the educator (parent, teacher or other adult) with the educated (person with need of education) so that the latter can become independent and responsible concerning the traffic environment, and traffic safety education as **specialized**, which focuses on traffic safety and the achievement of a high level of safe conduct in traffic.

The central purpose of traffic safety education is to conserve life, limb and property through the reduction of both the frequency and the severity of traffic related accidents. It is essential, therefore, to understand the nature of most traffic accidents.

4.3 THE ROLE OF PARENTS IN TEACHING TRAFFIC SAFETY EDUCATION

Since most preschools are not offering any systematic form of traffic safety education, the introduction of the child to the traffic environment is mostly a matter for parents, a task that they have to accomplish virtually unaided (Rothengatter, 1980:141). In the previous chapters it is stated that home is where a child starts his/her education and that the family plays a major role in developing that. Foster (1972:13) points out that a child learns through discovering new avenues of

exploration and new situations to think about and therefore family members help the child by extending his/her interests, drawing his/her attention to the unusual and giving him/her the benefit of their extra experience. Teaching traffic safety also is the responsibility of parents, they should not wait for the school to do that. Parents should teach children basic skills of traffic safety as they start using the road at home. It is never too early to teach a child traffic safety.

A good time to raise road safety issues with parents is when their children are about to start school. Anon (2002:1) encourages parents to take their children to school themselves and points out the importance of that as follows:

- The advantage of a parent to walk with the child is part of exercising, getting fresh air, a time to talk to the child and an opportunity for parents to practice road safety with the child
- By walking with children it is also an opportunity to teach a child to see safe places to walk on. For example, where to cross and when.
- For parents who drive their children to school it is a good time to teach children how to use seat belts and explaining the importance of it.

Teaching traffic safety should not only be a family affair, but also a community project. Parents should be involved directly in educational programs on traffic safety. They should acquire skills that will help them to teach their children at home and this can be done through workshops. The department of transport together with the community members should organize workshops which will be attended by parents and teach them basic skills on how to teach their children traffic safety

The community can also form traffic clubs where children will have after school lessons and parents should be informed on the progress of their children by sending them progress reports. The reports should have a space where parents will comment. This will help to see how committed parents are to their children's development (Anon, 2000:2).

It is the responsibility of parents and the community to teach children simple basic skills of traffic safety. Parents with cars can do this by showing children traffic signs they taught them at home while driving around with them. Also, parents without cars

can do this by teaching children while taking a walk with them. They should also ask children questions concerning the meaning and purpose of signs. This will help them to see how much their children know about traffic safety.

Parents should also be given a chance to comment on what they think their children should be taught concerning traffic. They should come up with topics that are relevant to traffic safety. Their involvement will make it easy for them to know what to teach their children and how to go about it.

4.4 THE ROLE OF THE SCHOOL IN TEACHING TRAFFIC SAFETY EDUCATION

Anon (1983:2) argues that the problem faced by road safety education is that it is not seen as part of any of the accepted school subjects and is not included in the public examination syllabuses. Klein (1989:3) argues that it is not important for schools to just accept any changes in the curriculum, rather principals should study their own schools and adopt a curriculum improvement plan that is specifically developed for their schools with their faculties. Therefore, du Plooy (1983:12) suggested that it is the task of the school as a social institution to compile and present the content of education in such a way that the following essentials can be realized:

- The realizations of positive relationships by creating trust, authority and understanding.
- The establishment of a mutual relationship in which the child knows and experiences that he can rely on the willingness of the teacher to help him on his way to full maturity.
- The active help the child receives when practicing to cope with the facts of life, so that he can progressively carry more and more adult responsibility.
- A purposeful attitude to accept and apply the norms of maturity as equipment.

Foster (1972:11) agrees with the statement above by saying that the fundamental purposes in primary schools should be to help children to think for themselves, to exercise choices and to make judgments.

Anon (1972:viii) points out that the school is challenged to use its own educational approaches based upon principles from the social, psychological and physical sciences in making traffic safety education an initial part of the total offering of the school system. It will be easier if every school develop a programme that complies with the expectations of the community. McCombs and Whistler (1997:14) argues that teachers should not only concentrate on the contents they are supposed to teach but also on what should be learned by the learner, as attention will now move to the learner's performance or demonstration of the knowledge or skills identified as important by the standards. These researchers further point out that the ultimate goal of schooling is to foster the learning of learners, and learners learn best when they are an integral part of the learning equation. Traffic education for young children requires an integrated effort of at least teachers and parents and possibly of road safety officers or other specialized personnel. The programme should be structured in a way that traffic safety is included in all learning areas of the curriculum. Anon (1996:33) points out that traffic safety training should not teach children only rules, it should rather teach them how to become responsible pedestrians, cyclists and passengers. Children should also be taught how to behave in traffic, not only how to obey traffic rules. Teaching traffic safety in classroom activities and outside activities should be included in that program.

4.4.1 Classroom activities

For a lesson to be effective, teachers should believe in their learners, respects them and relate to them well. If the learning environment is not based on a good teacher-learner relationship, learning will not be effective and will not produce good results. Therefore, before engaging children in any difficult activities, it is the duty of the teacher as a facilitator to know that in a classroom learners are not the same, that they do not develop at the same level and should be prepared to work on the attitudes and values of the learners. McCombs and Whisler (1997:98) point out that children should be taught with responsibility and respect rather than trying to teach them to blindly obey rules. For example, children need to be taught to be responsible road users and also to respect other road users and see them as people.

In the classroom, it is the responsibility of the teacher to organize space, resources and time for classroom activities since these contribute to a knowledge-based approach. Klein (1989:33) suggests that learning materials play a major role in determining what the learners will learn; therefore it is the responsibility of the teacher to see that the learning materials do reach the aims and objectives of the lesson. Anon (2001:1) adds that structuring the learning around multiple intelligences creates the opportunity to set up learning centers within the classroom that use road safety information and resources in a range of ways to make an impact on learners. McCombs and Whisler (1997:90) suggest that teachers should establish connections between curriculum and life by organizing the information to be learned around realizations or big idea statements at a high enough level of generality that they can apply beyond a specific unit of study. To make traffic safety easier in the classroom, the teacher can use videocassettes that are traffic related. For instance, showing children a video that shows how people use the road safely and dangerously and how to avoid danger and obey traffic rules. Also, books that show traffic signs can be used as material in the classroom to teach traffic safety. For example, a teacher might give children scissors and let them cut road signs in the book and name the sign and tell how to use the sign. Newspaper articles can also be used in the classroom. For instance, a newspaper article about an accident involving a school child being hit by a car while riding a bicycle, can be used to test thinking abilities of children. Questions like: "do you think children should be allowed to ride bicycles on highways or not?" can be asked to test if children can use their thinking skills. Children can also be tested by being asked what did they see when they were coming to school in the morning or what happened. This will create a discussion and this is where the teacher will realize how interested the learners are in traffic and also it will help to develop communication skills among the children. It is the duty of the teacher to make learners enjoy the lesson by making it easy for them to understand. McCombs and Whisler (1997:90), add to this by stating that teachers can help in making the curriculum more meaningful and relevant to learners by giving them choices whenever and wherever.

These activities should be done under the supervision of the teacher. Galloway and Edwards (1991:75) point out that the teacher needs to be able to observe each child at work with at best a sweep of the head or at most a movement by a few paces. The

teacher can also give group projects whereby children will be asked to make traffic signs on their own using boxes, papers and tins.

In the classroom, learners can be evaluated through questionnaires after the lesson whereby the teacher will ask questions and children will also ask if they do not understand. Thereby, the teacher will then see if the lesson was a success or not.

The UK Department of Transport has developed a programme where classroom activities are made easier to integrate traffic safety in all learning areas of the curriculum. The programme includes activities that are important in essential skills like communication, numeracy, information, problem solving, self-management and competitive, social and co-operative, physical and work and study (Anon, 2001). The programme is well structured and straightforward, it is also easy to be implemented as its activities are based on what the children experiences daily in their lives.

4.4.2 Outdoor activities

Outdoor activities can be referred to as the effective use of the natural environment both to teach those parts of the curriculum that can best be taught outdoors and to vitalize other parts through first hand experience. Hug and Wilson (1979:1) point out that outdoor education has values that are both tangible and intangible and that learning is stimulated and new interests are aroused by providing intriguing first hand experiences and that such experiences penetrate more deeply and are longer lasting than vicarious ones. These researchers further remark that the new interests spur the learner to broaden his/her concepts, to investigate many sources of information and to examine new areas of knowledge and that also the social values of outdoor education are important as members of groups learn that each person has something unique to contribute. Group work becomes more efficient through practice in formulating objectives, in planning, in dividing duties and in being responsible for results and also in that personalities grow in the relaxed environment in which teacher and pupils see each other as people. For example, traffic safety is something that is best learned by experiment, children will understand better if they see what they were taught in the classroom or at home live rather than learning them through

reading. They have to practice the rules and signs practically in order to know what is really happening.

Smith *et al.* (1972: 42), list characteristics that distinguish outdoor education as relating to methodology of learning:

- *Direct experience:* Direct exposure to learning experiences, without depreciating the values of vicarious experience, lectures, books, and visual aids.
- *Discovery, exploration, adventures:* Good teaching in the outdoors will seek to employ the methods of science, working from the specific to the general.
- For example being taught how to estimate the distance of the car and the speed it is traveling at.
- *Sensory learning:* Good outdoor learning will employ every applicable sense to the learning experience. For instance, looking at the real traffic signs and using them live will help learners to remember them always and know them by heart.
- *Activities natural to childhood and youth:* Because outdoors activities are lively, exciting and even thrilling, they have an inherent appeal for youngsters.
- *Intense interest:* Interest is high when learners are totally involved in learning experiences. Because of the natural appeal of the outdoors to most children and youth, it is relatively simple matter to secure total involvement and intense interest.
- *Reality:* Problems in the outdoor are real to learners; they are not problems of words, pictures, charts or diagrams.
- *Problems in context:* Problems encountered by learners exist in a real setting, the setting is as significant as the problem itself.
- *Learners are most active:* The outdoors provides many real challenges of such character to stimulate both the learner and the teacher. Learners become truly active in the learning process.

After classroom activities, the teacher needs to observe whether that which was applied in the classroom is acquired; therefore he/she needs to test it practically outside the classroom. Traffic safety programmes should be done practically in order to be successful. Anon (2000:1) supports this statement by stating that the principal

advantage of practical training methods is that they lead to measurable changes in children's actual behavior. Practical training methods are time consuming; therefore a full attention of a teacher and participation of children is needed. Foster (1972:13) goes along with the statement by also adding that children need first hand experience if they are to be free to experience adventure in their learning. By applying traffic safety practically, a teacher might take the children to the playground and use the traffic signs that children made in their group projects. Bicycles can also be used, as there are children who are riding bicycles to go to school, to demonstrate how to ride in a traffic situation, how to cross a pedestrian crossing and how to use a traffic light. Also, it will be of great importance if the school will organize an educational tour taking children to the road or traffic department, whereby they will have the opportunity to see those traffic signs.

The above-mentioned activities concentrate mainly on equipping children with knowledge of traffic safety but does not teach them how to behave in a real traffic situation. The behaviour of children has to be taken into consideration since it plays an important role in their learning. Rothengatter (1981:47) in a review of research done, points out that modeling should be advocated as an effective method of modifying traffic behaviour, especially for the acquisition of behaviour patterns. He also suggests that a training programme using behavior modification principles needs to be applied in the real traffic situation to be fully effective. It is very much important to deal with the behavior of children, as they are part of every decision they take. As it has already been stated in chapter 2, children learn through modeling; it is the responsibility of both parents and teachers to help them develop positive attitudes towards traffic safety as a school subject.

In order to apply the above activities successfully, there are certain things that need to be done. The school together with the Department of Transport, Department of Education and the community, should work together and formulate a programme on how to solve this problem.

Anon (1974:20) mentions the roles that should be played by the above-mentioned individuals in developing a programme for road safety in schools. The writer mentions that in order to make the programme a success, qualified people should be given the task to teach children. It will be easier if traffic safety education is included

at teacher's institutions as part of their training course, like Potchefstroom University has done. Then it will be much easier when they have to teach or integrate traffic safety in the school curriculum. The Department of Transport should also keep on informing teachers about new information and developments in their department. Teacher's manuals should be developed whereby teachers will be guided on how to teach traffic safety successfully.

Anon (1974:212) further states that the department of education should be relied on to provide leadership in matters of instructional materials, curriculum and course requirements, consultant services, teacher preparation and certification, research and evaluation, and in other ways that serve emerging traffic safety needs.

Carl *et al.* (1988:2) suggest that in the primary school there is plenty of room for syllabus development because there is no external examination system, and these researchers came up with a modular approach for primary schools to use in order to improve their syllabus. Klein (1989) has indicated that principals can improve the curriculum according to their school's needs; they can do that by implementing the design that Carl *et al.* (1988) has developed.

4.5 TEACHING STRATEGIES

A teacher has to execute a wide variety of teaching and learning activities during lessons and therefore has to plan carefully before going to class in order to make that lesson a success (Vreken, 2001:13).

Vreken (2001:13) continues by stating that before planning a lesson, the teacher has to know to whom the lesson will be directed, which learning content is to be taught, and what is to be attained with the lesson.

The empirical part of this study concentrates on two different grades and ages; therefore the lessons will not be the same. This simply implies that a lesson plan of grade fours will not be the same as that of grade sixes. The teacher should make the lessons simple, interesting and meaningful to learners.

Vreken (2001:16) mentions different strategies that teachers could use in their classrooms which are indicative, self-discovery and interactive. The methods that these strategies could include are as follows:

- Indicative – telling, demonstration and lecture;
- Self-discovery – class conversation, project, problem solving and dramatizing;
- Interactive – teaching and learning conversation.

Traffic safety education could be applied successfully with the help of the methods mentioned above.

4.6 INTEGRATING TRAFFIC SAFETY IN A LESSON

Grade four and six learners are between nine years and fourteen years and most of them can read but cannot cope with too much text. They cannot concentrate on one thing for a long time therefore they need a lesson that will meet their needs. Since learners face traffic daily, the teacher can use the experiences the learners get from traffic situations in his/her lesson.

The strategies and methods mentioned in paragraph 4.5 could be applied in the following ways:

On the grade fours, since the use of too much text cannot be that much of a success, projects would be of great use. The teacher would present the lesson to the learners and give them a project to do as a group as this will also encourage group work among the learners. This will also give each learner the opportunity to state his/her own views. A project using a chart, pictures, pencils and colorants to demonstrate the flow of traffic on the road can be given.

On the grade sixes, text can be applied, for instance giving learners a task of going to the library and writing down the traffic signs they find and their meaning and bringing it to class for discussion. It can be group or individual work.

After the completion of the project, the teacher would evaluate the project by involving each group member by asking questions like “what is this sign, what does it

mean and do you think people obey the sign?" Questions like these will help the teacher to see how learners think and how do they see things. Projects will help learners to gather information and to develop their communication skills. These questions will also be part of the teacher's evaluation of the outcomes of his/her lesson as each lesson has outcomes that are supposed to be met at the end of it.

The teacher can demonstrate the lesson with the learners. For example, taking the learners outside and using different projects that were assigned to learners to see if the learners can apply the information that they have collected.

The teacher can create classroom conversations by asking learners questions like "have you ever been involved in a road accident, what do you think causes accidents on the road" and "what do you think should be done to reduce road accidents".

4.7 CONCLUSIONS

It is clear in this chapter that something needs to be done in order to reduce the risk that children are in. A joint participation of parents, school and the Department of Transport can put an end to the danger that children are facing.

It would be of great importance if every school takes the responsibility of making sure that their children are safe by teaching them how to behave in traffic situations as a daily subject. Children will know this and remember it wherever they are. Children have the right to safety and therefore they should be taught by the school and parents how to avoid dangers and keep them safe. Children should be taught relevant content that will help them acquire skills that will help them in future. They should be taught how to solve problems on their own, how to relate with other people and how to use technology - for instance, traffic lights are part of technology and therefore children have to know how to use it.

If South African schools apply the method that is being implemented in the UK to teach traffic safety in schools, teachers would not have any difficulties as it is integrated in all learning areas of the curriculum. It is an easy method that will help learners to learn easy and it is also fun. The activities are based on what is happening around children.

CHAPTER 5

EMPIRICAL RESEARCH AND ANALYSIS OF RESULTS

5.1 INTRODUCTION

This study was conducted in order to determine the values and attitudes of primary school learners towards traffic safety and traffic safety education. The aims of this research focussed on values and attitudes of primary school learners towards traffic safety education, the role that school and parents play in developing positive values and attitudes to learners, and the role that the school and parents play in teaching traffic safety and traffic safety education to learners.

The empirical research in this study was conducted by means of a questionnaire. Copies of the questionnaire were given to primary school learners (Grade 4 and Grade 6) (Appendix 3), primary school teachers (Grade 4 and Grade 6) (Appendix 4) and parents of the same learners (Appendix 5).

The questionnaires were filled out by learners in the classroom under the supervision of the teacher and the researcher, the teachers also filled out their questionnaires in the presence of the researcher. The learners were given questionnaires to give to their parents to fill out at home and bring back. No strict time limit was stipulated for the questionnaires in order to allow every respondent to answer all the questions at his/her own pace.

The results of the learners', teachers' and parents' responses to the questionnaires are presented and discussed with respect to all the research questions and aims of this study.

There were several strategies that were considered for this research, for example the use of interviews, but due to the fact that the population of 630 was too large to be interviewed, only questionnaires were used.

The following are presented in this chapter:

- * Method of research (research design)

- * Response of learners, parents and teachers to the questionnaires
- * Discussion/interpretation of the results
- * Summary

5.2 METHOD OF RESEARCH

5.2.1 Introduction

To achieve the aims of the study, certain methods of research were used.

According to Nwana (1991) as quoted by Iornengen (1999:117) methodology can be referred to as the sequence of operation for the accomplishment of a particular task. This implies the design of such procedures to be taken towards achieving the purported objectives of the study. Design of the study is a phrase used to describe a number of decisions, which need to be taken regarding the methodology for the study, or for collection of data before the data is collected.

This section presents the methods that were used in carrying out this research. The sources of data; study population; method of data collection; method of interpretation and analysis of data will be discussed.

5.2.2 Sources of data

Two sources of data were used extensively. These were the primary and the secondary sources. The primary sources were the questionnaires designed and given to learners, teachers and parents of primary schools in Potchefstroom. The secondary sources were the content analysis of information obtained from the Internet, journals, textbooks, pamphlets, dissertations and theses.

5.2.3 Study population and sampling technique

Learners and teachers who participated in this research were from primary schools in Potchefstroom. The parents of these learners also participated. A sample of ten grade 4 and ten grade 6 learners from each school was used, one grade 4 teacher

and one grade 6 teacher participated and the parents of the learners also participated. All in all 300 learners, 300 parents and 30 teachers, which is 630 in total, took part in the research.

5.2.4 Method of data collection

To obtain relevant information regarding the aims and research questions of the study, the following techniques were utilized:

5.2.4.1 Questionnaire

A questionnaire was designed in order to reach the aims of this study for learners, parents and teachers.

The questionnaire for the learners consisted of 15 questions with the option of yes or no to answer; the questionnaire for teachers consisted of 18 questions with the option of yes or no answers and the questionnaire for parents consisted of 14 questions also with the option of yes or no answers. If a respondent leaves a blank space, it would clearly signal a misconception. This implies that all the blank spaces were not counted.

5.2.4.2 Literature survey

To achieve the aims of this study, a survey of literature was done in addition to the information collected through the questionnaire.

5.2.5 Method of conducting the questionnaires

The questionnaire as described in section 5.2.4.1 was given to primary school learners, teachers and parents of the learners.

The answering technique of the entire questionnaire was crossing the right answer with (x). Questionnaires were given to the learners and teachers and collected after

completion. The questionnaires for the parents were given to the learners to take home to be filled out by their parents and were collected the following day.

5.2.6 Method of data analysis

The analysis and interpretation of the data was done by using frequencies and percentages.

5.3 THE RESPONSE OF LEARNERS, TEACHERS AND PARENTS TO THE QUESTIONNAIRE

The responses of the learners, teachers and parents to the questionnaires are tabulated in Tables 1, 2 and 3 (see Appendix 6).

5.4 RESULTS AND INTERPRETATION OF THE LEARNERS' RESPONSE TO THE QUESTIONNAIRE

5.4.1 Demographic information of the learners

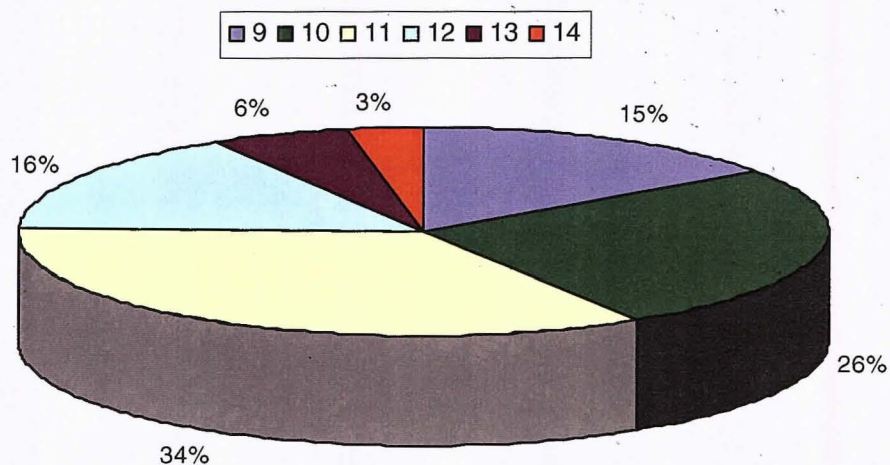
5.4.1.1 Number of learners who participated

Three hundred (300) learners took part in the investigation.

5.4.1.2 Age group

Age group of the participants was between 9 and 14 and they were primary school learners as indicated in figure 5.1:

Figure 5.1 Age of learners

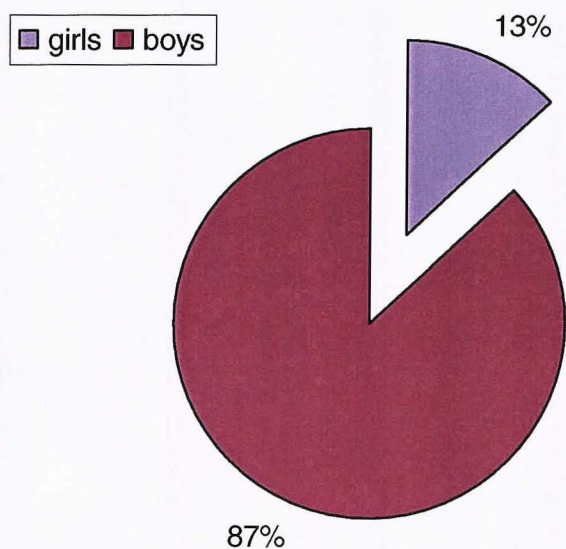


According to the above information most of the learners are still young as the figure indicates that they are between nine and twelve.

5.4.1.3 Gender

The gender of the learners who filled out the questionnaires was as indicated in figure 5.2

Figure 5.2 Gender of learners

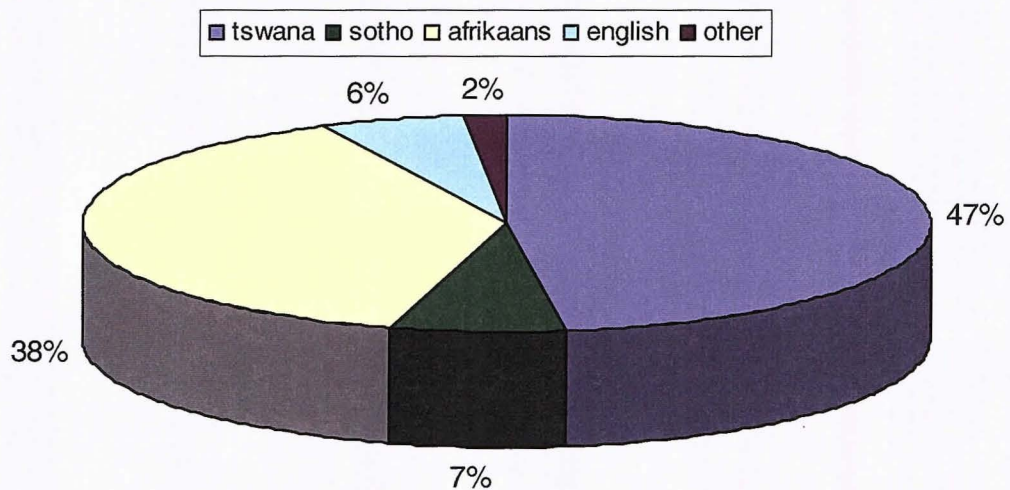


The figure above shows that more boys were involved in this research than girls. This was because most of the grade fours and grade six classes that were selected for the research consisted of boys.

5.4.1.4 Home language

The home language of the learners is indicated in figure 5.3 below.

Figure 5.3 Language of learners

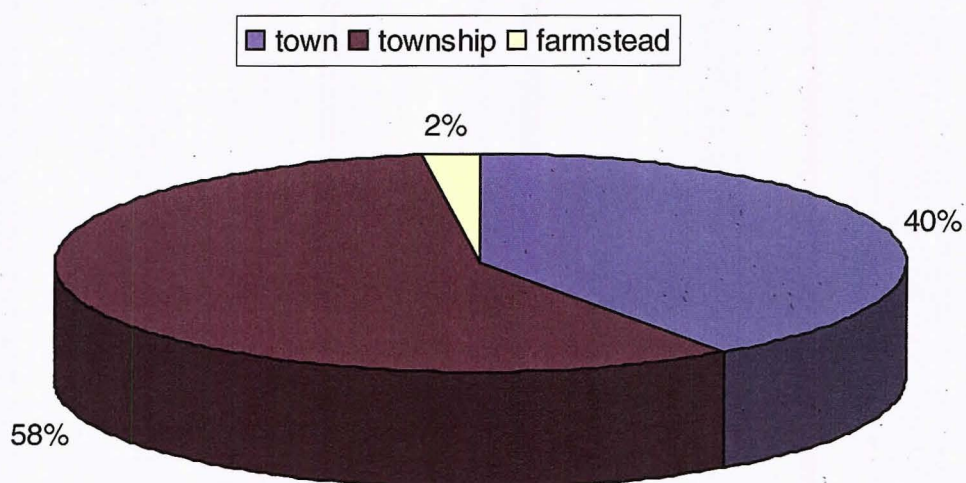


According to figure 5.3, 47% of the learners were Tswana speaking, followed by Afrikaans-speaking learners. This shows clearly that Tswana and Afrikaans speaking learners dominate the study population.

5.4.1.5 Place of residence

The place of residence of the research population is indicated in figure 5.4

Figure 5.4 Place of residence



Most of the learners were from the township with the high percentage of 58% followed by 40% who were from town. It was interesting to note the small percentage of the learners who were from farms.

5.4.2 Learners' values and attitudes towards traffic safety and traffic safety education

- 99% of the learners think that it is important for them to be taught traffic safety
- 93.65% of the learners think that the other learners will also be interested to learn traffic safety education.
- 98.33% feel that it is important for them to be safe road users.
- Learners feel that there should be a combined effort from parents, the school and the traffic department to educate them in traffic safety.
- 66.89% of the learners indicated that they could cope in traffic situations on their own, whereas 32.78% clearly showed that they couldn't cope in traffic on their own.

According to the percentages of the learners who feel they cannot participate in traffic on their own, it is clear that there is an absolute need to teach traffic safety in

schools, as these learners who feel incapable to use the road have to travel to school every day on their own.

- 91.28% of the learners indicated that they do care about the safety of the other road users.
- 73.56% of the learners feel that the other road users care about their safety on the road.
- 97.98% of the learners indicated that they would be interested to learn traffic safety.
- 97.32% feel that they would like to be safe road participants.
- 96.31% indicated that they do care about the safety of other road users.
- 83.50% feel that they would be interested in receiving training on how to be a safe cyclist.

According to the information above, it is clear that learners care about their safety and therefore have showed how interested they are to learn traffic safety education. They feel that traffic safety education is so important that it should be part of their school curriculum.

5.5 RESULTS AND INTERPRETATION OF THE PARENTS' RESPONSE TO THE QUESTIONNAIRE

5.5.1 Demographic information of the parents

5.5.1.1 Number of parents who participated

300 parents took part in the research.

5.5.1.2 Gender

Gender of the participants who filled out the questionnaire was as indicated in figure 5.5.

Figure 5.5 Gender of parents

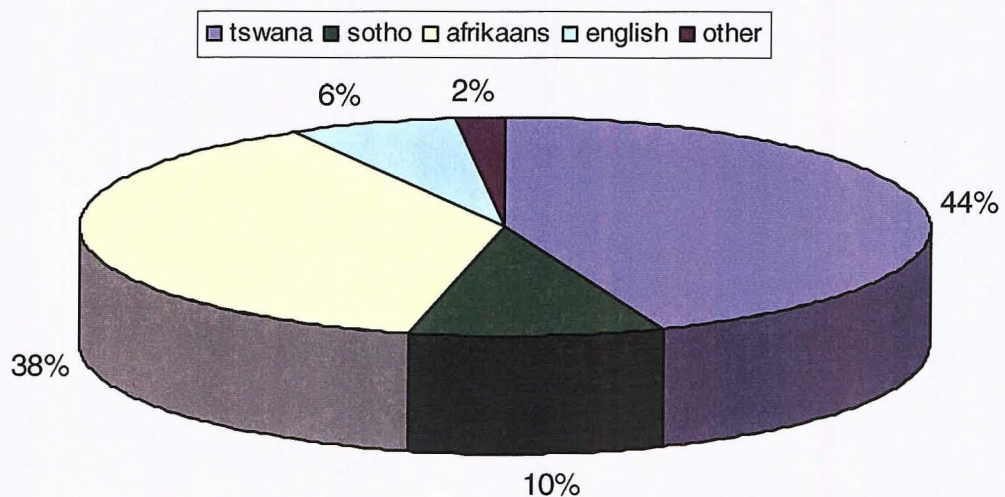


According to the information in figure 5.5, the majority (64.55%) of parents who took part were females.

5.5.1.3 Home language

The home language of the parents who participated is indicated in figure 5.6.

Figure 5.6 Home language of parents

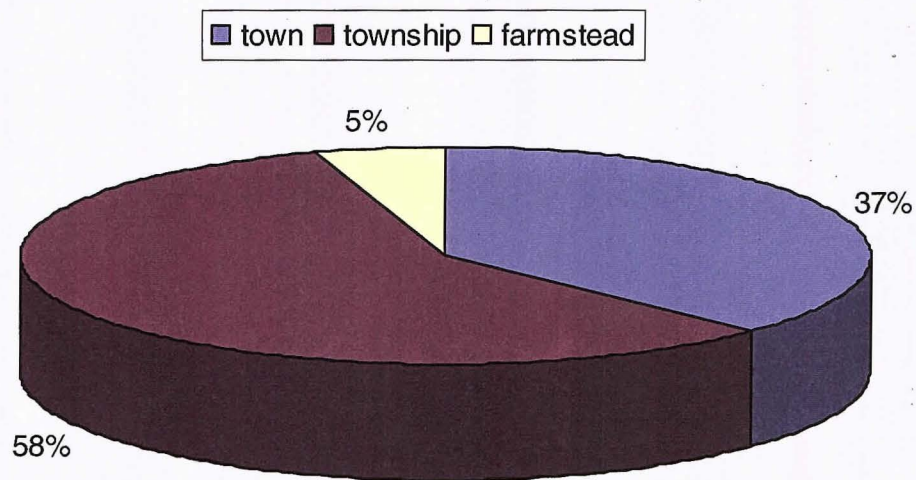


According to figure 5.6, 44.00% of the parents' home language was Setswana, while 38.00% was Afrikaans.

5.5.1.4 Place of residence

The place of residence of the parents' response group is indicated in figure 5.7.

Figure 5.7 Place of residence of parents

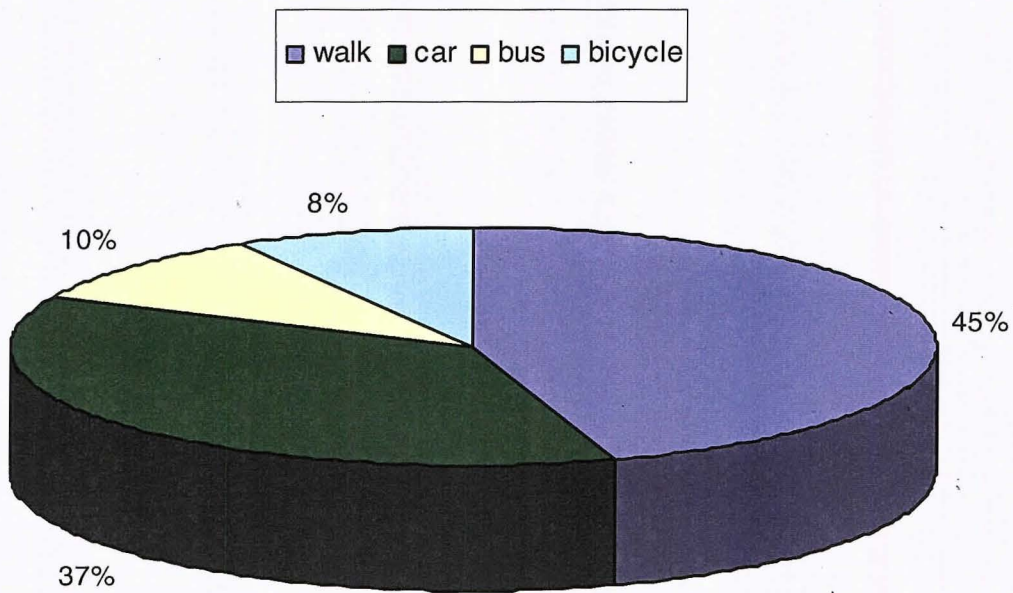


According to figure 5.7, most of the parents are staying in the township followed by a small percentage of those who are staying in town or/and farm.

5.5.1.5 The mode of transportation by which children travel to school

Figure 5.8 indicates how the children of the participants travel to school.

Figure 5.8 How the children of the participants travel to school



It seems that the majority of children (45.00%) have to walk to school. It is interesting to note that only a small percentage (8%) travel to school by bicycle.

5.5.1.6 Training of parents in traffic safety

46% of the parents indicated that they have received some form of training in traffic safety. Although the parents did not indicate what type of training they received it can be assumed that it was part of their training for a driver 's license.

5.5.2 Parents' values and attitudes towards traffic safety and traffic safety education

5.5.2.1 Parents' views concerning traffic safety education in school.

- 98.33% of the parents consider it as important that traffic safety should be taught at primary school level.
- 94.67% of them feel that it should be part of the primary school curriculum.
- Parents feel that there should be a combined effort from parents, teachers and the traffic department to teach traffic safety to their children.

- 94.65% of the parents feel that the values taught at home play a role in the decisions that their children make in traffic situations.
- 97.99% of the parents think it is important for their children to be safe road users.
- 98.67% of the parents would like to see that their children receive traffic safety education.
- 71.00% of the parents would like to receive training in traffic safety education so that they can also educate their children in traffic safety.
- 74.67% of the parents said that they would attend if training was offered.
- 94.63% of the parents support the idea that traffic safety education should be included in the primary school curriculum.

From the above it is clear that the parents are positive about traffic safety education and that they are willing to be trained in this respect so that they can also play a role. They feel that traffic safety education is so important that it should be included in the primary school curriculum.

5.6 RESULTS AND INTERPRETATION OF RESPONSE OF TEACHERS TO THE QUESTIONNAIRE

5.6.1 Demographic information of the teachers.

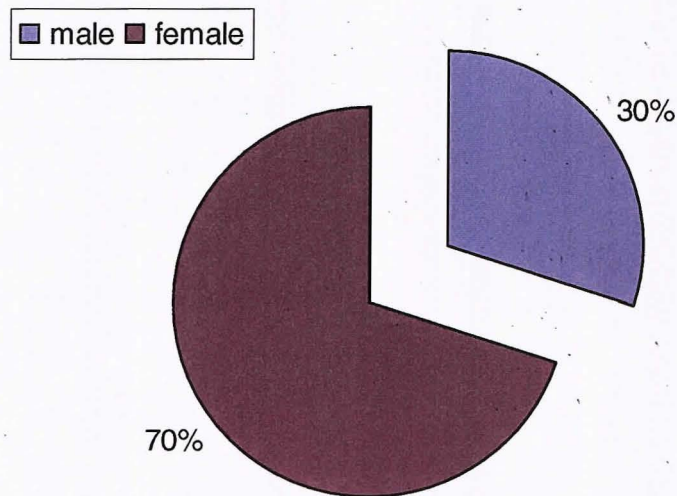
5.6.1.1 Number of teachers participated

30 teachers took part in the research.

5.6.1.2 Gender of teachers

Figure 5.9 indicates the gender of teachers who took part in the investigation.

Figure 5.9 Gender of teachers

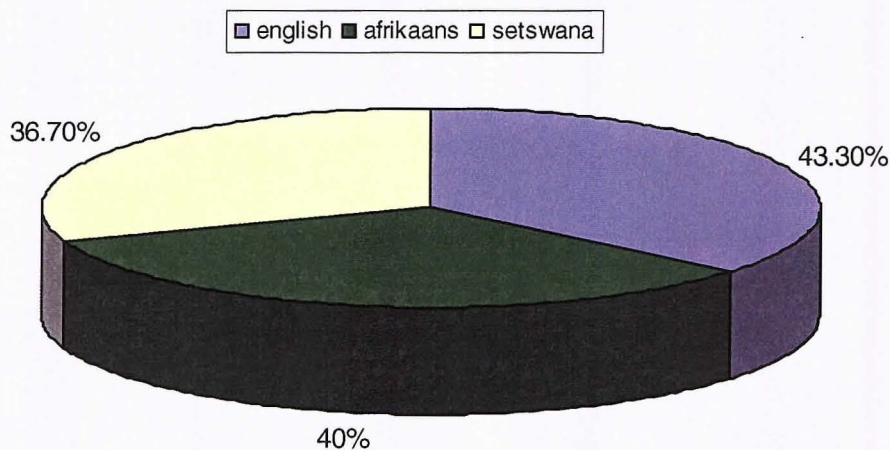


According to figure 5.9 the majority (70.00%) of the teachers who took part were males.

5.6.1.3 Medium of instruction

The medium of instruction of the schools is indicated in figure 5.10 below.

Figure 5.10 Medium of instruction



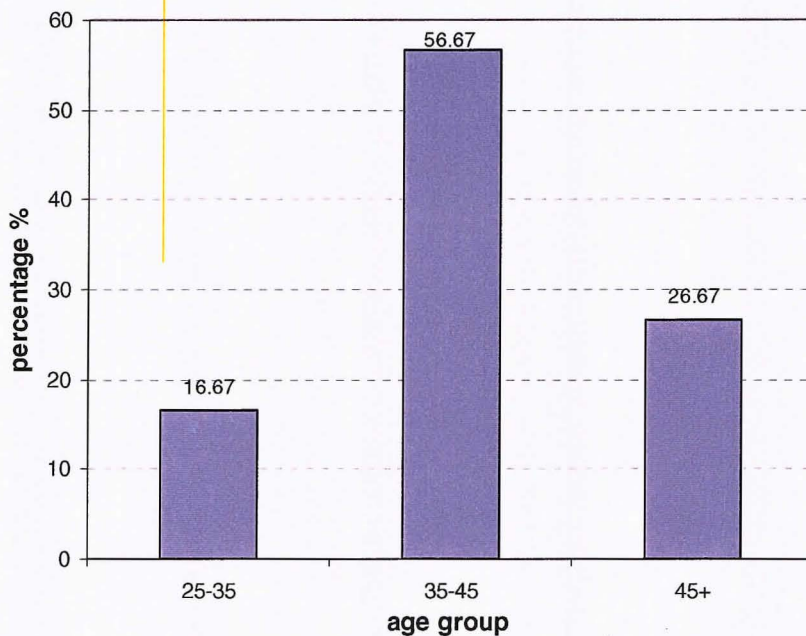
According to figure 5.10 43.3% of the schools use English as their medium of instruction, 40% use Afrikaans and 36.7% use Setswana. Some of the schools,

especially the Setswana medium of instruction, use English as their second medium of instruction in their schools.

5.6.1.4 Age group of the teachers

Age group of the teachers who participated was as indicated in figure 5.11.

Figure 5.11 Age group of the teachers



5.6.1.5 Training in traffic safety education

On the question of how many of the respondents received training in traffic safety education, only 26.67% indicated that they did receive some training.

5.6.2 Teachers' values and attitudes concerning traffic safety education

5.6.2.1 Teachers' opinions concerning traffic safety education

- 100% of the teachers believe that it is important that learners be taught traffic safety education in schools.

- 96.67% feel that traffic safety education should be included in the school curriculum.
- 86.67% think that all the teachers should receive training concerning traffic safety education.
- 100% of the teachers consider it as important for them to be safe road users or role models.
- 100% of the teachers feel that it is important for the school to emphasize positive values to children concerning traffic safety education.
- 86.21% of the teachers indicated that if traffic safety education was to be integrated as a school subject they would be interested to teach it.
- 100% of the teachers indicated that if given a chance to teach traffic safety education, they could make the best of it.
- 96.55% feel that they can teach traffic safety education in such a way that it will change the attitudes of the learners and make it interesting to them.
- 82.76% indicated that they are interested in receiving training in traffic safety education.
- 100% think that traffic safety education would succeed if implemented in schools.
- 100% think that learners will be interested in learning traffic safety education.
- 89.66% indicated that they could come up with teaching strategies to implement traffic safety education if given a chance to do that.
- 96.55% indicated that they would like to see their learners as safe road users.

The information above indicate clearly how positive teachers are concerning traffic safety education. They feel it should be part of the primary school curriculum as it is important to learners. They also indicated that if training were offered, they would be glad to attend it.

5.7 SUMMARY

This chapter presented a methodological report concerning all the decisions taken towards making the empirical survey successful. There were explanations in cases

where that which was originally in the research proposal was not accurately implemented.

The results of the empirical study were interpreted and discussed for the learners (in paragraph 5.4), for the parents (in paragraph 5.5) and for the teachers (in paragraph 5.6). The response of the learners, parents and teachers were analysed with respect to addressing the aims and research questions of the study.

It is hoped that these findings will be of value to primary school learners, teachers and parents.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The purpose of this chapter is to summarise the findings of the study, consider the implications and make recommendations for further research.

6.2 SUMMARY AND CONCLUSIONS

The key aim of this study was to determine the values and attitudes of primary school learners towards traffic safety and traffic safety education. The study investigated the values and attitudes of children, the role of the school and the parents in developing values and attitudes in children and the role of parents and teachers in teaching children traffic safety education.

The questions addressed were:

- What are the values and attitudes of primary school learners towards traffic safety education?
- What is the role that parents and the school play in developing positive attitudes and values in children towards traffic safety and traffic safety education?

To address these questions an investigation was carried out in fifteen primary schools in Potchefstroom in the North-West Province. The investigation consisted of Grade fours and Grade six learners, the parents of these learners and their teachers. The participants were given questionnaires to complete as part of the investigation in order to get the information that was needed in this study.

From the response of the learners, it was evident that learners care about their safety and that it is important for them to be safe road users. They showed interest in the question of traffic safety education being included in their schools curriculums. They supported that by indicating that it should be a joint effort of the community and the school.

The findings showed how much learners really value their lives. It is evident according to the findings of this study that learners need education concerning traffic participation. Some showed that they can participate in a traffic situation without the assistance of adults or friends, but there are also others who feel that they cannot. This indicates clearly how urgent this problem is.

The responses of the parents were very positive. They showed interest in their children's safety by indicating that traffic safety should be included in the primary school curriculum. They even indicated that they will attend training if it is offered. The findings showed that parents are concerned about their children and they want them to be in traffic situations.

Most of the teachers responded positively to the questionnaire. They showed interest in the possibility of including traffic safety education in the schools. They even indicated that they will support it if it is included in the primary school curriculum. They indicated, however, that they do need training in order to help learners to be safe road participants.

According to the findings of this study, it is evident that the reason why children are involved in road accidents is because of a lack of prior knowledge on traffic safety education. Teachers are not well equipped with the relevant knowledge to teach learners traffic safety education. Most of the parents also do not have the relevant knowledge and skills to teach their children. Therefore, it is clear that something has to be done to save the situation that the country is facing.

6.3 IMPLICATIONS OF THE STUDY

If the learners receive prior knowledge of traffic safety from parents and the teachers, it will assist them in traffic situations rather than facing traffic situations not knowing what to do. Equipping teachers and parents with the necessary skills will also assist in this matter. This will help the teachers and parents to develop positive attitudes towards the learners and to value their lives.

6.4 LIMITATIONS OF THE STUDY

The results of this study were based on the results sampled from fifteen primary schools and three hundred learners that were randomly selected in one province of South Africa. The results might be too limited to conclude that most learners in Grade 4 and Grade 6 are not familiar with traffic safety education in their schools. There are many primary schools in the country, therefore it is not known what they are doing concerning traffic safety education as it was stated in chapter four that each school has the right to improve its school's curriculum. Therefore, it can be possible that there might be schools that are already teaching traffic safety education.

6.5 RECOMMENDATIONS

- Traffic safety education is really needed in schools. Therefore, something has to be done to implement it successfully. There is a need for projects to be conducted. The government will have to assist with funds. Due to economical constraints the country is experiencing, each school must take charge. By taking charge, it simply means they should raise funds and ask for sponsors from the community. Parents should donate a certain amount to the school to make this implementation of traffic safety education a success.
- The volunteers from the Traffic Department must come and teach the community about traffic safety. After the community has received the necessary knowledge, they must then come and do voluntary teaching in traffic safety.
- Workshops should be organised for teachers who do not have training in offering traffic safety education lessons. To steer interest among the participants/volunteers, the Traffic Department should offer certificates on completion of these courses. This will motivate people to be more involved and committed to the project. This will mean that more people will become involved and that children will be receiving training/education from all the sides of the community.
- The traffic department should make sure that the community receive relevant training and that it is involved in reducing road accidents.

- The Department of Education should also mandate schools to add traffic safety education in their school curriculums.

APPENDIX

APPENDIX 1: PERMISSION LETTER TO THE DEPARTMENT OF EDUCATION

School of Education

PU for CHE

Potchefstroom

2531

03 February 2003

Mr D Bosman
District manager
Private Bag x919
Greyling Street
POTCHEFSTROOM

Dear Sir

PERMISSION TO CONDUCT RESEARCH

I hereby request permission to conduct a research on Values and attitudes of primary school learners towards traffic safety and traffic safety education at the primary schools in Potchefstroom area.

This research is being conducted in the fulfilment of the requirements for the degree Magister Educationis (traffic safety education) at the Graduate School on Education at the Potchefstroom University for Christian Higher Education.

Prof Vreken of the Faculty of Education at the Potchefstroom University for Christian Higher Education, is the Supervisor of this study, and if there is any query concerning the research being conducted at each school, please feel free to contact him on this number 018 – 2991894 (during office hours).

Your co-operation in this matter is greatly appreciated.

Yours sincerely

M.D. Phiri (Miss)

Supervisor

(Prof. N.J. Vreken)

APPENDIX 2: REQUEST LETTER TO THE PRINCIPALS

School of education

PU for CHE

Potchefstroom

2531

2003-02-17

The Principal

REQUEST TO DO RESEARCH AT YOUR SCHOOL

I am a student at Potchefstroom University, currently busy with M.Ed studies. My research title is "Values and attitudes of primary school learners towards traffic safety and traffic safety education." Since my research is based mainly on learners, I'm asking for your permission to allow me to do this research with your grade 4 and 6 learners together with their teachers. They will be only expected to fill out questionnaires.

I will appreciate it, if this request is granted.

Thanking you in advance.

Yours sincerely

M.D. Phiri (Miss)

Supervisor

(Prof. N.J. Vreken)

APPENDIX 3: QUESTIONNAIRE FOR THE LEARNERS

QUESTIONNAIRE 1

Grade 4 and 6 Learners

For office use

Number of questionnaire

01-04

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Each year thousands of children in South African roads lose their lives due to traffic accidents. One of the reasons is lack of proper education concerning traffic safety. This questionnaire will help us to construct more effective education programmes to help in developing positive attitudes and values of children in traffic safety.

SECTION A: DEMOGRAPHIC INFORMATION

Please read through the following survey and answer the questions as honestly as you can. Tick the right answer in the box by a cross.

1. How old are you?

9	10	11	12	13	14+
---	----	----	----	----	-----

05

2. Are you a boy or a girl?

BOY	GIRL
-----	------

06

3. Home language

Tswana	Sotho	Afrikaans	English	Others
--------	-------	-----------	---------	--------

07

4. Where are you staying?

08

Town	Township	Farmstead
------	----------	-----------

SECTION B: TRAFFIC SAFETY AND VALUES OF LEARNERS

1. Do you think it is important for you to be taught traffic safety in your school?

09

YES	NO
-----	----

2. Do you think other learners will be interested to learn about traffic safety?

10

YES	NO
-----	----

3. Do you think it is important for you to be a safe road user?

11

YES	NO
-----	----

4. Who do you think should be responsible for teaching you traffic safety?

12-17

Parents	Teachers	Friends	Siblings	Traffic department	All of them
1	2	3	4	5	6

5. Can you cope with traffic on your own?

18

YES	NO
-----	----

6. Do you care about the safety of other road users?

19

YES	NO
-----	----

7. Do you think the other road users care about your safety? 20

YES	NO
-----	----

SECTION C: TRAFFIC SAFETY AND ATTITUDES OF LEARNERS

1. Would you like to learn about traffic safety? 21

YES	NO
-----	----

2. Would you like to be a safe road user? 22

YES	NO
-----	----

3. As a road user, would you care for other user's safety? 23

YES	NO
-----	----

4. Would you like to receive training on how to ride a bicycle safely? 24

YES	NO
-----	----

Thanking you for your participation



APPENDIX 4: QUESTIONNAIRE FOR THE TEACHERS

QUESTIONNAIRE 2

GRADE 4 AND 6 TEACHERS

For office use

Number of questionnaires

01-04

--	--	--	--

SECTION A: DEMOGRAPHIC INFORMATION

1. Your gender

05

Female	Male
--------	------

2. Medium of instruction at your school?

06

English	Afrikaans	Setswana
---------	-----------	----------

3. Your age group

07

25-35	35-45	45+
-------	-------	-----

4. Did you receive any training in traffic safety?

08

YES	NO
-----	----

5. If yes please specify-----

SECTION B: TRAFFIC SAFETY AND VALUES

1. Do you think learners should be taught traffic safety in schools? 09

YES	NO
-----	----

2. Do you think traffic safety should be integrated in the school curriculum? 10

YES	NO
-----	----

3. Do you think all teachers should receive training concerning traffic safety education? 11

YES	NO
-----	----

4. Is it important for you to be a safe road user? 12

YES	NO
-----	----

5. Do you think it is important for the school to emphasize positive values to children concerning traffic safety education? 13

YES	NO
-----	----

If yes give 2 reasons why do you see the importance of teaching traffic safety education at school

5.1

5.2

SECTION C: TRAFFIC SAFETY AND ATTITUDES

1. If traffic safety is integrated as a school subject, would you be interested to teach it? 14

YES	NO
-----	----

2. If you are given a chance to teach it, can you make the best out of traffic safety to learners? 15

YES	NO
-----	----

3. Can you teach traffic safety in a way that it will change the attitudes of the learners and make it interesting to them? 16

YES	NO
-----	----

4. Would you be interested in receiving training in traffic safety? 17

YES	NO
-----	----

5. Do you think traffic safety education would succeed if implemented in your school? 18

YES	NO
-----	----

6. Do you think learners would be interested in learning traffic safety education? 19

YES	NO
-----	----

7. Can you come up with teaching strategies to implement traffic safety if given a chance to do it? 20

YES	NO
-----	----

8. Would you like your learners to be safe road participants? 21

YES	NO
-----	----

Thanking you for your participation

APPENDIX 5: QUESTIONNAIRE FOR THE PARENTS

QUESTIONNAIRE 3

GRADE 4 AND 6 PARENTS

For office use

Number of questionnaires

01-04

--	--	--	--

Teaching traffic safety education to learners is not only the responsibility of the school. Parents also have to be involved and committed to their children's education, therefore also have to play role a in reducing road accidents faced by children. This questionnaire determines commitment of parents towards their children's traffic safety education.

SECTION A: DEMOGRAPHIC INFORMATION

Please read the following survey carefully and answer the questions that follow as honestly as you can.

1. Gender

Female	Male
--------	------

05

2. Home language

Tswana	Sotho	Afrikaans	English	Others
--------	-------	-----------	---------	--------

06

3. Place of residence

Town	Township	Farmstead
------	----------	-----------

07

4. How does your child travel to school?

08

Walk	Car	Bus	Bicycle
------	-----	-----	---------

5. Have you received any training concerning traffic safety?

09

YES	NO
-----	----

SECTION B: TRAFFIC SAFETY AND VALUES

1. Do you think it's important for children to be taught traffic safety at school?

10

YES	NO
-----	----

2. Do you think traffic safety should be integrated in a school curriculum?

11

YES	NO
-----	----

3. Who do you think should be responsible for teaching children's traffic safety education?

12-17

Parents	Teachers	Friends	Siblings	Traffic department	All of them
---------	----------	---------	----------	--------------------	-------------

4. Do you think values that are taught at home, play a role in the decision that the child makes in traffic situation?

18

YES	NO
-----	----

5. Do you think it is important for your child to be a safe road user?

19

YES	NO
-----	----

SECTION C: TRAFFIC SAFETY AND ATTITUDES

1. Would you like your child to be taught traffic safety? 20

YES	NO
-----	----

2. Would you also like to receive training on traffic safety education? 21

YES	NO
-----	----

3. If training is, provided would you be interested in attending? 22

YES	NO
-----	----

4. Would you support it if traffic safety education is integrated as a school subject in your child's school? 23

YES	NO
-----	----

Thanking you for your participation

APPENDIX 6: RESULTS OF THE LEARNERS, PARENTS AND TEACHERS TO THE QUESTIONNAIRE - FREQUENCY PROCEDURE

Tables 1, 2 and 3 below present the results of the response of the learners, parents and teachers to the questionnaire. It shows the number of participants, percentages and the options that they had to answer in the questionnaire. Frequency missing indicates blank spaces or where participants ticked two answers instead of one or had many options to choose from.

TABLE 1: RESULTS OF THE LEARNERS TO THE QUESTIONNAIRE

QUESTIONS	FREQUENCY	PERCENT	FREQUENCY MISSING
A1			
9	46	15.33	
10	77	25.67	
11	104	34.67	
12	47	15.67	
13	17	5.67	
14+	9	3.00	0
A2			
Boy	117	39.13	
Girl	182	60.87	1
A3			
Tswana	143	47.67	
Sotho	20	6.67	
Afrikaans	115	38.33	
English	17	5.67	
Other	5	1.67	0
A4			
Town	121	40.33	
Township	172	57.33	
Farmstead	7	2.33	0
B1			
Yes	297	99.00	
No	3	1.00	0
B2			
Yes	280	93.65	
No	19	6.35	1
B3			
Yes	294	98.33	
No	5	1.67	1
B4			
Parents	41	100.00	259
Teachers	68	100.00	232
Friends	1	100.00	299
Siblings	2	100.00	298
Traffic Department	66	100.00	234
All	150	100.00	150
B5			
Yes	200	66.89	
No	98	32.78	2

TABLE 1: RESULTS OF THE LEARNERS TO THE QUESTIONNIARE (continued)

QUESTIONS		FREQUENCY	PERCENT	FREQUENCY MISSING
B6	Yes	272	91.28	2
	No	26	8.72	
B7	Yes	217	73.56	5
	No	78	26.44	
C1	Yes	291	97.98	3
	No	6	2.02	
C2	Yes	291	97.32	1
	No	8	2.68	
C3	Yes	287	96.31	2
	No	11	3.69	
C4	Yes	248	83.5	3
	No	49	16.5	

TABLE 2: RESULTS OF THE PARENTS TO THE QUESTIONNAIRE

QUESTIONS		FREQUENCY	PERCENT	FREQUENCY MISSING
A1	Female	106	35.45	1
	Male	193	64.55	
A2	Tswana	132	44.00	0
	Sotho	29	9.67	
	Afrikaans	114	38.00	
	English	19	6.33	
	Other	6	2.00	
A3	Town	112	37.33	0
	Township	173	57.67	
	Farmstead	15	5.00	
A4	Walk	135	45.00	0
	Car	111	37.00	
	Bus	29	9.67	
	Bicycle	25	8.33	
A5	Yes	138	46.00	0
	No	162	54.00	
B1	Yes	295	98.33	0
	No	5	1.67	
B2	Yes	284	94.67	0
	No	16	5.33	
B3	Parents	56	18.70	0
	Teachers	74	24.70	
	Friends	2	0.70	
	Siblings	0	0.00	
	Traffic Department	16	21.00	
	All	163	54.30	
B4	Yes	283	94.65	1
	No	16	5.35	
B5	Yes	292	97.99	2
	No	6	2.01	
C1	Yes	296	98.67	0
	No	4	1.33	
C2	Yes	213	71	0
	No	87	29	
C3	Yes	224	74.67	0
	No	76	25.33	
C4	Yes	282	94.63	2
	No	16	5.37	

TABLE 3: RESULTS OF THE TEACHERS TO THE QUESTIONNAIRE

QUESTIONS		FREQUENCY	PERCENT	FREQUENCY MISSING
A1	Female	21	70.00	0
	Male	9	30.00	0
A2	English	13	100.00	17
	Afrikaans	12	100.00	18
	Setswana	11	100.00	19
A3	25-35	5	16.67	0
	35-45	17	56.67	0
	45+	8	26.67	0
A4	Yes	8	26.67	0
	No	22	73.33	0
B1	Yes	30	100.00	0
B2	Yes	29	96.67	0
	No	1	3.33	0
B3	Yes	26	86.67	0
	No	4	13.33	0
B4	Yes	30	100.00	0
B5	Yes	28	100.00	2
C1	Yes	25	86.21	
	No	4	13.79	1
C2	Yes	30	100	0
C3	Yes	28	96.5	
	No	1	3.45	1
C4	Yes	24	82.76	
	No	5	17.24	1
C5	Yes	30	100	0
C6	Yes	30	100	0
C7	Yes	26	89.66	
	No	3	10.34	1
C8	Yes	28	96.55	
	No	1	3.45	1

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