THE EVALUATION OF A SCHOOL-BASED

## SUBSTANCE ABUSE PREVENTION

PROGRAMME

## By

## ANZÉL SCHÖNFELDT

SUBMITTED IN FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE
MASTERS PSYCHOLOGY
IN THE
FACULTY OF HUMANTIES
DEPARTMENT OF PSYCHOLOGY
AT THE
UNIVERSITY OF PRETORIA
PROMOTER: PROF MJ VISSER
NOVEMBER 2007

## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to the following individuals:

Our Heavenly father for his abundant Grace.

My family for their patience and continuous support.
Prof. M.J. Visser, my promoter, for her guidance and patience.
Benita van Wyk, for all her support and advice.
The National Research Foundation for allocating the funding for the study.
The Department of Education and all other stakeholders, including the participants in this study.
Mary Richards for proof reading this document.

Brennan Walsh for producing GIS maps.
Mariska Griesel for lending an ear.

# ABSTRACT <br> THE EVALUATION OF A SCHOOL-BASED SUBSTANCE ABUSE PREVENTION PROGRAMME 

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#### Abstract

This research report presents the findings of an evaluation of a school-based substance abuse prevention programme presented as part of Project Awareness. The programme was presented as a one-day intervention for grade ten learners in eleven schools in Tshwane. The prevention program taught substance abuse refusal skills, anti-substance norms, personal self-management skills, and general social skills in an effort to provide students with skills and information for resisting substance offers, to decrease motivations to use substances, and decrease vulnerability to substance use social influences. The study evaluated this school-based substance abuse prevention intervention in a sample of learners $(\mathrm{N}=300)$ in six of the eleven schools.

Measures were obtained on a behavioural survey to ascertain whether any knowledge, behaviour or attitude change occurred between the pre-intervention and post-intervention phases. In addition, focus group data and observational measures were implemented to determine how the learners experienced the programme and whether the programme was effective in capturing the attention of the learners.

Results indicated that, from learners perceptions of the programme, the intervention seems to have had a positive impact on substance abuse prevention, but not on changing the behaviour of learners already engaging in substance abuse. The results from the behavioural survey indicated some change in learner attitudes to some degree, but not behavioural change. Suggestions for the improvement of the programme were made throughout the report, and the observational measures specifically indicated that the more practical oriented tasks were more efficient in capturing the attention of learners. It is concluded that although the programme certainly had room for improvement, that the programme did indeed address relevant issues. The program also had a direct positive effect on several cognitive, attitudinal, and personality variables believed to play a role in adolescent substance use.


## Key Terms

Evaluation<br>School-based<br>Substance Abuse<br>Prevention<br>Adolescent<br>Programme Evaluation<br>Intervention<br>Focused school intervention<br>Kirkpatrick Model<br>Health Belief Model<br>Theory of Reasoned Action<br>Theory of Planned Be<br>Drug Abuse<br>Prevention Programme

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## Chapter 1

## 1. Introduction

"Our country is faced with a growing problem of substance abuse. This has serious implications for the millions of citizens because it contributes to crime, domestic violence, family disintegration and other social problems."
-Nelson Mandela

There is great concern about substance use and abuse among secondary school learners in South Africa. According to Rocha-Silva, de Miranda and Erasmus (1996) general or drastic socioeconomic changes (such as the case in South Africa) contribute to an escalation of risk-behaviour such as substance abuse and the spread of HIVIAIDS. Research conducted by Yamada, Kendix and Yamda (1996) found that increased incidences of alcoholic consumption and frequent cannabis use also significantly reduce the probability of high-school graduation.

This has then, in turn, far-reaching individual and societal implications and has increased the need for cost- efficient national intervention programmes. As South Africa re-emerges as a member of the international community, we are faced with heightened risk and prevalence of substance abuse. Flisher (1999) confirms that there is room to believe that data from a 1990 study is no longer valid because of social and political changes as well as an increase of available drugs in South Africa due to globalization. Research has shown that the influence of substance abuse transcends social, racial, cultural, religious and gender barriers. The reality is that substance abuse affects everyone, whether directly or indirectly.

Calls for preventative action have progressively intensified in the last couple of years (World Drug Report, 1997; Declaration and Plan of Action on Drug Abuse and Illicit Trafficking Control in Africa, 1996; World Summit for Social Development, 1995:8, 107-109; World Health Organization, 1993). According to the World Drug Report of 1997, the relationship of drug use to the transmission of infectious disease such as hepatitis and HIV/AIDS, the costs incurred by the individual and society in terms of physical harm, increased taxation (e.g. to provide health care and maintain the criminal justice apparatus) and lower productivity are serious causes for concern. Parry (2005) reported that in recent years, national surveys that included questions on substance use behaviour (Parry, Plüdderman \& Steyn, 1998; and Reddy, Pandas \& Swart, 2002) as well as surveillance systems on treatment demand and on alcohol-related mortality (Matzopoulos, Seedat \& Marais, 2004) had received additional funding. Parry (2005) further
elaborated that the Medical Research Council has also explored risk and protective factors for adolescent substance (ab)use (Morojele, Flisher \& Muller, 2002; Parry, Morojele \& Flisher, 2004). The research base underpinning substance abuse policy and practice in South Africa needs to be strengthened, and various gaps need to be addressed, including in-depth evaluations of prevention programmes.

### 1.1. Substance Abuse

According to Reber and Reber (2001) substance abuse refers to the improper, irresponsible, or self-damaging use of addictive substances. According to the World Health Organization (1992) substance abuse refers to using a substance continually even with knowledge that usage of this or these substance(s) may cause several debilitating problems and may eventually lead to some form of addiction. The Diagnostic and Statistical Manual of Metal Disorders (DSM - IV-TR) (APA, 2000) describes substance abuse as a maladaptive pattern of substance usage, leading to clinically significant impairment or distress which usually manifests in one or more of the following symptoms within a year: recurrent substance use in a situation that cause physical danger to the user, or, in the face of obvious incapacitation or impairment in school or employment contexts, or despite resulting in social, interpersonal or legal problems. Searll (1995) defines substance abuse in similar terms, namely the excessive usage of psychoactive substances or alcohol resulting in lowered levels of functioning on several cognitive and physical levels.

The Department of Health widens the definition slightly in its National Drug Master Plans of 1999 and 2006 to encompass both misuse and abuse of legal substances such as nicotine, alcohol, over-the-counter drugs, prescribed drugs, alcohol related concoctions, indigenous plants, solvents, inhalants, as well as the usage of illicit substances. Newcomb and Bentler (1989) report that any substance abuse amongst children and adolescents up until the age of sixteen (18 years in South Africa) constitutes a form of abuse. Newcomb and Bentler (1989) further elaborate that reasons for this classification include that the negative effects of substance usage on a stilldeveloping nervous system makes adolescents more susceptible to the adverse effects of substances. Additionally, substance abuse at an early age has been clearly linked to later substance abuse (Kandel, 1980 Du Pont, 1989; Catalano, Kosterman, Hawkins, Newcomb \& Abbott, 1996), as well as other serious behavioural problems, including truancy, school drop out, delinquent activities and precocious sexual activities (Newcomb \& Bentler, 1989).

According to Visser and Routledge (2007) research conducted in South Africa report that substance abuse among adolescents is one of the most significant health and social problems,
and that data show a progressive increase in the use of alcohol during the past decade. Parry, Bhana, Myers, Plüdderman, Siefried, Morojele, Flisher and Kozel (2002) report that alcohol is the dominant form of substance abuse. According to Rocha-Silva, de Miranda and Erasmus (1996) $42 \%$ of black youth respondents in both rural and urban areas reported to have drunk alcohol at some point in their lives, with $34 \%$ reported current drinking patterns in the 12 months preceding the survey. Rocha-Silva, Mokoko and Malaka (1998) further report that prevalence rates for substance usage and abuse amongst youth between the ages of ten and twenty-five years of age seem to reflect comparative figures in the Unites States (The National Drug Control Strategy 1997). Rocha-Silva et al. (1998) found that over-the counter-medicine, alcohol, tobacco, cannabis and solvents seem to be the drugs of choice amongst the majority of South African youth, followed by sedatives and stimulants and, to a lesser extent, designer drugs such as cocaine, heroin, ecstasy and LSD. Rocha-Silva et al. (1998) claim that substance abuse is especially common among males and that usage generally increased in intensity in older age groups. According to Parry, Plüdderman, Bhana, Matthysen, Potgieter and Gerber (2001) approximately one in four grade ten learners reported getting drunk occasionally during the course of a month in a school survey undertaken by the University of South Africa. Parry et al. (2002) further report that over-the-counter and prescription medicines, such as slimming substances, analgesics and headache medication appear to be the most commonly abused substances in Gauteng.

Gilles (1996) reports trends that indicate a tendency for progressively younger learners experimenting with substances, which remain a cause for concern. During adolescence, substance use generally progresses in terms of frequency and quantity of usage as well as in the number of substances abused (Millman \& Botvin, 1992). Additionally, there seems to be a progression in the type of drug(s) used over a period of time. So-called gateway drugs such as alcohol and tobacco are usually the first substances that are abused, partially due to their wide availability within the community. Later, a percentage of these youth graduate to cannabis and over-the-counter medication, and some eventually go on to use stimulants, opiates and other illicit substances.

Nesser, Ovens, Victor-Zietsman, Ladikos and Olivier (2001) report that within the periods of 1998 and 1999, $31 \%$ of grade 12 learners and $26 \%$ of grade 10 learners reported heavy drinking in the United States. Disturbingly, Pytel (2007) reports that learners who start drinking before the age of fifteen are five times more likely to have alcohol-related problems in later life. Botvin and Griffin (2001) maintain that research findings around substance abuse trends and prevention in schools across the United States over the last two decades provide a firm conceptual foundation of effective approaches to substance abuse prevention. Etiology research has identified several significant risk and protective factors that seem to be important in counteracting the effects of
these risks (Hawkins, Catalano \& Miller, 1992). All of these factors need to be addressed in order for an intervention to be affective. These factors are usually grouped into the social sphere in which they operate:

1. Peer and school-related domains and their associated risk and protective factors
2. Family domain and its associated factors
3. Personal or individual domains and their associated factors
4. Community domain and its associated factors

Peer and school-related risk factors include friends who engage in high-risk behaviour, availability of substances, a lack of support in schools, as well as a lack of shared norms for behaviour. In counter to these risk factors in the peer and school related domains, Hawkins, Catalano and Miller (1992) suggest that a resilient temperament, positive social orientation, healthy beliefs and clear standards such as an anti-substance abuse policy at school heighten an adolescent's resilience to risk factors. Rocha-Silva et al. (1998) found that drug-taking generally takes place in company (except, to some extent, in the case of illicit drugs) and fairly uncontrolled social settings (e.g. taverns/shebeens, bottle-stores, clubs/discothèques and the homes of friends), and that youth usually experience direct pressure to start using substances.

Family conflict, a family history of risk behaviour as well as a favourable parental attitude towards substance abuse constitutes risk. Many prevention strategies focus on protective factors in order counter these risk factors by addressing issues such as social-problem solving or skills building components within interventions (Bry, 1982; Greenberg, Kusche, Cook \& Quamma, 1995; Lochman, 1992).

Adolescent substance abuse prevention initiatives that are typically classroom-bound are usually designed to have an impact on the Individual domain. By intervening with a prevention program for adolescents, it is presumed that the prevalence amongst these youth will ultimately be reduced as they become older. According to Hawkins et al. (1992) personal factors include cognitive expectancies (e.g. attitude, beliefs, and normative expectations regarding substance use/abuse), personal competencies and skills (e.g. decision making and self-control), social skills (e.g. communication skills and assertiveness), as well a set of relevant psychological factors including self-efficacy, self-esteem and overall psychological well-being as is the case with the programme evaluated in this study. An emotionally supportive family unit where there is a high level of bonding amongst family members with clear and consistent expectations is able to counter any risk factors associated with the Family domain (Lang, Rosati, Jones \& Garcia, 1996).

The last domain deals with community risk factors such as the availability of substances, media portrayal of substance abuse, community norms that favour substance abuse in addition to poverty. Prevention programmes that address the strengthening of community protective factors focus on youth participation within the community, a noted decrease in availability of substances within the community as well as community norms such as non-smoking laws in public areas.

Mathias (1996) reports that universal community programmes need to be comprehensive with well- coordinated components for the individual, the family, the school, the media, and community organizations. One such universal community-based programme, developed by the National Institute on Drug Abuse-funded researchers at the University of Southern California in Los Angeles, has reduced substance abuse over a five-year period among middle-school students in Kansas City, Missouri. In this comprehensive programme, a classroom curriculum teaches learners how to resist risk factors associated with substance abuse. In addition, schools, parents, mass media, and community organizations work together to promote consistent anti-substance messaging, attitudes, and policies within the community.

### 1.2. Prevention and Programme Evaluation

Traditionally, prevention practices have been divided into three main categories. Primary prevention, as is the case in the intervention described in this study, focuses on individuals prior to the onset of any signs of the unwanted behaviour, while secondary prevention are directed at individuals who demonstrate early signs of unwanted behaviour. Tertiary prevention (often referred to as treatment) is usually directed at individuals who already manifest unwanted behavioural patterns. More recently, researchers sought to redefine the traditional view on prevention (American Institute of Medicine, 1994). Three types of prevention where outlined, namely:

- Universal prevention, directed at whole populations;
- Selective prevention, targeted at individuals demonstrating at-risk factors associated with the unwanted behaviour, and
- Indicated prevention aimed at individuals who are in the so called "treatment" phase; corresponding to the traditional tertiary intervention level.

According to Tarter (2006) the traditional and more recent classification of prevention strategies are not mutually exclusive. The newer classifications strategy is more focused inasmuch as it specifies the type of population and the presence or absence of identifiable factors that require intervention. Johnson, Amatetti, Funkhouser and Johnson (1988) note that because prevention is
an evolutionary field that is continuously growing, the current knowledge base will expand and emerge in new combinations, providing better tools with which to address substance abuse.

Programme evaluation research revolves around the establishing of the effectiveness of social programmes. According to Terre Blance and Durrheim (1999) the number of evaluations being conducted locally is comparatively small in relation to the number of social interventions that are in existence. Indications are that over R6 billion of both foreign and local funding has been spent on social interventions since 1970, of which only a fraction was evaluated.

South African researchers have only recently begun to show an increased interest in programme evaluation (Terre Blance \& Durrheim, 1999; Peltzer, Cherian \& Cherian, 1999). This does not reflect the trend in countries like America and Canada, where there seems to be greater emphasis on the rights of donors and the public to be informed about the success of social programmes. Some researchers believe that social interventions can only be viable if they are externally evaluated (Worthen \& White, 1987). Potter (in Terre Blanche \& Durrheim, 1999, p.225) believes that evaluation is an area of applied social science research that "holds great promise to those social scientists that wish to conduct research with high social relevance". In an increasingly difficult economic climate, it is important that evaluation evidence be taken into account to develop more cost and content -efficient interventions to promote effective social change.

The development of comprehensive, community-based interventions for the prevention of substance use and abuse calls for careful evaluation of these programmes (Hansen \& Kaftarian, 1994). With more refined evaluation methods, it will be possible to identify characteristics of successful interventions as well as common challenges in the design and implementation of school-based interventions. A study conducted by Peltzer, Cherian and Cherian (1999) among secondary school pupils in the Northern Province called for a systematic collection of data on substance abuse and subsequent use of this data in various parts of the country in order to design an effective national substance abuse prevention programme.

To date, the response to the country's substance abuse problem was at best uncoordinated and disjointed. The duplication of services and the non-existence of others have led to mismanagement of dwindling resources and failure to secure new funding. According to Zafar (1998) there is a need to improve the management and coordination of interventions to ensure that adequate funding is secured to support much needed research. Parry and Bhana (1997) confirmed that widespread dissemination of locally and internationally derived research findings will help to determine which modifications are required for successful prevention in a local context.

According to the World Health Organization (Expert Committee on Drug Dependence, 1993), evaluation is needed to establish the extent of the need for prevention programmes, but also to identify ways in which particular kinds of drug related harm can be reduced. Intervention and operational research is needed to make closer matches between substance abusers and specific treatment problems. Appropriate modifications will then, in turn, lead to the development of more effective treatment models.

Tarter (2006) comments that there seems to be numerous reasons for the variation in effectiveness of prevention programmes and the evaluation thereof. Not all individuals are at equal risk for developing the particular disease or behaviour. Consequent to a unique genetic makeup, environmental factors, and developmental history, each person in the population has a different level of risk for manifesting the adverse outcome. Persons at elevated risk are less amenable to universal preventions. Hence, despite widespread knowledge dissemination, public relations campaigns, and educational programming, a relatively large proportion of the population engages in substance abuse. Tarter (2006) further documents that intensive individualized prevention is required to effectively reduce, or more expectantly, ameliorate the risk. Toward this end, selective and indicated preventions are required.

There has been a call for an increased number of gender/age specific models and programmes for behavioural change, as well as the evaluation of these programmes. Guthrie and Flinchbaugh (2001) report that "... programme designers in the $21^{\text {st }}$ century concerned with programmes for adolescents need to make concerted efforts to understand that gender does matter and to include gender as a social construct in substance abuse prevention programmes for adolescents, generally, and for early adolescent girls, in particular." According to the National Institute on Drug Abuse (1996) in the United States, there should be more preventative programmes and evaluations that focus on a general assumption that the negative consequences of drug abuse may have differential impact and may require targeted prevention intervention strategies for some of the population, especially young woman in the adolescent age cohort.

It is clear that evaluation research needs to be documented consistently on an empirical level. This study, although not longitudinal, has a contribution to make in terms of the growing body of South African research on the subject. The intervention evaluated during this study was developed by professionals as part of a team effort for a one-day intervention in schools. The programme consisted of exercises and discussions of the impact of substance abuse in the life of a teenager as well as information on the risks of substance abuses. Life skills related to the handling of peer group pressure, stress and problem solving skills were trained to assist the learners not to become involved in substance abuse. The content of the intervention was largely
based on information dissemination and aspects of the health belief model. This study focused on the evaluation of the implementation and impact of the intervention in the schools.

### 1.3. Existing research findings related to school-based substance abuse prevention

Several organizations have published substance abuse prevention results over the last couple of decades, including government departments, universities and other research institutions as well as local stakeholders (NGO's and CBO's). According to the National Institute on Drug Abuse (2003) any period of change or transition (such as adolescence), is a risk period for substance abuse onset. Research conducted by Kandel (1978) around the age of substance abuse onset indicates that prevention programmes should target individuals by at least the onset of adolescence.

The National Institute on Drug Abuse (2003) found that the consequences of drug abuse by females are more severe and data indicate that after initial use, females may proceed more rapidly to drug abuse than males. The causes, correlates, and consequences of drug abuse and addiction appear also to differ with respect to girls and boys. Women's initiation into drug use also differs from that of men's. Preliminary results from a study on gender differences in cocaine initiation and abuse indicate that approximately 90 percent of women reported that men played some role in their involvement with crack cocaine. By contrast, only 17 percent of men reported that women were involved in their initiating or maintaining the use of crack cocaine. Women were more likely to begin or maintain cocaine use in order to develop more intimate relationships, while men were more likely to use the drug with male friends and in relation to the drug trade. Successful prevention programmes should therefore contain life skills' training that is specifically related to gender differences regarding substance abuse onset during adolescence.

Programmes that have had some success in the prevention of substance abuse among adolescents include Project SOAR (Skills, Opportunity and Recognition), also previously known as the Seattle Social Development Programme. According to Hawkins, Catalano, Kosterman, Abbott and Hill (1999), this school-based intervention seeks to reduce the risk of substance abuse by enhancing protective factors. Lonczak, Abbott, Hawkins, Kosterman and Catalano (2002) point out that this programme is designed to enhance opportunities, skills and rewards for learner's pro-social involvement. The United States Department of Education (2001) reports that long-term results for this programme show positive outcomes for participants, including reduced anti-social behaviour, substance abuse and teen pregnancy.

Morojele, Knott, Myberg and Finkelstein (1997) report on a sub-committee of the Western Cape Alcohol and Drug Abuse Forum (Education and Prevention Committee) which formed to assess/audit school-based substance-abuse prevention programmes based in the Western Cape. The aim was to determine the appropriateness of each programme being implemented in schools, as well as the extent of coverage of prevention activities in the Western Cape. Eight programmes participated in the evaluation (including the Lion's Quest Skills for Adolescence described below in its American context). Of these eight organizations, only three have undergone previous formal evaluation. Morojele et al. (1997) subsequently concluded that interventions with basic information approaches to prevention should also utilize interactive teaching methods and include skills training elements (without the use of shock tactics). These substance abuse prevention programmes should also be extended to cover the primary school levels, and should be extended to cover multiple years. Morojele et al. (1997) also suggest that:

1. Programmes should seek to extend levels of community involvement.
2. Programmes should seek to serve historically disadvantaged communities.
3. Programmes should seek to serve rural communities.
4. Programmes should aim to include more intensive teaching methods such as the use of extended practice, role-playing and modeling.
5. Programme providers should recognise shortcomings in their approaches, where present, and be open to modifying potentially ineffective aspects.

Additionally, Morojele et al. (1997) argue that there is a need to prevent duplication of programme activities and consistency within the same school settings, as well as a need for more trained programme facilitators. Interventions should also be evaluated to determine their outcomes as well as the degree to which they are effective in achieving expected outcomes.

Similarly, The Lions-Quest Skills for Adolescence (SFA) is a life skills education programme which entails a drug prevention programme focus on the prevention and delay of substance abuse onset in high school. The programme consists of forty sessions and includes components on self esteem and personal responsibility, communication, peer influence and knowledge and consequences around substance abuse.

According to Keister (2000), results indicate that exposure to the Skills for Adolescents (SFA) programme can help deter initiation of regular smoking and marijuana usage, results which held true across all ethnic groupings in the United States. A study conducted in 34 schools in Detroit, Lost Angeles and Baltimore found that SFA participants had significantly lower self-reported rates of using beer, liquor, and chewing tobacco in the previous month in addition to lower predictions of use of five harmful substances in the next 30 days. The same study indicated that the respondents' level of knowledge, awareness and attitudes about the risks of both alcohol and
other drug usage improved by 43 percent after participating in the Skills for Adolescents programme.

Another programme, Project ALERT, is a two year universal programme for school learners that aim to reduce substance abuse onset. Its focus is on participatory activities, including small group activities, role playing exercises, guided classroom discussions and videos that assist learners in establishing anti-substance norms and resist pro-substance pressures. The United States Department of Education reports that this programme has proven successful with high-and low-risk youth from a variety of communities, reducing initiation of marijuana usage and current usage by 30 and 60 percent respectively, and developing significantly enhanced anti-drug beliefs.

Sussman (1996) evaluated the Project Towards No Drug Abuse (Project TND) in the United States, a heterogeneous intervention that targets high school learners in the form of 12 in-class sessions that provide motivation, social and self-control skills. The instruction to students provides cognitive motivation enhancement activities (to not use drugs), detailed information about the social and health consequences of drug use, and correction of cognitive misperceptions. Results indicated that the intervention was effective at a one year follow-up across three true experimental field trials and across variable outcomes.

### 1.4 Project Background

This document contains the evaluation of a one-day school-based substance abuse prevention programme. The project constituted part of a large-scale intervention carried out under the auspices of the Gauteng Department of Education in which various role players took part. The primary focus was on the evaluation of one of the programmes within the larger intervention.

A multi-disciplinary prevention of high-risk behaviour amongst the youth in secondary schools of Pretoria West, Laudium and Atteridgeville was initiated by the Greater-Pretoria Child Protection Committee. It was an initiative combining resources of fifteen organizations, including several government departments (Health, Education, Welfare and Safety and Security), local stakeholders such as tertiary institutions (UP, UNISA and Technikon Pretoria) and various nonprofit organizations (NICRO, FAMSA, SANCA, CANSA, NIPILAR, The Traffic Department and Mental Health). An estimated three hundred and fifty teachers and thirteen thousand learners from eleven secondary schools in Tshwane were exposed to the intervention in a time frame of eleven weeks.

The intervention consisted of various components intended to be implemented / sustained for a three year period. These were:

- Implementing a focused one-day school intervention by a team of interdisciplinary facilitators. A group of facilitators join each class in the school for a whole day and present a workshop on specific themes (Given in Table 1) to prevent various forms of high-risk behaviour (primary prevention). The current project forms part of this programmatic component.
- Establishing a youth self help centre involving two teachers, sixteen interested learners and two facilitators.
- Establishing small group counselling opportunities (Secondary intervention)
- Providing individual treatment and referral opportunities (Tertiary intervention).Table 1 contains an overview of the broader project.

Table 1: Project Awareness: Basic Outline

$\left.\begin{array}{|l|l|l|l|l|}\hline & \begin{array}{l}\text { PLANNING STAGE FOR } \\ \text { FOLLOW UP } \\ \text { Learners indicate that they are } \\ \text { interested } \\ \text { Teachers identify learners with } \\ \text { problems } \\ \text { Follow up facilitators choose } \\ \text { particular group } \\ \text { Other names in other phases } \\ \text { kept by Life Skills Teacher for } \\ \text { the next follow up sessions }\end{array} & \begin{array}{l}\text { group therapy } \\ \text { FIFTH ENCOUNTER } \\ \text { Rest of the group } \\ \text { continues with one } \\ \text { teacher, one facilitator } \\ \text { Another scenario - More } \\ \text { practice } \\ \text { SIXTH ENCOUNTER } \\ \text { Where do you go from } \\ \text { here? } \\ \text { Use newly acquired } \\ \text { Skills, Market the club, } \\ \text { peer education }\end{array} & \begin{array}{l}\text { and forms part of the } \\ \text { school disciplinary } \\ \text { system. }\end{array} \\ \text { Learner with } \\ \text { behavioural problems } \\ \text { first completes this } \\ \text { course before further } \\ \text { action is taken }\end{array}\right\}$

Unfortunately, although the project was planned to continue for 3 years, the intervention ended after the first phase of the project due to restructuring in the Department of Education. The only component that was implemented and, eventually evaluated, was the focused school intervention component. The highlighted area indicates where this project fits into the larger project.

### 1.5 Focused School Intervention

The focused school intervention focused on providing general information and life skills to learners at eleven target schools in Pretoria West, Atteridgeville and Laudium. This was intended as primary prevention of negative behaviours (e.g. substance abuse, high risk sexual behaviour, crime and high drop out rates) amongst all learners in the school, whether they were exposed to these psycho-social problems or not. Additionally the focused school intervention was intended to provide a means for identifying learners in need of secondary intervention such as support groups and counselling.

The focused school intervention included visits from a team of interdisciplinary experts at each of the target schools for one day period. During these visits, experts facilitated knowledge and skills workshops focusing on topics as indicated in Table 1, with all of the learners from a specific grade attending school on that day. Learners from each grade were exposed to a different topic. The intervention was implemented according to an implementer's guide (Appendix A) which was designed by members of the implementation team. The programmatic content was presented in a workshop format.

Figure 1: Geographic location of Schools taking part in Programme Evaluation


### 1.6 Evaluation of the Focused School Intervention

Evaluation has come to play an increasingly important role in the operation of education and social programs. The University of Pretoria was approached to assist with the evaluation of the Focused School Intervention. This evaluation focused specifically on the evaluation of the grade ten substance abuse prevention sub-components. This sub-component centred mainly on knowledge regarding substances, peer pressure, stress management and problem solving skills. The programme consisted of the following content areas:

- Substance Abuse: knowledge about various substances, effects on the body, danger of using substances
- Peer Pressure and how to resist peer pressure
- Stress Management: what causes stress for school going youth, how to deal with stress in constructive ways.
- Problem Solving Skills: steps to solve a problem constructively.

The content was presented in a workshop format involving demonstrations, discussions, case studies, and role-plays. A video on drug use was also included. The following evaluation aimed to answer various questions regarding the intervention.

- Did learners find the programme sufficiently interesting and topical to allow for the successful transfer (learning) of the messages contained in the programme, during the presentation of the programme?
- Were the anti-substance abuse messages (knowledge) of the programme retained by the learners after the programme?
- Were the learners' attitudes congruent with the anti-substance abuse messages transferred by the programme, after the programme?
- Did the learners indicate or report any behavioural change after the programme?

In addition, specific components of the intervention was examined in order to find out which sections of the programme worked best to facilitate the above mentioned evaluation aims. Various instruments were designed in order to answer the questions detailed above. A pre-post behavioural survey (Appendix B) was developed in order to measure any attitudinal, behavioural and knowledge components of the programme that may have had an impact on learners. Additionally, programmatic content, presentation and learner involvement were tracked by means of an observational data collection sheet (Appendix C), followed up by focus groups (Appendix D) conducted in conjunction with the administration of the post- behavioural survey.

In chapter two an outline will be given around the theoretical models used to ground the evaluation; detailing the Kirkpatrick Model and its associated levels of measurement, the Health Belief Model, the Theory of Reasoned Action as well as the theory of Planned Behaviour. Chapter three will describe the methodology used to measure the outcomes of the intervention, while chapter four will detail the findings. Chapter five will round off the evaluation with a discussion of the evaluation as a whole and to interpret the data in terms of the theoretical approach and other research findings.

## Chapter 2

## Theoretical Models

### 2.1 Introduction

This chapter will describe the various theoretical models that were utilised in conjunction with data gathered during this project. Each theoretical model will be reviewed in terms of its successes and shortfalls in relation to programme evaluation, and related to the intervention being evaluated in this document.

Reeves and Hedberg (2003) is of the opinion that there seems to be no single correct approach for conducting a programme evaluation. There seems to be no clearly defined criterion for choosing any particular theories to inform interventions, and a wide range of theories exists with substantial overlap in terms of constructs (Fishbein, Triandis, Kanfer, Becker, Middlestadt \& Eichler, 2001; Nigg, Allegrane \& Ory, 2002). Researchers typically choose an appropriate methodology to fit the pragmatic requirements and practical constraints of each intervention, rather than being guided by one particular model or approach.

For the purpose of this evaluation, the Strategic Training Model, also known as the Kirkpatrick Model was used as a theoretical framework. In addition, the two social cognition models of Health Belief, augmented by the Theory of Reasoned Action, as well as the Theory of Planned Behaviour, were used to interpret the outcome of the programme evaluation.

### 2.2 The Kirkpatrick Model

The Kirkpatrick Model was developed by Donald Kirkpatrick and has been used as an evaluation model since the late 1950's. The Kirkpatrick model postulates that there are four levels of outcomes that could result from an intervention, and therefore an evaluation could focus on any or all of these four levels (Reeves \& Hedberg, 2003). Kirkpatrick (1976) believed that in order to evaluate training programmes, four measurements must be taken, however, Kirkpatrick revisited (1996) points out that "the model doesn't provide details on how to implement all four levels. Its main purpose is to clarify the meaning of evaluation, and offer guidelines on how to get started and proceed" (p. 223).

Learner's experience of the intervention, either positive or negative (reaction), knowledge and skills gained by the learners (learning); any improvement to the learner's skills (behaviour); and
impact on the organization, or in this case society (results) must be measured and evaluated. Admittedly, Kirkpatrick's model was intended for an industrial setting, but there are many parallels between his idea of training and the training of learners in life skills based interventions (Alliger \& Janak, 1989). Clark (2003) summarized the levels of the Kirkpatrick Model as follows:

Table 2: Levels of the Kirkpatrick Model

| Level | Target | Evaluation Goal |
| :---: | :---: | :--- |
| Reaction | Training | Initial endorsement by learners |
| Learning | Learner during intervention | That learning occurred as a <br> result of the intervention |
| Behaviour | Learner in a wider school |  |
| context | That learning affected <br> behaviour, or, performance in <br> a wider context |  |
| Results | Organization or Societal Level | That the intervention had the <br> desired results in the <br> organization/society |

### 2.2.1 Levels of the Kirkpatrick Model

According to Kirkpatrick's four level model for assessing training effectiveness, evaluation should always begin with level one, and then, as time and budget allows, move sequentially through the remaining levels of evaluation. The following section details each level's characteristics, measurement and shortfalls.

### 2.2.1.1 Level one (Reaction)

At reaction level, learners are asked to comment anonymously, usually in the form of questionnaires, on the adequacy of the intervention, the approach and the perceived relevance. According to Clark (2003), the goal at this stage is simply to identify glaring problems within the intervention. Level one evaluation will give an indication of the ability of the intervention to maintain the learner's interest, the relevance, amount and appropriateness of interactive exercises and the learners' perceived value of the intervention. If learners have a positive reaction to the initiative during its implementation, it is more likely that positive outcomes will
result . Level one is perhaps the most frequently used measurement because it is the easiest to measure.

According to Clementz (2003), the questions asked on level one are related to:
o Presentation techniques
o How thoroughly the topic was covered
o The value of each module of the program
o Relevance of the program content
o How learners plan to use their new skills in a wider context

According to Kirkpatrick (1994), at the very least, each programme should be evaluated at this level. In addition, learner's reactions have important consequences for learning (level two). Level one measures how worthwhile and enjoyable the intervention was to the learners. Predicated on the premises that learners can learn only in a positive environment, level one evaluation is easy to obtain and is painless for participants (Alliger \& Janak, 1989; p.333).

## Measurement on Level One

Clark (2003) offers several guidelines on the assessment of level one goal. He suggests that no more than fifteen to twenty questions, designed to obtain both qualitative and quantitative data, should be included in a survey measurement for level one evaluation. In addition, he suggests that:

- Most survey questions should be ranked on a quantitative scale, with only two or three open ended (qualitative) questions.
- Data gathered should be tracked over time, comparing trainers and other variables so that it is easier to isolate causes and view trends. This assists in determining what actions are appropriate to improve the intervention accordingly.
- Evaluation results should be compared over all four levels in order to determine relationships.

The most commonly used method of level one evaluation is the so-called "smiley sheets" completed by learners after the completion of the programme. In their simplest form, they measure how well learners liked the training. According to Kruse (2003), this type of evaluation can reveal valuable data if the questions asked are more complex, including the relevance of the programme objectives, the ability of the course to maintain interest, the amount and appropriateness of any interactive exercises and the perceived value of the information conveyed by the intervention.

## Limitations of Level One

This level is not indicative of the intervention's success, as it does not truly measure what new skills the learners have acquired or what they have learned and can transfer to a wider context. This has caused some evaluators (Clark, 2003) to downplay its value. However, it seems that the interest, attention and motivation of the learners are critical to the success of any intervention.

In addition, level one research has reportedly shown relatively little correlation between learner reactions and measures of learning, or subsequent measures of changed behaviour. Criticism of level one includes that it is too simple and that it does not take into account the various intervening variables affecting learning and information transfer. Kirkpatrick's emphasis on selfreporting measures at level one is often viewed as being negative. In contradiction with level one's premise that learner satisfaction is a forerunner to the learning process, there have been suggestions that "satisfaction" is not necessarily related to good learning, and that discomfort is sometimes essential in the learning process.

### 2.2.1.2 Level Two (Learning)

The extents to which learners change their attitudes, improve knowledge and increase skill as a result of participating in the intervention are varying measures at level two. The learning evaluation requires a post-testing to ascertain what skills were learnt during the intervention. The post-test is only valid when combined with pre-testing, so that the researcher can differentiate between existing knowledge and information learnt during the programme. Blanchard and Thacker (1999) believe that on level two there is usually a critical relationship between an identified learning need and the evaluation. The typical level-two evaluation focuses on questions such as:

- What knowledge did the learners acquire as a result of the intervention?
- What skills were developed or enhanced as a result of the programme?
- What attitudes were changed as a result of participation in the intervention?

Assessment of learning is not exclusively confined to level two, and can be implemented throughout the intervention, using a variety of evaluation techniques. Pre- and post measures are often utilised to determine the retention of knowledge, along with observational data and interviews. Measurement at level two might indicate that an intervention's instructional methods are effective or ineffective.

## Limitations of Level Two

Caution must be urged in interpreting data obtained on level two as an absolute measure of acquired skills and knowledge. Learners might be able to repeat but not apply the knowledge. Performance during or very shortly after a programme is not necessarily a predictor of posttraining performance.

### 2.2.1.3 Level Three ( Behaviour)

Many researchers believe that the third level of evaluation represents the truest assessment of an intervention's effectiveness (Clark, 2003). However, measuring at this level is usually difficult as it is often impossible to predict when the change in behaviour will occur. This requires important decisions in terms of when, how and how often to evaluate.

Level three measures the extent to which behavioural change, or the ability to transfer learnt information into action, has occurred because of programme participation. Evaluation can be conducted formally (testing) or informally (observation). The measurement of behaviour is important because the primary purpose of the intervention is to improve results through behavioural change (in this case skills, knowledge, behaviour and attitude). Simply put, levelthree evaluation attempts to answer the following question: Are the newly acquired skills, knowledge and attitudes being used or transferred in the learner's everyday environment?

Boverie, Sanchez-Mulcahy and Zondle (1994) suggested ten guidelines for designing training that ensures transfer. Five of these guidelines relate to education, and should be considered when analyzing the evaluation results and reporting to stakeholders:

- Consider transfer as an objective of the unit of study, thus objectives are not met until transfer has taken place;
- A plan of transfer should be built into the unit of study from the outset;
- The learning environment must provide positive incentives to apply knowledge and understanding gained in the unit of study;
- Use specific topics that are relevant and related to the learner's environment; and
- Ensure that intervention learning activities clearly match the situation in which learners will apply skills in future.

According to Clark (2003), learners typically score well on post-tests, but the real question is whether any of the new knowledge and skills are retained and transferred back into a wider
context. Level three evaluations attempt to answer whether or not learner's behaviour actually change as a result of new learning.

Level three evaluation is usually conducted at predetermined intervals. Kirkpatrick (1976) recommended that a post-test be conducted between three to six months after the intervention. By allowing some time to pass, students have the opportunity to implement new skills and retention rates can be checked. Reeves and Hedberg (2003) cautioned against placing too much emphasis on one evaluation strategy and advocated collecting data from multiple sources using multiple methods on levels two and three. In their experience, results were often influenced by many factors other than the training.

## Limitations of Level Three

There are a wealth of studies that comment on the failure of training to transfer into trainees own context, and which have identified a range of organizational factors that inhibit transfer. According to Kirkpatrick (1976), important factors relating to transfer are perceived usefulness, job autonomy and commitment. In addition, individual factors also play a role, including selfefficacy, motivation to learn and general levels of intelligence. Evaluation needs to become more complex. It is suggested that manager assessment or self-assessment needs to be conducted, but these methods are not always accurate.

### 2.2.1.4 Level Four (Results)

Level four moves away from the impact on the individual and looks at an organizational or community level. Level four evaluations look at the learners' ability to apply learned skills to new and unfamiliar situations. Clark (2003) described it as evaluation being expanded beyond the impact on the learners. The focus broadens the impact of the intervention on the wider community (results) - in other words, on how the training influenced the whole context. For example: what changes took place in the broader community because of the intervention. Training effectiveness is measured on this level - whether the training is working and yielding value on an organizational level - and measures impacts including legal action, efficiency, morale, teamwork and reduced errors.

Collecting and analyzing data on level four is widely regarded as very difficult, time consuming and costly. As we move from level one to four the process becomes more difficult although it seems to provide data of increasing significant value. It is suggested that each level should be used to provide a cross set of data for measuring a training programme.

## Limitations of Level Four

Level four measures the success of the programme from a business and organizational point of view, yet this level is not often addressed by researchers (Kirkpatrick, 1994). Determining results in financial terms or in terms of community processes are difficult to measure and to relate directly to the training. Alliger and Janak (1989) reported that at best, level four evaluations yield only a likelihood that training could have affected the organization or community processes.

In addition, Burrow and Berardinelli (2003) argued that level four evaluations are never pure; both because of the time interval between interventions and measurement, and because of the broad focus, other factors can influence these outcomes.

## Is the Kirkpatrick model hierarchical?

The Kirkpatrick model has often been interpreted as four hierarchical levels that researchers go through in the evaluation process. Bernthal (1995) however, questioned the existence of a hierarchy of superiority within the model, and argued that "each level can provide equally valuable information depending on the type of trainees being evaluated".

Blanchard and Thacker (1999) argued that the four levels of evaluation are ordered - reaction outcomes come first and will influence how much will be learned. The skills developed as a learning outcome determine how much behaviour can change concerning the job. In turn, behaviour on the job determines how much organizational impact the training had overall.

Hesketh and Ivancic (2001) however, questioned the notion of there being any significant causal connection between the four levels. Tamkin, Yarnall and Kerrin (2002) also criticized the implied hierarchy of the four levels, claiming that the assumption that levels are each associated to the previous and next level implies a causal relationship that has not always been established by researchers.

It is clear that there are a number of contradicting opinions regarding the connection and interrelation of the four evaluation levels of the Kirkpatrick model. As mentioned earlier, Kirkpatrick (1996) held that the model's chief purpose is to clarify the meaning of evaluation and offer guidelines on how to get started and proceed. Therefore, although Kirkpatrick's four level model was chosen as a guide for the evaluation of this project, it was decided to slightly adapt it to suit the educational environment and the evaluation needs of the intervention.

Concisely, levels to be interpreted in this research project are: Level one (Reaction)

Level one measures student satisfaction, assessed through questionnaire, field observation and focus group discussions. The data gathered here is usually used as a guide for modification of and the enhancement of teaching material, aimed at improving the student learning experience.

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Level two (Learning)
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Level two assessment uses pre- and post-tests, observations, and focus group data to access the skills and knowledge gained during the intervention. Pre- and post behavioural, attitudinal and behavioural changes were self-reported by means of a questionnaire for the purposes of this study.

Level three (Transfer)

Level three refers to a certain measure of knowledge skills and understanding gained in the intervention. Level three evaluations attempt to answer whether or not learner's behaviours actually change as a result of new learning gained during the intervention. Kirkpatrick (1996) recommended pre-and post-test measures to determine the level of transfer that has taken place. A section pertaining to self-reported behaviour, along with focus group discussions were used to determine whether any knowledge and skills transferred during the intervention was retained and subsequently used.

## Level four (Results)

Level four represents the dissemination and value of the training to the organization or community, a measure of cost effectiveness and organizational benefits, such as:

- Whether the programme meet the long and short term goals of the training, and
- Whether the intervention produced the results the organizers expected.

For the purpose of this study, no specific measurements were taken for level four. Secondary data, including observation, learner satisfaction, student retention and level of learner participation were utilised.

### 2.2 Value and limitations of the Kirkpatrick Model

Despite the popularity of Kirkpatrick's model, several researchers have commented on the lack of completeness of the model. Alliger, Tannenbaum, Bennett, Traver and Shotland (1997) asserted that level two (learning) should be subdivided into learning that occurs immediately following the intervention and learning that occurs after a period of time. In addition, they believe that level three (behaviour) should be classified as transfer of training/learning.

There is some difficulty in trying to use the four levels to determine where a problem exists with a given educational programme. Holton (1996) proposes a new model of training evaluation that, unlike Kirkpatrick's four level system, will account for the impact of the primary intervening variables such as motivation to learn, trainability, personal characteristics and transfer of training conditions. Despite the Kirkpatrick model's limitations, it offers an elegant simplicity that lends itself well towards a programme-model fit for the purpose of this study.

### 2.3 The Health Belief Model

> "It is now believed that individuals will take action if they regard themselves as susceptible, if they believe there are potentially serious consequences, if they belief that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition, and if they believe that the anticipated barriers to taking the action are outweighed by their benefits"

- I.M. Rosenstock (1990).

The Health Belief Model is a value expectancy model, which holds beliefs and values at its core, and was developed as a means to explain and predict preventive health behaviour. It is valuable in ascertaining learner's perceived susceptibility towards substance abuse and provides important information regarding behavioural cues, whether present or future driven. The model is a good fit for prevention-focused programmes like the one described in this study, because prevention programmes usually promote specific actions, and the Health Belief Model assists in understanding the possible factors that influence these action or behaviour.

### 2.3.1 Definition and Rationale of the Health Belief Model

The Health Belief model was originally devised by a group of United States Public Health social scientists to explain how health educators could encourage preventive health behaviour (Rosenstock, 1974). One of the most widely used conceptual frameworks for the understanding of health behaviour, the model seeks to explain the link between exposure to persuasive health messages and behaviour. Based on cognitive behavioural theory, the model hinges on the learner's desire to be healthy, the personal value he or she places on a particular health goal, and what he or she thinks is the likelihood of achieving that goal (Janz \& Becker, 1984).

The Health Belief Model is based on the core assumption that an individual will take health related action (e.g. not smoke), if the learner feels that a negative health condition (for example lung cancer) can be avoided, and if he or she has a positive expectation that by taking action, he or she can avoid the negative health condition. In addition, the individual must believe that he or she can successfully take a recommended health action.

As some learners may already be smoking and drinking, changes in behaviour may occur to prevent illness if a learner sees himself as being at risk (perceived susceptibility), or if he believes that it will have a serious impact on aspects of his life (perceived severity). Learners should also believe that specific behaviour would prevent substance abuse and that they will benefit from such behaviour. Botvin, Gilbert and Botvin (1992) reported a progression in the type of drug(s) used over a period of time. So-called gateway substances such as alcohol and tobacco are usually the first substances that are abused, partially due to their wide availability within the community. Later, a percentage of these youth graduate to cannabis and over-the-counter medication, and some eventually go on to use stimulants, opiates and other illicit substances. For adolescents not yet experimenting with substances, the consequences of substance abuse (perceived severity) should prevent them from abuse onset.

The positive results from the new behaviour (perceived chances of success) should be rated higher in the minds of the learners than the cost or negative aspects (perceived chances of failure and cost) of the new behaviour. There should also be something that motivates the onset of the behavioural change, like an intense experience or seeing someone with a drug problem.

A person's perception of his/her risk of being affected by abusing substances, (e.g. lung cancer) is referred to as perceived susceptibility. This is one of the most important components in predicting behaviour change. Only when a person sees her- or himself as being at risk will he/she take precautions to prevent it. The intervention sends a clear message that substance abuse is not necessarily something that only happens to others, it can to anyone.

Perceived severity involves the learner's belief that substance use or abuse will have a serious impact on aspects of his or her life - that it is a real threat to him/her. The person's perception of the severity of substance abuse can be measured by his or her emotional reaction to the consequences of substance abuse and how he/she thinks it will affect their lives. Behaviour and attitude both have cognitive and affective components. Extreme scare and shock tactics, however, tend to inhibit learning and consequential behavioural change and should be avoided.

If perceived benefits are more than the costs, the learner will be more likely to engage in preventive behaviour. Emphasis on the benefits of behavioural change is important in the planning of any intervention. The perceived costs of changing behaviour are the most important obstacle, because in the case of substance abuse it relates to both physical and psychological needs. The substance abuse -intervention focuses on the costs of both these needs, highlighting the negative outcomes on both the mind and body.

The situation is complicated by norms and values, which may lead to ambivalent attitudes, for example, the fact that dagga is considered a medicinal substance in some cultures, but is classified as a prohibited substance, in others. The decision to engage in high risk-behaviour is also influenced by peer norms in many ways. It is strongly linked to social acceptance, and complicates the promotion of socially responsible behaviour. Misconceptions and myths (i.e. drugs are not habitual) also have to be addressed in order to underline the perceived (and often hidden) costs of substance abuse. Traditional stereotypes (for example macho men advertising cigarettes) and stigmatisation (drugs only affect a certain segment of the population) also need to be addressed.

The focus of this study is the evaluation of a school-based prevention programme in order to determine its effectiveness. The Health Belief Model and its constructs are used in an attempt to predict intended behavioural change.

According to this model, changes in behaviour depend on five factors:

1. Perceived severity---the belief that a health problem is serious
2. Perceived threat---the belief that one is susceptible to the problem
3. Perceived benefit---the belief that changing one's behaviour will reduce the threat
4. Perceived barriers---a perception of the obstacles to changing one's behaviour
5. Self efficacy---the belief that one has the ability to change one's behaviour

Marlatt, Baer and Quigley (1994) proposed five categories of self-efficacy that are related to stages of motivation and prevention, of which the first one is particularly relevant for the purposes of this study:

- Primary and Secondary Prevention
(a) Resistance Self-Efficacy
(b) Harm-Reduction Self-Efficacy
- Self-Change, Treatment, and Relapse Prevention
(c) Action Self-Efficacy
(d) Coping Self-Efficacy
(e) Recovery Self-Efficacy

Resistance Self-Efficacy relates to the confidence of learner's abilities to avoid the onset of substance abuse. It implies resistance against peer pressure. It has been repeatedly found that the combination of peer pressure and low self-efficacy predicts the onset of smoking and substance use in adolescents (Conrad, Flay \& Hill, 1992). With these findings in mind, one would expect that the training of resistance skills would raise resistance self-efficacy, which in turn would reduce future substance use.

It is important to note that avoiding a negative health consequence is a key element of the Health Belief Model. For example, a learner might stop smoking in order to save some money. That example does not fit the model because the learner is not motivated by a negative health outcome - even though the health action of the non-smoking learner is the same as for the individual who wants to save money by buying fewer cigarettes.

### 2.3.2 Values and limitations of the Health Belief Model

Regis (1990) believed that the Health Belief Model assumes that all the most relevant aspects of behaviour are health-related. He postulates that this model may possibly not be generalized to other types of behaviours. Another issue that has plagued the Health Belief Model, is a lack of question conformity. Different questions are used in different studies to determine the same beliefs; consequently, it is difficult to compare results across studies. Additionally, factors other than health beliefs influence health behavioural practices, such as cultural- and socio-economic factors and previous experiences.

However, the Health Belief Model stands out among psychosocial models in its particular relation to individual decision making, and is often utilitised because of its predictive value. Calnan and Moss (1984) argue that the Health Belief Model is supported by a myriad of empirical evidence in which data on behaviour and beliefs were simultaneously collected. In further support of the model, it has various applications in the field of health education, namely:

- Provides incentives to take action
- Enhancing learner's feelings of competency to take action
- Provides clear courses of action at an acceptable cost.

In conclusion, the Health Belief Model (figure 2) provides insights into the reasons why individuals make health decisions and creates a process of encouraging and facilitating change. It was decided to combine the Health Belief Model with other learning and change theories that offer more specific guidelines on other aspects of the study.

### 2.4 The Theory of Reasoned Action

Ajzen and Fishbein formulated their theory for reasoned action (TRA) in the late seventies after trying to estimate discrepancy between attitude and behaviour. The theory was developed to predict and explain social relevance that is under a person's voluntary control.

The approach to behaviour that Ajzen and Fishbein proposed centers on the notion of "reasoned action". They maintained that people are essentially rational, in that they "make systematic use of information available to them" and are not "controlled by unconscious motives or overpowering desires", neither is their behaviour "capricious or thoughtless" (Fishbein \& Ajzen, 1975:15). Thus, the theory is based on the learner's intent to perform certain behaviour.

Figure 2: The Health Belief Model (Regis, 1990)


According to the theory of reasoned action, behavioural intention is the most immediate determinant of any social behaviour, but only under conditions where the behaviour in question is under volitional control and behavioural intention remains unchanged. The theory proposes that an individual's intention is determined, in turn, by two significant factors: his or her attitude, and subjective norm regarding the performance of the behaviour.

- The learner's attitude towards the behaviour is accounted for by beliefs about the outcomes of the behaviour, and evaluations of those outcomes.
- The subjective norm is determined by perceived pressure from significant others (for example the learner's peers) to carry out the behaviour and motivation to comply with the wishes with those significant others.

Marcoux and Shope (1997) indicated that literature on substance usage suggested that attitudes towards alcohol use, normative influences and intention to use alcohol are important predictors of adolescent alcohol use. According to Ajzen and Fishbein (1980), external factors to the model will indirectly influence the behaviour through the model components. Situational factors such as physical location, the presence of peers and thoughts and feelings about substance usage are likely to be important in the learner's decision to use substances.

According to Morojele and Stephenson (1994) many studies have successfully applied the theory of reasoned action, or variations of it, in the prediction of intentions to perform versus actual performance of behaviours commonly associated with addictions such as drinking, smoking and substance usage. The theory of Reasoned Action, despite its limitations, remains the most widely used theory of motivation and seems most suitable for an examination of the motives that lie behind smoking and drinking. It measures mostly cognitive elements that might be supposed to be of relevance. Regis (1990) believed that this theory might provide a convenient nonexperimental vehicle for the examination of the relative importance of attitudinal and normative considerations in determining the behaviour of young people.

Regis (1990) notes that Fishbein and Ajzen are to be commended for coming up with a way of looking at action, which is apparently very basic and yet seems to work in a wide variety of contexts.

Figure 3: The theory of reasoned Action (Ajzen and Fishbein, 1980)


### 2.4.1 Limitations of the Theory of Reasoned Action

The biggest limitation of the theory of reasoned action seem to centre around the fact that the model does not account for and apply to habitual actions that are seemingly not under continual conscious control. In addition, Azjen and Fishbein' (1980) assumption that external factors to the model will indirectly influence the behaviour through the model component, was proven incorrect by Azjen's own research. Self-monitoring refers to a stable individual difference in the tendency to vary one's behaviour in different situations. High self-monitors are sensitive to situational cues and can tailor their appearance and behaviour to the situation. Low self-monitors are unconcerned when it comes to situational cues, and act based on their principles.

Ajzen, Timko and White (1982) found that the attitude/intention model was more predictive of the behaviour of low self-monitors than high self-monitors. High self-monitors' intentions did not correlate with their behaviour. Low self-monitors apparently tend to act on their attitudes no matter what the situation. High self-monitors may not express an attitude in behaviour if they feel the behaviour is inappropriate for the situation. To summarize, the Fishbein-Ajzen model seems
to work better for low self-monitors because these people are more likely to translate their attitudes into behaviour across a variety of situations.

A further criticism is that the model seems to rely too heavily on self-reported data. Self-reports may vary with individual attitudes. Learners with more positive attitudes may report more positive actions than actually performed, and vice versa. However, it soon became clear that some important limitations on the theory's domain, required that additional variables would need to be included, and that the theory was perhaps better understood as taxonomy, as opposed to an explanatory system. This lead to Ajzen's (1987) updated version of the theory of reasoned action called the theory of planned behaviour.

### 2.5 The theory of Planned Behaviour

In view of the Theory of Reasoned Action's inability to account for involuntary behaviour, Ajzen developed the Theory of Planned Behaviour to include the perceived behavioural control component. The Theory of Planned Behaviour is thus an extension of the Theory of Reasoned Action. According to the Theory of Planned Action (figure 4), behaviour is guided by three considerations:

- Behavioural Beliefs (beliefs about the likely consequences of behaviour).
- Normative Beliefs (beliefs about the normative expectations of others).
- Control Beliefs (beliefs about the presence of factors that may facilitate or impede performance of the behaviour). The concept of perceived behavioural control is similar to the concept of self-efficacy in the Health Belief Model - the person's perception of his or her ability to perform the behaviour.

Behavioural beliefs result in a positive or negative attitude toward the behaviour, while normative beliefs result in perceived social pressure or subjective norm. Control Beliefs lead to perceived behavioural control. In combination, attitude towards behaviour, subjective norm and the perception of behavioural control leads to the formation of behavioural intent. With the exclusion of the Theory of Reasoned Action's inability to account for involuntary behaviour, all its other limitations are present in the Theory of Planned Behaviour.

Figure 4: The Theory of Planned Behaviour (Ajzen, 1991)


The theoretical models described in this chapter were chosen on the bases of theory-model fit. In conjunction each model explains aspects of the evaluation conducted for the purpose of this study; lessening some of the limitations described in this chapter for each of these models. Each of these models builds on the strengths of its counterpart, assisting in framing the analysis within a behavioural and psychosocial context.

### 2.6 Conclusion

This chapter described the theoretical approaches in relation to the prevention of substance abuse. Having discussed the theoretical review with relevant information in this chapter, the following chapter will discuss the research methodology that was utilised for the purposes of this study.

## Chapter 3

## Methodology

Research methodology defines what the activity of the research is, how to proceed, how to measure progress or outcomes, and what constitutes as success. In many ways, methodology refers to more than a simple set of methods. It refers to the rationale that underlies a specific study. This chapter will describe the hypothesis, research methods and procedures followed in conducting the study, including data collection techniques, instruments used, sampling and analysis.

### 3.1 Research questions and hypothesis statement

In order to ascertain whether any intervention programme was effective, Arthur and Blitz (2000) are of the opinion that one might consider how well the outcomes of the programme reflects the goals and objectives of the programme, in addition to how the process contributed towards these elements. As touched on in Chapter 1, the objectives and goals of the programme could be outlined as follow:

## Objectives:

- The programme attempted to convey knowledge about the abuse of substances such as alcohol, tobacco, cannabis and other drugs
- It attempted to change attitudes regarding the use of the named substances to such an extent that drug abuse is seen as negative by means of discussions on the possible outcomes of drug abuse.
- It attempted to teach learners skills to cope with peer pressure by means of role-plays.


## Goals

- As a general goal, the programme attempted to protect, empower and support the learners in the involved teaching district.
- More specifically the programme aimed to change and prevent high-risk behaviour and the pattern of substance abuse amongst grade ten learners.

A concise statement of the research question based on the above mentioned goals and objectives would then be:

Research Question 1: "Was the drug prevention programme in Project Awareness effective in dispersion of skills and knowledge to the extent that grade 10 learners - in the traditionally disadvantaged areas of Tshwane - changed their attitudes regarding substance abuse in such a way that this form of high-risk behaviour could be prevented?"

Hypothesis 1: The bivariate relationship between self-reported knowledge, skills, behaviour and attitude (respectively), and the intervention, will be positive and significant.

Research Question 2: Are there any significant differences between demographic indicators (age and/or gender) and self-reported reported knowledge, skills, behaviour and attitude (respectively) that may require a more targeted prevention intervention strategy in future.

Hypothesis 2: The bivariate relationship between self-reported skills, behaviour and attitude (respectively), and gender as well as age will be significant and positive.

### 3.2 Data collection techniques

The focused school intervention included visits from a team of interdisciplinary experts at eleven Tshwane schools for one day. During these visits, experts facilitated knowledge and skills workshops focusing on specific grade-assigned topics, with all of the learners from a specific grade attending school on that day. For the purpose of this study it was decided to focus on the grade ten substance abuse prevention components. Presenters were randomly assigned to a grade ten class at each school where they followed a predetermined programme as outlined in a presenter's manual (Appendix 1).

The development of community-based interventions for the prevention of substance use and abuse calls for careful evaluation (Hansen \& Kaftarian, 1994). With more refined evaluation methods, it will be possible to identify characteristics of successful interventions as well as common challenges in the design and implementation of school-based interventions.

Three data collection techniques were used, and will mainly be discussed as they relate to each level of the Kirkpatrick Model, aspects of the Health Belief Model and the Theory of Reasoned Action. The interrelatedness of especially the four evaluation levels in the Kirkpatrick Model allowed for the relevance of the focus group discussion and learner survey data on more than one level of evaluation.

- Level 1: Focus group discussions and classroom observation schedules
- Level 2: Learner survey
- Level 3: Learner survey and focus group discussions


### 3.2.1 Level 1 -Reaction

Level one postulates that if learners have a positive reaction to the initiative during its implementation, it is more likely that positive outcomes will result. Classroom observation schedules were used to determine the learner's reactions to the initiative during its implementation. The ability of the intervention to maintain interest was linked to the learner's behaviour; judged according to task- or non-task involved behaviour or activities. The classroom observation schedule will be discussed in section 3.2.1 of this document.

### 3.2.2 Level 2 -Learning

Kirkpatrick proposed that if the learners are able to learn and retain the messages conveyed in the intervention, it is more likely that positive outcomes will result. For the purpose of level two and to a certain extent level three evaluation, a pre- and post-measure Learner Survey was implemented in an attempt to assess learner's skills, attitude and knowledge levels before and after the intervention.

The Learner survey (Appendix B) measured knowledge (Items 8 and 9), attitude (Questions 3 through 7) and skills (Items 8 and 9). The survey was administered the morning before the project was implemented at a specific school. The same questionnaire was then conducted again about one month after the learners were exposed to the programme, in order for any probable behavioural or attitudinal change to be measured. Additionally, focus group discussions were conducted one-and-a-half months after the intervention to assess the learner's perceived value and transferability of skills learnt during the programme to new and unfamiliar situations.

### 3.2.3 Level 3 -Behaviour

According to Kirkpatrick (1976), level three evaluation attempts to measure the transfer of learning to a wider context of behaviour. The sections pertaining to self-reported behaviour in the post learner survey (items 2.1 to 2.15), along with the focus group discussions were used to determine whether the knowledge and skills learnt during the intervention was retained and put into action. Clark (2003) believed that this level of evaluation represents the truest assessment of a course's effectiveness.

### 3.2.4 Level 4 —Results

The extent to which the learners applied the information and skills acquired during the intervention to a wider behavioural context, and the impact on the context, was not determined in this study.

### 3.3 Data collection instruments

The following section will describe the various data collection instruments and the rationale behind the design of each.

### 3.3.1 Classroom Observation Schedule

Field workers systematically watched learners' reaction and programmatic events to gather more information about behaviour and interaction during programme delivery. According to Mays and Pope (2006) such observations epitomises the idea of the researcher as the actual research instrument in a natural setting (naturalistic research). Mays and Pope (2006) further elaborated that observational data gathering measures have several advantages that can assist in overcoming any discrepancies between self-reported behaviour. It was decided to build in an observational component primarily to circumvent the inherent biases normally associated with self-reported behaviour, such as faking good or bad responses, especially amongst adolescent learners in a school based environment. Furthermore, observational methods are well suited to uncover behaviours or routines of which the learners and presenters alike may be unaware of themselves.

Kelleher (1993) believed that observation offer several other advantages. Observation forces the observer to familiarize him- or herself with the learners, while allowing previously unnoticed or ignored aspects to be documented and included as data. Kellehear (1993) further states that people's actions are probably much more telling than their verbal accounts, and therefore unobtrusive observation becomes very valuable. With this in mind, in order to determine whether the programme was able to retain the learner's attention, learners were observed during the presentation of the programme.

The implementation assessment (programme monitoring) attempted to determine whether the programme was able to grasp the learner's attention and which part of the programme or what activity of the presenter caused them to loose or keep interest. The objective of the observation was:

- To determine which parts of the programme and content was effective or was not effective
- To determine the learners' degree of engagement at various stages of the intervention
- To record any errors pointed out or confusion encountered in the intervention, and the response of the presenters to these challenges.

The selection for suitably experienced field workers commenced well in advance. Several candidates were screened for interest and basic qualifications for the position (in this case Honours Psychology students.) All candidates who passed the initial paper selection were then interviewed. The interviews culminated in the hiring and training of four observers in addition to two researchers, who were chosen on the grounds of previous fieldwork, research and data collection experience. As far as was possible, fieldworkers were encouraged to record exactly what happened during the programme, including any relevant observations regarding the implementation of the programme activities.

Observation sheets were designed to measure the learner's task involvement or disinterest in the programme's content (Appendix C), and observations took place on two levels. Firstly, the involvement behaviour of learners during the presentation of the programme (quantitatively) involved field workers (observers) that where then tasked to each judge a specific group of learner's task involvement according to specific time intervals (every 5 minutes) during the presentation of the programme. Task- involved behaviour included the level of facilitator-learner interaction, task participation and general attentiveness (interest) in programme activities. Nontask involved behaviour included distracted behaviour, unresponsiveness to programme activities, non-programme related activities such as talking to friends at inappropriate times, or looking out of the window. An average of four observers was deployed during each programme implementation. Field workers managed to keep detailed field records including subjective observations and categorised behavioural data linked to task involvement.

Secondly, the presentation of the programme was also linked to 5-minute time intervals where learner behaviour was noted to coincide with these predetermined programme time intervals. A possible confounding factor would be that all programme implementations did not go as outlined in the Implementer's manual (Appendix A). Apart from documenting task-involvement and task non-involvement, field workers also recorded programmatic aspects of the intervention such as time keeping of presenters and learners, time allocation of tasks in the programme, programme delivery and programmatic content. A different presenter's programme was observed at each school in order to gain insight into different presentation styles.

Observational data and the gathering, therefore, also have various pitfalls. Due to various ethical considerations in conducting covert observational research, it was decided that the gathering of
observational data would be disclosed to learners. On the downside, certain behavioural modifications may occur as a reaction to disclosed observational data gathering (Hawthorne effect), or, according to Mays and Pope (2006) "encourage introspection or self questioning among those being researched" (p.1). Although it is clearly difficult to completely eliminate all these confounding factors with the utmost certainty, efforts were nonetheless made to verify data across the different measuring instruments. Learners were informed of the purpose of the study, and were assured of the confidentiality of the data gathered. It was found that learners soon forgot about the observers in the room as programme activities started.

The selection for suitably experienced field workers commenced well in advance. Several candidates were screened for interest and basic qualifications for the position (in this case Honours Psychology students). All candidates who passed the initial paper selection were then interviewed. The interviews culminated in the hiring and training of four observers in addition to two researchers, who were chosen on the grounds of previous research and data collection experience. As far as was possible, fieldworkers were encouraged to record exactly what happened during the programme, including any relevant observations regarding the implementation of the programme activities.

### 3.3.2 Focus group discussions

Focus group discussions were held with a sample of learners from the participating schools to determine their experience and evaluation of the intervention. The discussions were conducted by the trained field workers one-and-a-half month after the intervention. Topics that were included aimed at tapping into the learners' experience of the programme, and the broader context in which they lived. It was the aim of the researcher to keep the language used in the focus group as simple and straightforward as possible, keeping in mind that many of the learners were not first language English speakers. A moderator's manual (Appendix D) was compiled from general observational and field notes taken by the researcher while the learners were exposed to the programme.

According to Kitzinger (1994:103) "focus groups are group discussions organized to explore people's views and experiences on a specific set of issues". What distinguishes the focus group technique from the wider range of group interviews is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction and dynamics found in a group (Morgan 1997:12). In short, focus group discussions uncover or explore not only what learners think, but also provide the opportunity as to why they hold the views they do.

Morgan (1997:8) further believes that the main advantage of focus group data in comparison to participant observation is "the opportunity to observe a large amount of interaction on a topic in a limited time period. Group discussions provide direct evidence about similarities and differences in the participants' opinions and experiences as opposed to reaching such conclusions from post hoc analyses".

Focus groups seem to hold several advantages. It is a flexible, cost-effective way of gathering data, allowing for direct interaction between the researcher and the respondents (learners). This enables the researcher to clarify or follow up on issues discussed, and allows for the observation of non-verbal responses. However, it is often difficult to generalise information from data gathered from a focus group because of its smaller size and often sampling convenience. Additionally, responses from different learners are not independent of one another, and participants that are more dominant may bias the results obtained. Moderator bias may also result by either intentionally or unintentionally neglecting cues within the focus group. Selecting a properly trained moderator is thus of utmost importance.

The selection of a sizable group has both logistical and substantive aspects that need to be taken into consideration. Morgan (1997) argued that small groups could be less productive as they are more sensitive to group dynamics, however, larger groups may be more difficult to control, maximising the risks of subgroup development.

Focus group discussions were held at the six schools that participated in the evaluation of the intervention. The already identified six cluster schools, who participated in the learner's survey (sampling discussed in 3.4), provided the sample from which learners were selected to represent a heterogeneous cross section of each of their classes in the focus groups. The aim was to conduct a fifty-minute focus group with ten randomly selected learners, as the literature reveals that 4 should be the minimum size for a group while 12 is the upper, and 6-8 accounting for the average limit. This group consisted of a heterogeneous cross section of male and female learners in each of the six schools, but due to time constraints and other interruptions it was often not possible to conduct a full fifty-minute discussion. The detailed sampling of learners assigned to participate in the focus group discussions will be discussed in detail in section 3.4.

Learners were assured of the confidentiality of their comments, and were given the option not to take part in the groups at the beginning of each session. None of the selected learners did however choose to go back to class and everyone got the opportunity to speak their mind on the chosen topics. Questions discussed (as detailed in Appendix D) included learner's views on the necessity of a substance abuse prevention programme, as well as the identification of the
successes and failures of the intervention. Learners were encouraged to share their suggestions around future programmes, in addition to general thoughts and feelings regarding school-based programmes in general. Learners had the opportunity to air their opinions regarding whether the programme had made a difference in their perceptions, knowledge, attitude and behaviour surrounding substance abuse issues.

### 3.3.3 Learner survey

Substance usage-related behaviour is a largely private activity, subject to varying degrees of social, cultural, religious, moral and legal norms and constraints. A key challenge for all such research is to generate unbiased and precise measures of individual and population behaviour patterns. Usually, inbuilt measures are needed to curtain measurement error, resulting from participation bias and learner's self-reported exposure to and usage of various substances or socially censured attitudes and behaviours.

Various respondent variables had to be taken into account when the behavioural measurement tool (survey) was designed. An acceptable response rate is core to the studies' representativeness and reduced participation bias. Participation bias is defined by Fenton, Johnson, McManus and Erens (2001) as the error arising from systematic differences (for example drug usage) of respondents who took part in the study versus those who did not participate. Participation bias can introduce significant errors in measuring estimates of any type of behavioural risk. Clement (1990) believed that the more intrusive a survey, the more likely it is to encounter participation bias that overestimates the variability and frequency of substance usage related behaviour. Care was taken to glean sensitive information by attempting to frame all survey questions as tactfully as possible. In order to accommodate different language groups and comprehension of survey questions, survey questions were read to learners in their own language, and questions were explained to them verbally. As with the other levels of measurement, participation in the learner survey was voluntary, and learners were given the chance to opt out. Learners were reminded that results would be considered confidential.

Survey questions were based on those used by Rocha-Silva et al. (1996). In order to minimise the measurement error associated with pen and paper surveys, questions were formulated in an easy to understand way, with field workers translating surveys into learners' language of preference. Field workers were able to explain the rationale and format of the survey to the learners. The survey questions were designed to check for internal consistency, while the validity was accounted for by using more than one measuring instrument. Re-administration of the same survey (pre- and post test design) after a brief time interval provided an index of stability of
learners' self reported drug usage over time. Care was taken to construct a questionnaire that would need a maximum of 30 minutes to complete. This time restriction was put in place in order to avoid concentration difficulties on the part of the learners and not to disrupt their classes too much.

The survey (Appendix B), measuring knowledge (Items 8 and 9), attitude (Questions 3 through 7) and behavioural change (Items 2.1 - 2.15 ), was administered the morning before the project was implemented at a specific school. A repeated measure design with pre- and post-test was implemented to assess any attitude, knowledge or behavioural changes taking place after the intervention. In the original planning, a control group was added, but due to practical factors (e.g. an absence of available control schools in a cluster) a control group could not be included. The post-test measure was taken one month after learners' exposure to the programme. Numbering of questionnaires allowed for pairing of pre- and post measures. Learners who were absent at either of the measuring instances were excluded from the sample. Figure 4 describes the data collection process.

## Figure 5: The data collection process



Pilot Study


Intervention Pre-Test Survey


Post-Test Survey (30 days after Intervention)
Focus Group (45 days after Intervention

## Time Lapse: 45 days

A pilot study was conducted at a school where the intervention took place, but which was not selected in the sampling for this study, in order to ensure that the learner survey was appropriate in terms of content and whether research protocols could be properly followed. Although pilot studies are subject to a number of limitations (Peat, Mellis, Williams \& Xuan; 2002) their importance cannot be negated. De Vaus (1993:45) listed a myriad of reasons for conducting pilot studies:

- Developing and testing adequacy of research instruments
- Assessing the feasibility of a (full-scale) study/survey
- Designing a research protocol
- Assessing whether the research protocol is realistic and workable
- Establishing whether the sampling frame and technique are effective
- Identifying logistical problems which might occur using proposed methods
- Estimating variability in outcomes to help determining sample size
- Determining what resources (finance, staff) are needed for a planned study
- Assessing the proposed data analysis techniques to uncover potential problems
- Developing a research question and research plan
- Training a researcher in as many elements of the research process as possible

Care was taken to curb any limitations regarding the pilot, for example, in order to counter contamination, data and respondents from the pilot study were excluded from the main findings. De Vaus (1993:54) reiterated: "Do not take the risk. Pilot test first." A set of procedures were followed to ensure the optimal internal validity of the survey (Table 3.23 in Peat et al. 2002: 123).

- The survey was administered to learners in the school where the pilot study was done after the intervention in exactly the same way as it will be administered in the main study
- Learners were asked for feedback to identify ambiguities and difficult questions
- The time it had taken to complete the questionnaire was recorded in order to ensure that time frames were realistically projected
- The survey was assessed to whether each question elicited an adequate range of responses
- The survey was checked in order to ensure that all questions were answered.

After administering the pilot study, slight changes were made, mostly relating to phrasing of survey questions. It was decided to exclude some of the substance's street or slang names, as it seems to have confused some learners. The most confusing survey items seemed to be the street names for LSD which was also indicated on the questionnaire (Candy, Smarties), as well as the reference to steroids as muscle builders. This was rectified after the first measurement instance by either removing the street names from the questionnaire, or specifically stating that the street names were not to mislead the learners.

### 3.4 Sampling

The one-day focused school intervention programme was implemented in 11 secondary schools in Atteridgeville, Laudium and Pretoria West. Schools from these three geographic areas were approached as different clusters since the historical and cultural contexts differed considerably. The three clusters could be described as follow:

1. Cluster 1 included two multi-racial schools in a previously predominantly white residential area (Pretoria West).
2. Cluster 2 included three schools in an exclusively Indian residential area (Laudium).
3. Cluster 3 was comprised of eight schools from an exclusively black residential area (Atteridgeville).

Due to time and resource constraints, the possible sample size was limited to six classes in these schools. A cluster sampling strategy was followed to select schools for the sample. Since the reactions of learners from the three different clusters were likely to be different based on cultural and historical differences, it was decided to select two schools from each cluster. In turn, one class from each school was selected from the number of available classes. . A letter stating the purpose, time and date of the post-test as well as an identification of the data collection team was sent to each school. Each school was phoned to verify the information sent in the initial follow up letter. No school denied the request for cooperation. Table 3 outlines the number of schools selected.

Table 3: Selection of Schools: Per Cluster, Involvement Category and Class Size

| Cluster | Number Of <br> Schools in Cluster | Number Of <br> Schools selected | Number of classes <br> selected |
| :---: | :---: | :---: | :---: |
| Cluster 1 | 2 | 2 | 2 |
| Cluster 2 | 3 | 2 | 2 |
| Cluster 3 | 8 | 2 | 2 |
| Total | 13 | 6 | 6 |

Although this sample was not strictly representative, the purposive selection strategy was intended to convey a picture of what the typical learner reaction would be at schools typifying the
culture and ethos of each of the three clusters. The criteria used to select schools from each of these clusters, is elaborated below:

- Cluster 1: The project was presented at both schools in the Pretoria West area, and it was decided to include both these schools in the sample. Project members that worked in this cluster of schools indicated that some discrepancy might exist between the two schools in terms of their culture and ethos, and that visiting both these schools would provide a more balanced view.
- Cluster 2: The project was presented at all three schools in the Laudium area and it was decided to include two of these schools in the sample. Information from project members indicated that some differences in the culture and ethos of these schools existed. Two of these schools were identified as most likely to present a balanced view.
- Cluster 3: The project was presented at all eight of the schools in the Atteridgeville area, and it was decided to select two schools most likely to typify the response from learners from this context. Project members with experience from these schools assisted with the identification of two typical (i.e. not the best or the poorest) schools in terms of culture and ethos.

Further sampling was conducted to select learners to be included in the different research techniques. These are described below.

### 3.4.1 Selection of learners for the Learner Survey

One grade ten class in each of the selected schools was randomly assigned to participate in the evaluation. Random probability sampling methods can reduce volunteer bias by yielding unbiased samples of the target population. Learners in these classes were requested to complete a questionnaire before and after the intervention. Numbering of questionnaires allowed for pairing of pre-and post measures. Only the data of learners who completed the pre- and postmeasure were analysed. A total of 215 learners completed the evaluation questionnaire.

### 3.4.2 Selection of learners for the Classroom Observation

Observation sheets were designed to measure learner's task involvement (Appendix C). Three to four observers were assigned to observe one or two rows of learners in the classroom during the presentation. In most cases it was possible to observe $75 \%$ of learners in the class. The main purpose behind this type of selection was not to necessarily generalise results to a population,
but to highlight common links or categories shared between the different schools observed, specifically in relation to programme content and delivery.

### 3.4.3 Selection of learners for the Focus Group Discussions

Learners were selected for the focus group discussion to represent a heterogeneous cross section of each of these classes who participated in the evaluation. Ten learners, male and female, were selected from the same classes to participate in each focus group discussion. In total, six focus groups were held; one for each school which participated in the evaluation.

### 3.5 Data Analysis

Miles and Huberman (1994) propose that data analysis consist of three different phases, which include data reduction, data display and information verification. The following section aims to describe the conversion of raw information into meaningful information.

### 3.5.1 Observational data

Data obtained from observations were systematically analysed by theme (as put forth in the presenter's manual) and its coinciding time interval. Bloor (1976) described the analytical process for variants of all content analysis (as was used for this particular data set) as follow:

1. Provisional Classification (task involvement, uninvolvement)
2. Identification of provisional case features - common features identified in each category and across sites (e.g. overall higher level of task uninvolvement during the second programme segment)
3. Scrutiny of deviant cases (e.g. mean age for school one as outlier)
3.1.1 Identification of shared case features with non deviant data (despite age deviance in school one, all other categories were very similar to those of other sites)
4. Repetition of steps two and three for each disposal category.

The observational data for each school produced frequencies of task-involved and task noninvolved learners for five-minute intervals. All observers' data was added and for every fiveminute interval the proportion of involved and uninvolved learners was calculated. These proportions were then averaged to get a baseline proportion of task-involved and task-uninvolved learners for each school. The data was then investigated for intervals where the learners were
significantly uninvolved or involved. Any interval where more than the baseline proportion of learners was not task-involved, was categorised as significantly not task non- involved. At school one for example the baseline proportion of involved learners was 0.858 . All intervals where less than 0.858 learners were task involved, was investigated. In the case of one school however, the baseline proportion of involved learners proved to be very high - (0.924), and "significantly not task-involved" was then defined by any instance where less than 0.90 learners were task involved.

It was investigated what parts of the programme was not well attended and what could have contributed to this loss in learner attention. All instances where $100 \%$ of the observed learners were task-involved were investigated to determine the sections of the programme that were very successful in keeping learners' attention.

### 3.5.2 Focus group discussions

Each focus group discussion was transcribed and the contents analysed for main themes (Miles \& Huberman, 1994.) These themes were then compared across different schools. A summary of the main themes will be discussed. Although the primary goals of these focus groups was to gather information on the process, some information could also be utilised in conjunction with the quantitative data obtained from the pre-and post learner survey, to determine whether a positive outcome was achieved. Focus group discussions survey the perception of the effectiveness rather than the actual outcome of the project however, these results were useful in contextualising the quantitative results.

### 3.5.3 Learner survey

To analyse the difference between the pre- and post-test of learners in terms of attitude and behaviour the non-parametric McNemar test (also referred to as McNemar's test of symmetry or McNemar symmetry chi square) on SPSS was used to analyse questions two to seven. The McNemar test assesses the significance of the difference between two dependent samples where the variable of interest is a dichotomy. It is primarily used in before-after studies to test for an experimental effect. The goal was to determine whether any significant change ( $p<0.05$ ) in attitude or behaviour was effected between the pre- and post-measurement. Regarding the McNemar test's power efficiency, when it is used with nominal measures (e.g. gender), the concept of power efficiency becomes meaningless; according to Siegel (1956), as there is no alternative with which to compare the test.

Questions eight and nine were measured on a five point interval scale, and therefore repeated measures analysis of variance could be conducted. This test was used to determine whether any difference between the pre- and post-tests occurred. The learners' age was also compared between schools by making use of a one-way analysis of variance. Visual inspection of the distributions indicated that the data in general was normally distributed and although the assumption of homogeneity of variance was perhaps not satisfied, Ferguson (1981) said: "One advantage of the analysis of variance is that reasonable departure from the assumptions of normality and homogeneity may occur without seriously affecting the validity of the inferences drawn from the data" (p. 246).

### 3.6 Ethical considerations

Ethical conflicts often arise in evaluation research because people have opposing interests in the findings of the programme. These ethical issues are aggravated by limits on research cost, time limits and the degree of cooperation among those involved. An attempt was made to adhere to the general principles of autonomy, non-malevolence and beneficence as set out in the Esomar guidelines (Appendix E). Participants received a full, non-technical and clear explanation of the tasks expected of them. Verbal consent was obtained from all learners throughout the research and evaluation process. Participation in the research was voluntarily and the participant's attention was drawn to this fact at every level of the evaluation. Confidentiality of individuals was protected at all times and only summarised group information or anonymous quotations were published. The format of the results was specified as academic and competent and appropriate professional resources were identified and consulted.

### 3.7 Conclusion

This chapter dealt with the description and outline of the research design and methodology of the evaluated programme. The next chapter provides the presentation of the findings in the form of a detailed analysis in addition to data interpretation.

## Chapter 4

## Results

### 4.1 Introduction

Chapter four focuses on the data analysis and interpretation obtained from the research instruments. Each research instrument and the results that it yielded will be discussed in full. Where appropriate, specific areas of an instrument was analysed in more detail where results indicated possible significant differences in pre-and post-test measurement.

### 4.2 Proaramme implementation

A realistic interpretation of data collected can only be made if various confounding factors are taken into account. The availability of time at each of the six locations, late return by learners after breaks, lack of onsite resources including electricity, as well as the presentation styles of the presenters may have influenced outcomes. Additionally, variance in programmatic content should also be examined in order to reach a reasonable conclusion when presenting evaluation results. An analysis was conducted of the field notes taken by observers during the implementation of the programme. The results are subsequently discussed below.

### 4.2.1 Time Allocation

Time allocation could have affected both programmatic delivery and outcomes. During the presentation of the programme, lack of time resulted in presenters seldom keeping to the time schedule as was originally detailed in the programme manual (Appendix A). In the manual, several different options for activities were included, which varied in length. In general, time allocated for each activity was not sufficient, as learner discussion and questions posed to the presenters were not figured into the original programmatic time schedule. A lack of resources also resulted in time constraints, as in one instance it was planned to show a video snippet, resulting in the delivery and setup of equipment only to realise that the school had no electricity. Most presenters either substituted this activity with a lesson on the consequences of substance abuse, or allowed time for a quick discussion on learners' suggestions for a substance prevention action plan at their school. In some presentations, this activity was totally excluded. In most cases, very little time was left for activity wrap-ups and revisitation of key concepts. Additionally, presenters had difficulty in following through on ground rules, as learners were often late for sessions after breaks. In some instances, this activity was totally excluded. In most cases, very little time was left for the wrapping up of any of these activities.

### 4.2.2 Proaramme Delivery

Interaction during this intervention was characterised by collaboration, and, although educators were not always actively involved in presenting content, most were actively engaging with the programmatic content during delivery. However, one could assume that these joint performance delivery systems would be associated with a certain degree of teacher training, a component that was missing during this intervention. All of the presenters followed an informal and flexible approach concerning planned activities, resulting in learners not being exposed to the same material with the same intensity across the six schools.

### 4.3 Observational Data

As described in Chapter 3, Learner's behaviour was judged according to task- or non-task involved behaviour or activities (Appendix C). A total of 192 learners in the six selected classes were observed at five-minute intervals, equaling 3,552 observations. Overall, $85 \%$ of learners remained task-involved during the majority of the programme, while non-task involvement was associated wit $15 \%$ of learners observed. The average task-involvement of learners observed in each school was summarised in table 4.

Table 4: Proportion of involved learners per school at 5-minute intervals (from highest to lowest baseline involvement).

| School | Baseline Proportion involved | Number of children |
| :---: | :---: | :---: |
| 5 | .924 | 27 |
| 2 | .897 | 31 |
| 1 | .858 | 41 |
| 3 | .855 | 33 |
| 6 | .830 | 30 |
| 4 | .795 | 30 |

A Pearson correlation revealed a very weak non-significant negative correlation of $r=-.171\left(r^{2}=\right.$ 0.0292 ) between the size of class and the average involvement, which implies that smaller classes were not generally more task-involved than the bigger classes. In the same way, no apparent relationship between the proportion of involved students and the cluster in which the school was located was found. The investigation into the instances where learners were significantly not task - involved, did not indicate a specific activity that generally led to the loss of learner attention.

### 4.3.1 Involvement and proaramme activities

Figure 6 indicates a slightly negative trend as time progressed during the intervention, demonstrating that learners were slightly more task-involved at the beginning of the programme than in the second half. This trend could possibly be linked to lessened learner concentration levels due to fatigue. It is evident that the schools varied greatly in baseline proportion of involved and uninvolved learners. An example of this is the involvement at school six, where involvement ranged from very high to very low.

When related to programme content at times of observation, it was found that learners were more task-involved in sections where the programme content was more interactive and required small group discussions. General open floor discussions often resulted in difficulty to maintain proper rapport and discipline within the classroom. Presenters were generally able to keep the attention of learners while explaining concepts like the biological effects of substances, unless the explanation became too long, or the presenter moralised the behaviour.

Figure 6: Proportion of involved learners per school (5-minute intervals)


Towards the end of the programme, learners seem to pay less attention to instances of presenter monologue. Learners also tended to get less interested while the presenter addressed questions posed by fellow classmates, because attention is then given to individuals and not to the group as a whole.

Interactive activities seem to have held learner's attention for much longer. When all the learners were invited to give input (e.g. the icebreaker where they had to relate their dreams), they generally tended to stay more focused. Learners generally enjoyed the role-play activities, although task involvement was sometimes low during the planning and performance of the dramas, especially in the larger groups. Due to previously mentioned time constraints, many learners attempted to finish their role-play outline while other groups were already presenting.

It was not possible to make any definite conclusions regarding topics generally leading to less task involvement, because the same topics that co-occurred with a significant decline in tasknoninvolvement, often also co-occurred with perfect task-involvement in other instances. One such example is when the topic of the influence of the use of dagga was discussed. Although, in some instances, the majority of learners actively tried to convince others that it did or did not have medicinal qualities and health implications, there were a proportion of learners who became uninvolved in the task.

Themes that could be identified in the programmatic content across the majority of schools and presenters during the second session, and which influenced learner attention levels, included:

- The consequences of substance abuse - on a physical, mental, financial and social level (lower level of non-task involvement)
- The religious and moral implications of substance abuse (higher level of non-task involvement)

An analysis of content per activity revealed some interpretational difficulty, as programme presentation, content and duration in each school differed somewhat from that detailed in the presenter's manual, and from school to school. It is necessary to examine each school in detail in order to determine which aspects of or activities as a whole were more successful. The following section will thus cover a detailed breakdown of observational data at each school.

### 4.3.2 Site Level Data

Data analysed by school confirmed the overall trends described above. In most instances, it was difficult to identify one overall topic across the board that caused the learners to lose interest in
the programme per school. Conclusions reached were based on detailed field notes corresponding to a five-minute time interval in each observed classroom.

## School 1

Prior to the commencement of the session, it became evident that learners in school one were assigned to classes according to academic achievement. The presenter referred to this class of 41 learners as the "survival class", indicating that these particular learners demonstrate low academic achievement in addition to behavioural problems.

Instances where learners seemed less task-involved (table 5) could be linked to background noise coming from outside the classroom, rather than to a specific theme within the programme content. Learners had some difficulty understanding certain terminologies used, for example "syringe". However, the rapport between the presenter and learners was comfortable enough for them to ask questions when they did not understand sections of the programme content. Learners responded well to all visual stimuli as well as interactive activities such as being taught a song. Lack of time was a hampering factor, and there was no break between activities. On average, approximately four learners were non-task involved across the entire programme span; whilst 21 learners were actively involved in tasks and content presented in the classroom observed in school one.

Table 5: School 1 (Cluster 2 - Laudium): Proportion of Task-Involved versus Uninvolved learners across five-minute observation intervals

| Time Interval | Theme | Proportion Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Ground Rules | 0.115 | 0.885 |
| 10 | Dreams | 0.115 | 0.885 |
| 15 | Dreams | 0.038 | 0.962 |
| 20 | Dream Killers | 0.077 | 0.923 |
| 25 | Dagga smoking lead to <br> dependency | 0.154 | 0.846 |
| 30 | Dagga smoking lead to <br> dependency | 0.154 | 0.846 |
| 35 | Dagga smoking lead to <br> dependency | 0.154 | 0.846 |
| 40 | Physical consequences of <br> smoking dagga | 0.154 | 0.962 |
| 45 | Financial implications of <br> dependency | 0.080 | 0.846 |
| 50 | Consequences of increased <br> tolerance | 0.115 | 0.920 |
| 55 | LSD | 0.115 | 0.885 |
| 60 | Cocaine | 0.154 | 0.885 |
| 65 | Dagga | 0.154 | 0.846 |
| 70 | Consequences of Rape |  | 0.846 |


| 75 | Drug syndicates | 0.148 | 0.852 |
| :---: | :---: | :---: | :---: |
| 80 | Newspaper Article | $\mathbf{0 . 2 3 1}$ | 0.769 |
| 85 | Newspaper Article - <br> influence of peer pressure | $\mathbf{0 . 2 3 1}$ | 0.769 |
| 90 | Choices | $\mathbf{0 . 3 0 8}$ | 0.692 |
| 95 | Responsible choices to <br> make dreams come true | 0.192 | 0.808 |
| 100 | Responsible choices to <br> make dreams come true | $\mathbf{0 . 2 2 2}$ | 0.778 |
| 105 | Responsible choices to <br> make dreams come true | 0.211 | 0.789 |
| 110 | Wrap Up | 0.105 | 0.895 |

## School 2

The presenter's style was structured and kept very close to the presenter's manual in terms of content. Unlike the other schools, two grade ten classes had to be combined. Absenteeism was high, resulting in only 21 learners from two classes being present. Learners were informed that a programme will be presented on this day and those not interested did not attend school on the day. Levels of task-noninvolvement (table 6) indicated that learners were not involved due to logistics (breaks in attention when groups rotated around the classroom) rather than programmatic content. Learners were grouped according to gender for discussions, resulting in two relatively large groups with two or three active members, while social sub-groups formed within the larger circle. A total of 17 learners were involved in the programmatic tasks in general across the duration of the programme, with an average of 2 learners being distracted or tasknoninvolved. This average was calculated for the entire number of learners who where taskuninvolved for more than $80 \%$ during the duration of the programme.

Table 6: School 2 (Cluster 1 Pretoria West): Proportion of Task-Involved versus Uninvolved learners across five-minute observation intervals

| Time Interval | Theme | Proportion Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Ground Rules | 0.047619 | 0.952381 |
| 10 | Dreams | 0.047619 | 0.952381 |
| 15 | Dreams | 0 | 1 |
| 20 | Achievement of Dreams | 0.095238 | 0.904762 |
| 25 | Goal Obstacles | 0.047619 | 0.952381 |
| 30 | Responsible Choices | 0.190476 | 0.809524 |
| 35 | Group Role Plays Prep | 0.047619 | 0.952381 |
| 40 | Group Role Plays Prep | 0.142857 | 0.857143 |
| 45 | Group Role Plays Prep | 0.095238 | 0.904762 |
| 50 | Group Role Plays Prep | 0.2 | 0.8 |
| 55 | Group Role Plays Prep | 0.095238 | 0.904762 |
| 60 | First Group - Role Play | 0.142857 | 0.857143 |


| 65 | First Group - Role Play | 0.095238 | 0.904762 |
| :---: | :---: | :---: | :---: |
| 70 | Second Group - Role Play | 0 | 1 |
| 75 | Second Group - Role Play | $\mathbf{0 . 2 3 8 0 9 5}$ | 0.761905 |
| 80 | Discussion | 0.047619 | 0.952381 |
| 85 | Common Theme of RPs | 0.047619 | 0.952381 |
| BREAK |  |  |  |
| 90 | Financial Implications of <br> substance abuse | 0.095238 | 0.904762 |
| 95 | Social Implications | 0.142857 | 0.857143 |
| 100 | Biological Implications | 0 | 1 |
| 105 | Groups - Newspaper Articles | 0.0625 | 0.9375 |
| 110 | Who has Experimented | 0.25 | 0.75 |
| 115 | Bullet Proof Jacket | 0.1 | 0.9 |
| 120 | Bullet Proof Jacket | 0.25 | 0.75 |

## School 3

The highest count of task noninvolvement in school 3 occurred before and after the break and could not specifically be linked to programmatic content. The class consisted of 33 learners who were initially on the defensive, but generally became more at ease as the programme progressed. The presenter utilised good handouts. Across the period observed, an average of three learners was task-uninvolved, with 19 learners being focused on the tasks at hand. When the presenter and learners were not in agreement about an issue, the programme was disrupted, for example, the presenter related that substance abuse usually leads to learners blaming God although they themselves caused the problem. When learners disagreed over the abuse of dagga, the presenter responded that he was not going to discuss the matter with them further, as he had already made his feelings clear on the subject. As illustrated in table 7, learners were primarily noninvolved during programmatic sections covering alcohol and dagga.

Table 7: School 3 (Cluster 3 Atteridgeville): Proportion of Task-Involved versus Uninvolved learners across five-minute observation intervals

| Time Interval | Theme | Proportion Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Ground Rules | 0.042 | 0.958 |
| 10 | Ground Rules | 0.042 | 0.958 |
| 15 | Dreams | 0.000 | 1.000 |
| 20 | Dreams | 0.083 | 0.917 |
| 25 | Obstacles - Dreams | 0.167 | 0.833 |
| 30 | Cigarettes/Smoking | 0.042 | 0.958 |
| 35 | Lungs/Health/Cancer | 0.167 | 0.833 |
| 40 | Alcohol | $\mathbf{0 . 3 3 3}$ | 0.667 |
| 45 | Kinds of drugs available | 0.125 | 0.875 |
| 50 | Costs of drugs | 0.125 | 0.875 |


| 55 | Where would you get the money | 0.240 | 0.760 |
| :---: | :---: | :---: | :---: |
| 60 | Dagga is not a medicine | 0.333 | 0.667 |
| 65 | Dagga can cause mental illness | 0.333 | 0.667 |
| 70 | Effects of drugs on your soul | 0.333 | 0.667 |
| 75 | Effects of dagga on your body | 0.333 | 0.667 |
| 80 | Slimmers/Over the counter drugs | 0.292 | 0.708 |
| 85 | Slimmers/Over the counter drugs | 0.000 | 1.000 |
| BREAK |  |  |  |
| 90 | Groups - Role Play | 0.125 | 0.875 |
| 95 | Groups - Role Play | 0.000 | 1.000 |
| 100 | Role Play | 0.208 | 0.792 |
| 105 | Role Play | 0.167 | 0.833 |
| 110 | Role Play | 0.000 | 1.000 |
| 115 | Role Play | 0.056 | 0.944 |
| 120 | Discussion on Role Play | 0.056 | 0.944 |
| 125 | Discussion on Role Play | 0.111 | 0.889 |
| 130 | Follow up - RP - how did you feel | 0.056 | 0.944 |
| 135 | Reading of two case studies | 0.111 | 0.889 |
| 140 | Do these prevent you from reaching your dreams? | 0.000 | 1.000 |
| 145 | What would you do to keep your school drug free | 0.333 | 0.667 |

## School 4

When taking into account the task-involvement of the 30 learners in school 4 across programme duration, an average of 4 learners was task-noninvolved compared to an average of 14 involved learners. The presenter had an excellent rapport with the learners, at times switching over to their native language to get a point across. Time allocated to the preparation of role-play could be shortened in future, as it seemed that learners lost interest in the task at hand when time allocation to an activity were not adhered to, as can clearly be seen from the time extension of certain activities and of this presentation as a whole when compared with implementation at other schools.

In general, the consequences of using dagga and drinking alcohol also appeared to have generated less interest amongst the learners, possibly due to desensitisation and moralization towards these specific topics in the mass media and educators. This is a great cause for concern, as these substances are regarded as "gateway drugs" and should be a critical focal point for substance abuse prevention.

Table 8: School 4 (Cluster 2 - Laudium): Proportion of Task-Involved versus Uninvolved learners across five-minute observation intervals

| Time Interval | Theme | Proportion Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Dreams | 0.143 | 0.857 |
| 10 | Obstacles - Dreams | 0.200 | 0.600 |
| 15 | Obstacles - Dreams | 0.100 | 0.900 |
| 20 | Obstacles - Dreams | 0.056 | 0.944 |
| 25 | Explaining Role Play | 0.278 | 0.722 |
| 30 | Explaining Role Play | 0.000 | 1.000 |
| 35 | Role Play - Prep | 0.278 | 0.722 |
| 40 | Role Play - Prep | 0.000 | 1.000 |
| 45 | Role Play - Prep | 0.444 | 0.556 |
| 50 | Role Play | 0.500 | 0.500 |
| 55 | Role Play | 0.000 | 1.000 |
| 60 | Role Play | 0.333 | 0.667 |
| 65 | Role Play | 0.444 | 0.556 |
| 70 | Role Play | 0.000 | 1.000 |
| 75 | Role Play | 0.000 | 1.000 |
| 80 | Role Play | 0.167 | 0.833 |
| 85 | Consequences of Improper Behaviour | 0.056 | 0.944 |
| 90 | Article - alcohol and peer pressure | 0.111 | 0.889 |
| 95 | Discussion Alcohol and Peer pressure | 0.167 | 0.833 |
| 100 | Consequences of drinking | 0.318 | 0.682 |
| BREAK |  |  |  |
| 105 | Freedom of Choice | 0.278 | 0.722 |
| 110 | Physical, emotional and social consequences of drinking | 0.278 | 0.722 |
| 115 | Physical consequences of smoking | 0.167 | 0.833 |
| 120 | Drugs - legalization debate | 0.278 | 0.722 |
| 125 | Consequences of smoking Dagga | 0.500 | 0.500 |
| 130 | Consequences of Drinking | 0.333 | 0.667 |
| 135 | Learners question how glue can be a drug | 0.222 | 0.778 |
| 140 | Inhalants, stimulants and depressants - physical consequences | 0.278 | 0.722 |
| 145 | Newspaper articles | 0.278 | 0.722 |
| 150 | Alternatives to drugs | 0.333 | 0.667 |


| 155 | Discussion | 0.111 | 0.889 |
| :---: | :---: | :---: | :---: |
| 160 | Stimulants like Ecstasy | 0.111 | 0.889 |
| 165 | Discussion | 0.000 | 1.000 |
| 170 | Wrap up | 0.000 | 1.000 |

## School 5

The average number of learners that were not consistently task-involved was significantly lower than those who were task-involved (two versus twenty learners across the duration of the programme). Programme content that seemed to have related to the highest level of noninvolvement were linked to a call to action from the presenter, directed at groups and individual learners ("What action each learner can take to prevent substance abuse"). The questions posed by the presenter elicited a very low response rate during both segments of the programme as well as during the video shown, however, learners were more communicative when asked to discuss topics in groups. Interesting, learners remained task-involved until the end of the programme, and despite the programming running longer than the time allocated (table 9).

Although observational data indicated that learners were generally paying attention to the video being shown, it should be noted that interest was more for the entertainment value than for the content of the programme as noted from learner comments noted by the fieldworkers. The video content was dated, and did not relate to the learner's daily frame of reference, resulting in various humourous comments. Thus, although the video may not have been appropriate for senior phase learners, it still generated debate around substance abuse and did not fail to achieve the outcome as set out in the programme manual. Unfortunately, speculations around the video's content cannot be cross-tabulated for analysis purposes as this is the only school where the presenter chose to show the video.

Table 9: School 5 (Cluster 1 - Pretoria West): Proportion of Task-Involved versus Uninvolved learners across five-minute observation intervals

| Time <br> Interval | Theme | Proportion <br> Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Ground Rules | 0.000 | 1.000 |
| 10 | Dreams | 0.040 | 0.960 |
| 15 | Group Role Plays | 0.000 | 1.000 |
| 20 | Group Role Plays | 0.000 | 1.000 |
| 25 | Group Role Plays | 0.080 | 0.920 |
| 30 | Group Role Plays | 0.120 | 0.880 |
| 35 | Consequences of drug <br> abuse | 0.080 | 0.920 |
| 40 | How does drug abuse <br> affect others | 0.080 | 0.920 |
| 45 | Presenters - conferring | 0.040 | 0.960 |


| BREAK |  |  |  |
| :---: | :---: | :---: | :---: |
| 50 | Newspaper Articles | 0.040 | 0.960 |
| 55 | Newspaper Articles | 0.040 | 0.960 |
| 60 | Implications - discussion of articles | 0.080 | 0.920 |
| 65 | Implications - discussion of articles | 0.160 | 0.840 |
| 70 | Implications - discussion of articles | 0.000 | 1.000 |
| 75 | What can be done to give the articles a happy ending | 0.120 | 0.880 |
| 80 | Teacher announces break | 0.120 | 0.880 |
| BREAK |  |  |  |
| 85 | 7 Reasons not to do drugs (Presenter's own handout) | 0.000 | 1.000 |
| 90 | 7 Reasons not to do drugs (Presenter's own handout) | 0.160 | 0.840 |
| 95 | How to Identify a drug user | 0.000 | 1.000 |
| 100 | How to Identify a drug user | 0.080 | 0.920 |
| 105 | How to Identify a drug user | 0.120 | 0.880 |
| 110 | How to Identify a drug user | 0.154 | 0.846 |
| 115 | What each learner can do to help | 0.200 | 0.800 |
| 120 | What each learner can do to help | 0.200 | 0.800 |
| 125 | Video of drug addicts relating experiences | 0.160 | 0.840 |
| 130 | Video of drug addicts relating experiences | 0.080 | 0.920 |
| 135 | Video of drug addicts relating experiences | 0.200 | 0.720 |
| 140 | Video of drug addicts relating experiences | 0.040 | 0.960 |
| 145 | Video of drug addicts relating experiences | 0.040 | 0.960 |
| 150 | Video of drug addicts relating experiences | 0.080 | 0.920 |
| 155 | Video of drug addicts relating experiences | 0.080 | 0.920 |
| 160 | Video of drug addicts relating experiences | 0.120 | 0.880 |
| 165 | It can happen to anyone discussion video | 0.105 | 0.895 |
| 170 | School -drug action plan discussion | 0.077 | 0.923 |
| 175 | Video of drug addicts relating experiences | 0.000 | 1.000 |
| 180 | Video of drug addicts relating experiences | 0.000 | 1.000 |
| 185 | Video of drug addicts relating experiences | 0.000 | 1.000 |
| 190 | Video of drug addicts | 0.000 | 1.000 |


|  | relating experiences |  |  |
| :---: | :---: | :---: | :---: |
| 200 | Video of drug addicts <br> relating experiences | 0.000 | 1.000 |

## School 6

Overall, learners observed in this school came across as unruly but very articulate. Learners often shouted at each other to get their point across, constantly moved around the classroom, and were able to take a strong standpoint on their individual views. The presenter divided learners into groups by assigning them random numbers, which assisted in keeping them taskinvolved. However, debates ran unchecked and there was some difficulty in keeping some of the learners focused on the programme, especially during the debate intervals (minutes 85 to 95 as illustrated in table 10) Amongst the task-involved learners (on average, twenty learners across the duration of the programme), encouragingly, programmatic content seemed to spark some interesting debate.

The percentage of task-uninvolved learners totaled an average of four during the entire programme, and could be attributed to disciplinary and control issues within the classroom, and could not be linked to a particular programmatic theme or outcome. Additionally, low levels of task-involvement in this group could also be attributed to the size of the group, where two of the learners dominated the discussion in a debate-like forum, with the presenter struggling to keep them focused on the topic at hand. This caused some learners to "fade into the background" by either becoming semi-active spectators, or, in some instances, completely uninvolved (minute 95).

Table 10: School 6 (Cluster 3 - Atteridgeville): Proportion of Task-Involved versus Uninvolved learners across five minute observation intervals

| Time Interval | Theme | Proportion Uninvolved | Proportion Involved |
| :---: | :---: | :---: | :---: |
| 5 | Ground Rules | 0.167 | 0.833 |
| 10 | Allocation to Groups | 0.042 | 0.958 |
| 15 | Role Play | 0.042 | 0.958 |
| 20 | Role Plays | 0.000 | 1.000 |
| 25 | Discussion - Role Plays | 0.125 | 0.875 |
| 30 | Opinions on Role Plays - <br> Reasons for using drugs | 0.000 | 1.000 |
| 35 | Discussion - reasons for <br> using drugs | 0.208 | 0.792 |
| 40 | Is it easy to say no to <br> drugs | 0.042 | 0.958 |
| 45 | What can you do if your <br> peers use drugs | 0.083 | 0.917 |
| 50 | Dreams | $\mathbf{0 . 3 4 6}$ | 0.654 |


| 55 | Dream Breakers | $\mathbf{0 . 2 9 2}$ | 0.708 |
| :---: | :---: | :---: | :---: |
| 60 | Dream Breakers | 0.208 | 0.792 |
| 65 | Choice | 0.167 | 0.833 |
| 70 | Debate | $\mathbf{0 . 3 3 3}$ | 0.667 |
| 75 | Debate | $\mathbf{0 . 3 3 3}$ | 0.667 |
| 80 | Still discussing dream <br> breakers | 0.083 | 0.917 |
| 85 | Debate | $\mathbf{0 . 2 0 8}$ | 0.792 |
| 90 | Debate - dreams and <br> choices | $\mathbf{0 . 3 3 3}$ | 0.667 |
| 95 | Debate | $\mathbf{0 . 4 5 8}$ | 0.542 |
| 100 | Debate | BREAK |  |
| 105 | Debate | 0.000 | 1.000 |
| 110 | Debate | 0.174 | 0.826 |
| 115 | Wrap Up | 0.130 | 0.870 |
| 120 | Wrap Up | 0.130 | 0.870 |

In summary, it is clear that time allocation, modality of presentation and interactivity of the programme seems to have an influence on learner task-involvement and noninvolvement.

### 4.4 Behavioural Data

The learner survey was used to determine learner's attitude, knowledge and behaviour in relation to substance abuse. In the outcome evaluation quantitative methods were used to determine whether the programme contributed to behavioural change. A quasi-experimental design with pre- and post-test was implemented. The strengths of this design included the ability to attribute change between the pre- and post test to the intervention given certain outcomes. According to Brogan and Kutner (1990) this is one of the most frequently used designs in social research, although the strength of this design is, in this case, slightly weakened by the absence of a control group. For the purpose of this analysis, significance will be determined at 0.05 level. This means that there is a $95 \%$ chance that the results are due to the independent variables and not chance.

### 4.4.1 General Overview

The survey consisted of 9 questions and was related to different aspects of the intervention, including:

- Biographical Information (age and gender)
- Attitude
- Peer pressure
- Knowledge
- Behaviour


### 4.4.2 Respondent Profiles

### 4.4.2.1 Age

Learner's age (survey item 1.1) was recorded in order to ensure participant homogeneity and to be able to ascertain the age-appropriateness of the programmatic content in conjunction with data gathered with other measurements. The age distribution is illustrated in figure 7. The mean age for survey respondents was 16.1 years (Appendix F). An analysis of variance indicated that the learner's ages were not equally distributed; with school one having a mean age of 18.6. The learner profile indicated that learners in school 1 are allocated to groups based on academic performance (in this case, learners failed multiple grades). In school 3, on the other hand, all learners were younger than 16 years.

Figure 7: Learner Survey: Percentages by Age: Post Hoc Tests (Whole Group)


As illustrated in figure 7 above, the majority of learners who took part in the evaluation were between the ages of 15 and 16 years (which are age appropriate categories for grade ten learners). A small percentage of learners were older than 16 years, which is a tendency in these schools.

### 4.4.2.2 Gender

Females accounted for $58 \%$ of the total number of learners partaking in the learner survey, while males accounted for $42 \%$ as indicated in table 11 below.

Table 11: Learner Survey: Frequencies by Gender: Post Hoc Tests

| Gender |  | Frequency | Percent |
| ---: | :--- | ---: | ---: |
|  | Male | 69 | 42.1 |
|  | Female | 95 | 57.9 |
|  | Total | 164 | 100.0 |

Analysis indicates that the average age for female learners participating in the evaluation is 16 years, compared to 17 years for male learners. The standard deviation of both groups is 1.498 and 1.802 respectively. The boy's age varies with approximately 2 years and girls with approximately 1 year. The measures of tendency for both populations with respect to age are approximately equal, which suggest normality between the populations, but also show data skewness, which indicates there are fewer values when navigating through the right as compared to on the left.

The next step was to determine if there is any significant statistical difference between the mean ages for each gender category. An independent samples test (Appendix M) was run to test the homogeneity of variance (whether the null hypothesis is met), indicating a significant value (usually 0.09 above alpha or a cut off of 0.05 ). The null hypothesis of equality of means that significance values are those above 0.05 , indicating that, according to the null hypothesis, the means are statistically equal. In this case, the null hypothesis is thus rejected due to a Levene Test result of 0.009 . Proceeding to the t-test results, with an assumption of equal variance, the result is 0.009, concluding that there is a significant difference between gender groups concerning age.

### 4.4.3 Behaviour change from survey results

A whole group analysis (including all learners from all schools regardless of gender or age) revealed no significant change in substance abuse behaviour between pre-and post-test scores, with the exception of the item pertaining to refusing substances in a social, peer pressure related settings (item 3.4). During the pre-test on survey item 3.4, 7 (or $4 \%)^{1}$ of the learners indicated they would accept substances under peer pressure, while 100 (62\%) learners indicated a similar response during the post-test, resulting in a negative 23\% difference between pre-and post-test.

[^0]Similarly, 62 learners indicated they would refuse substances under peer pressure during the pretest, in comparison with only 48 during the post-test ( $23 \%$ difference between pre-and post-test scores). Learners who aligned themselves to the "uncertain" category during the pre-test ( 95 learners), dwindled to only 12 learners in the post-test ( $87 \%$ difference between the two measurements). A detailed results matrix is presented in Appendix $G$. The results summarised in table 12, indicate items which where either problematic ${ }^{2}$ (indicated in bold) or yielded a significant change on a whole group level. Items $2.15,4.2$ and 6.2 relating to alcohol was included in the table for interest sake.

Table 12: Learner Survey: Whole Group

|  |  |  | tal | Percentage Change ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Pre-Test | Post-Test | Pre- and Post-Test (Whole Group) |
| Question 2: Have you | any of the following | bstances o | er the past | days? |
| 2.1 | - Yes | 94 | 114 | 21\% |
| Over the counter pain relief substances | - No | 63 | 44 | -30\% |
|  | - Uncertain | 7 | 5 | -29\% |
| 2.2 | - Yes | 102 | 114 | 12\% |
| Over the counter substances e.g. cough medicines | - No | 52 | 44 | -15\% |
|  | - Uncertain | 10 | 5 | -50\% |
| 2.6 | - Yes | 146 | 148 | 1\% |
| LSD | - No | 9 | 0 | -100\% |
|  | - Uncertain | 8 | 10 | 25\% |
|  | Significance ${ }^{4}$ |  |  | 0.031 |
| 2.11 | - Yes | 130 | 130 | - |
| Substances that relieve sever pain | - No | 25 | 25 | - |
|  | - Uncertain | 9 | 9 | - |
|  | Significance |  |  | 0.011 |
| 2.12 | - Yes | 150 | 141 | -6\% |
| Steroids | - No | 7 | 14 | 100\% |
|  | - Uncertain | 3 | 8 | 167\% |
| 2.14 | - Yes | 92 | 100 | 9\% |
| Alcohol | - No | 66 | 58 | -12\% |

[^1]Question 3: If you are at a party and someone offers you a drink/smoke to enjoy the party more, what would you do?

| 3.4 Refuse even if friends don't like it | - Yes <br> - No <br> - Uncertain <br> Significance | $\begin{gathered} 62 \\ 7 \\ 95 \end{gathered}$ | 48 100 12 | $\begin{gathered} -23 \% \\ 1329 \% \\ -87 \% \\ 0.000 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Question 4: Which of the following substances will you use when you are older? |  |  |  |  |
| 4.2 Alcohol | - Yes | 87 | 99 | 14\% |
|  | - No | 46 | 43 | -7\% |
|  | - Uncertain | 31 | 22 | -29\% |
| Question 6: Is it all right for someone of your age to use: |  |  |  |  |
| 6.2 Alcohol | - Yes | 113 | 113 | - |
|  | - No | 33 | 24 | -27\% |
|  | - Uncertain | 18 | 27 | 50\% |
| 6.4 Over-the-counter substances | - Yes | 92 | 100 | 9\% |
|  | - No | 47 | 40 | -15\% |
|  | - Uncertain | 24 | 23 | -4\% |

### 4.4.3.1 Age in relation to the survey responses

Analysis was relating age was conducted in order to determine whether the bivariate relationship between self-reported skills, behaviour and attitude and age was significant and positive (Appendix M). In terms of age groups, a whole group analysis did not reveal any significant changes between the pre-and post-test. Since general analysis had shown significant differences between pre- and post-tests on certain questions in the whole group (as detailed in Appendix H ), it was decided to focus on survey items which proved to be either problematic (items 2.1; 2.2; 2.6; 2.11; 2.12 and 4.4) or indicative of showing significance between pre-and post-test reports (items 2.2; 2.6; $2.12 ; 3.2 ; 3.4 ; 4.4 ; 6.1$ and 6.2 ) for either the whole group or individual schools.

## Over the counter pain relief substances (Item 2.1)

## Under 16 age band

Analysis of survey responses by age band (under 16,18 20 and older than 20) and school (Appendix $M$ ) revealed that learners under sixteen years of age (the majority of the group) did not report significant change with regard to self reported usage of over-the-counter substances (in order to relieve pain) over a thirty day time period in a non-medicinal context. However, in school $2,30 \%$ of learners reported having used over-the-counter medicines in the post-test compared to $52 \%$ during the pre-test. Conversely, $60 \%$ of learners in school five reported having used over-
the-counter medicine before the intervention, with $77 \%$ of learners in that school reporting they were using these substances in the post-test. Data on the other schools indicated only marginal increases or decreases between the pre-and post measurement in either the "yes" or "no" categories.

As illustrated in table 12, item 2.1 was a problematic survey item and was not validly answered by learners, which can primarily be attributed to the survey design. On the printed questionnaire, there was no mention of usage of over the counter pain relief substances for non-medicinal purposes. Although field workers gave a verbal explanation around the concept of non-medicinal purposes on survey item 2 , learners still misinterpreted the item and answered from a medicinal usage viewpoint.

## Non-prescriptive over the counter substances (Item 2.2)

The item pertaining to over-the-counter substances which can be bought without a prescription based on usage over a period of thirty days (item 2.2 on the survey and incidentally also a problematic item), indicated a significant pre- and post-test difference in school 2. Overall, learners did not complete this survey item in a valid way. As with survey item 2.1, learners answered item 2.2 from a legitimate medicinal usage viewpoint, and did not necessarily understand the survey item as pertaining to non-medicinal usage of over the counter substances.

## Under 16 age band

As an example of learner's misinterpretation of item 2.2, analysis indicates that the learners in school one reported unanimously that they do not abuse over-the-counter prescription medicine in the pre-measurement, while indicating the opposite during the post-measurement.

## LSD (Item 2.6)

## Under 16 age band

Results obtained from survey item 2.6 are not valid due to confusion amongst the learners created by the inclusion of LSD's street names (acid/candy/green goblins/smarties/strawberry fields) in the survey. Five out of the six schools reported a $100 \%$ abuse rate on problematic survey item 2.6 pertaining to the usage of LSD (acid/candy/smarties) in the under-sixteen age group. The only school that reported a positive change after the post measurement was school six (improved from a $100 \%$ reported abuse rate to a $75 \%$ reported abuse rate). From learner responses, it was clear that learners interpreted the question as pertaining to candy and not an abused substance.

## Alcohol (Item 2.14)

Under 16 age band
More learners under sixteen years of age in school one reported not having used alcohol in the last 30 days during the post-test measurement when compared to the pre-test.

## Under 18 age band

Sixteen to eighteen year old learners in school one reported a positive change to survey item 2.6, with $63 \%$ of learners indicating that they have not used alcohol in the post-test, compared to only $38 \%$ during the pre-test. The overall number of "uncertain" answers for this age group was minimal. None of the learners reported being "uncertain" in the pre-test, with one learner reporting the same in the post-test within the entire under eighteen age band across all six schools.

## Peer pressure and the acceptance of substances in a social setting (Item 3.2)

Under 18 age band
In the analysis of the younger than eighteen age band, there are some significant changes between the pre- and post-test measures, with learners between the ages of sixteen and eighteen reporting an increased non-usage rate of $62 \%$ and $37 \%$ respectively in schools one and two. As was evident in analysis for survey items 2.1,2.11, 3.4 and 4.2, investigation of item 3.2 similarly indicated that the sixteen to eighteen old group reported less "uncertain" survey answers (a decrease of 55\% in "uncertain" across schools one, two, four, five and six) in favour of positive behaviour in social settings when peer pressure and substance abuse is involved.

## Predictive substance usage (Item 4.4)

Question four of the survey dealt with learner's opinions on future use of over-the-counter substance usage ("which of the following substances you think you will use when you are older"). As item 4.4 relating to over-the counter-medicines for non-medicinal purposes indicated a significant change for school two ( 0.015 between pre- and post measurement), it merited further investigation.

## Under 16 age band

The under-sixteen group in two schools indicated a reduction in perceived future usage ( $21 \% \mathrm{ad}$ $9 \%$ difference respectively) between the two measurements. The same results were not found for all the other age bands surveyed.

## Attitude towards peer tobacco and cigarette usage (Item 6.1)

Under 16 age band
In the under-sixteen group, no significant change was observed in schools six, three and four, however, in school one, $86 \%$ of under-sixteen learners thought it was acceptable for someone their age to smoke, while only $57 \%$ thought so after the intervention. Similarly, school two learners went from $72 \%$ positive answers to smoking, to $59 \%$ after the intervention.

## Under 18 age band

In analysis of the under-eighteen group, there was no significant change in school two. In school one, twelve percent less learners thought smoking by peers were acceptable; 25\% less learners thought so in school five, while $50 \%$ of learners in school six indicated their change in attitude towards smoking. Respondents in schools one and four did not show any significant changes.

## Attitude towards peer alcohol usage (Item 6.2)

In school one more learners were negative about the acceptability of alcohol usage amongst their peers.

## Under 16 age band

In examination of the under-sixteen group, there were indications that more learners disapproved of their peers using alcohol, for example, 71\% of the sampled learners in school one reported during the pre-test that it was acceptable for someone their age to drink alcohol, while $57 \%$ reported so in the post-test. In school six, $67 \%$ of learners thought using alcohol was acceptable, while $50 \%$ thought so during the post-measure.

As stated previously, a whole group analysis did not reveal any significant changes between the pre-and post-test in terms of respondent age. Learners in the older age bands reported fewer responses in the "uncertain" category than the younger age bands.

### 4.4.3.2 Gender in relation to survey responses

Whole group analysis reveals that, with regard to gender (item 1.2); there were no significant differences between learner's responses before and after the intervention (Appendixes I and K respectively). Interestingly, the only question (Question 3.4 indicated in table 13 and figure 8) which indicated a slight change was the question related to peer pressure (would they refuse using drugs even if their friends found it the "unpopular" choice). During the pre-test, the majority of both male and females reported as being "uncertain" when it comes to the refusal of substances under peer pressure, however, although responses in the "uncertain" category was less in the post-measurement, learners indicated that they would not be able to resist peer
pressure linked to substance abuse. In both the pre-and-post-test as illustrated in figure 8, more girls indicated that they would not use substances, even if friends thought it an unpopular choice.

Table 13: Survey Item 3.4 (Peer pressure) that showed a significant difference between pre - and post - test (Gender Breakdown - Whole group analysis ${ }^{5}$ (p values)

|  | Males |  |  |
| :--- | :--- | :--- | :--- |
| Question 3.4 | 0.013 | Question 3.4 | 0.000 |

### 4.4.4 Summary- Self-reported behavioural aspects of substance abuse (Questions 2

 to 7)Question 2 to 7 in the learner survey focussed on behavioural aspects of substance abuse.With the exception of the excluded items on over-the- counter drugs, very little change was measured between the pre- and post-tests (Appendix L). The item that produced the most consistent change was item 3.4, focusing on pressure where learners in four of the experimental schools, learners indicated that they were more likely to refuse substances after the programme, even when under pressure from their friends. On question 3.2 learners in two schools indicated that they were less likely to accept the substance and not use it after the programme. Schools that reported the most change when analysed by age and gender included schools one, two and six, although there were no indication of significant changes for the group as a whole. Concerning age, the under sixteen group showed some change (for example, on items 2.14, 4.4 and 6.2), while girls indicated a greater positive change between the pre-and post-test regarding substance abuse under peer pressure.

[^2]Figure 8: Pre- and Post -Test Cross Tabulation of item 3.4 by Gender (Whole Group)


### 4.4.5 Knowledge (Questions 8 and 9)

Question 8 pertained to knowledge around behavioural warning signs of substance abuse, while question 9 investigated if the learners knew where to go for help if they had a substance abuse problem. Questions were qualitative and open ended, and were coded into quantitative categories for analysis purposes. No significant difference was found regarding levels of knowledge on Questions 8 and 9 between the pre-test and post-test, and between schools. (See Appendices F \& G for SPSS output). Since these questions were an assumed indication of where they had to go if they had a substance abuse problem, it seems that the programme did not succeed in improving learner's knowledge - or at least the knowledge measured on the two items included in the questionnaire.

### 4.4.6 Conclusion

From the results, certain patterns were identified. No behavioural change in the use of specific substances was evident from the measurement after the intervention by the group as a whole. No change in knowledge about substance use was evident from the measurement, while contradictory findings were found regarding attitude change. Regarding age and gender, no significant changes were reported for the group as a whole.

### 4.5 Themes from focus group discussions

The primary goal of the focus group discussions was to gather information on the process of implementation. From the analysis of the discussions the following themes can be identified.

### 4.5.1 There is a need for education on substance abuse

Learners reported to have had limited previous exposure to programmes aimed at preventing substance abuse. Learners at school 3 said that a combined substance abuse preventions and HIV/Aids programme had been presented at their school the previous year, but the learners did not remember much of the programme. Learners from two neighbouring schools also mentioned that they had exposure to substance abuse prevention and HIV/Aids programme in primary school. The only other information on substance abuse that they had access to, was mass-media initiatives such as posters, radio and television campaigns. Although the learners said that they had seen posters on substance abuse, one learner summed it up as follows: "I don't read it. I just see it. I don't experience it in my life and that's why I don't give attention to it".

Substance abuse was perceived to be a serious problem in most schools. Learners sometimes smoked cannabis at school, and one learner said that alcohol abuse on the school premises was common. Interestingly learners also smoked openly during the presentation of the programme at two of the schools.

Alcohol and cannabis were perceived to be the most frequently abused substances. It also seems as if authorities at different schools addressed the problem with different levels of seriousness. At school 3, the police conducted random drug searches, while a learner at school 6 was of opinion that the problem is denied. "Hulle steek dit weg" (They are hiding it) was his comment.

### 4.5.2 Perceived impact of programme

Although learners said that a one day intervention was not sufficient, and that many learners felt it was "a joke" and "...a nice way to miss class" most said that the programme had "a positive impact", mostly in terms of knowledge gained. Although one learner shared that he had stopped using dagga after the program, most of the learners thought that the program did not influence a large number of learners to discontinue the use of substances. They were aware that the physical dependency on substances might require a rehabilitation session before the serious users would quit.

Learners said that the programme might have been more effective in preventing substance abuse and experimenting, rather than stopping already set patterns of behaviour. The programme's
focus on the consequences of substance abuse, handling of peer pressure and guidelines for helping a friend, were mentioned as contributing factors.

Learners concurred that although the programme addressed issues that they had heard about on previous occasions, that it was good to repeat the message. Even though some learners reported that they would have been able to resist experimenting with substances before the programme, it was said that the intervention refreshed their memories and they were able to practice skills, making them less vulnerable.

### 4.5.3 Gains from the programme

Amongst the things that learners could remember of the programme, they said to have gained the following:

- Knowledge:

Where pictures of drugs were shown, they could now better recognize drugs
They learnt that cigarettes contained many dangerous chemicals
They learnt about the consequences of substance abuse
In addition, in one school learners said that they had learnt about the many names for cocaine, and LSD.

- Skills

Learners said that they had learnt how to say "no" through the role-plays
They were more certain of how to handle themselves at a party

- Awareness was created:

Learners said that they were now more aware of the dangers of sexual abuse often coupled with substance abuse

They were more aware of the negative consequences of substance abuse, alcohol consumption and smoking cigarettes

One learner said that she was now also aware that Panado could be a drug

- They were empowered

They were made aware that they could choose to achieve their dreams by saying no to drugs.

### 4.5.4 Programme highlights

Learners said that the role-plays were the most memorable part of the programme. The dramas were said to be really enjoyable and fun and that it succeeded in bringing the programme's message across. The opportunity for open discussions and "debates" was also identified as a major positive point for the programme. Furthermore, some learners were adamant that the advice given during the programme was very positive. Learners also commented positively on the fact that the questionnaires were anonymous, and that all the learners were treated on an equal and respectful footing.

### 4.5.5 Programme challenges

The "long speeches" which was seen to be very boring and "made us [the learners] fall asleep", were areas that learners identified needed rethinking. Learners also said that they did not like it when the presenter said things like "Dagga is bad" without giving reasons and opportunities for learners to air their own viewpoints. The programme was perceived as being not visual or taskinvolved enough.

### 4.5.6 Suggestions for improvement

The learners said that they would have liked to see pictures or examples of substances and some shocking pictures to show the "before" and "after" effects of the face of a drug addict. They suggested the incorporation of a video "to show us how it is in real life". They also suggested that a recovered drug addict speak to them about how he/she got into drugs, how he/she experienced it, and how difficult it was to recover. Another learner suggested that learners visit a rehabilitation centre.

Learners said that in order for them to make the choice whether or not to experiment with substances, they needed more than just information about the consequences. They had to see it, or experience it. One learner suggested that a "dagga zol" be passed around in class for learners to really experience it. They said that learners would want to experiment with drugs, but that this usually happened at home and was limited to drugs such as cannabis. They were generally worried about being caught with drugs in their possession.

Other suggestions included the mobilisation of learners by means of dramas. Learners indicated that professional drama's or ones created by learners could be used to carry out the message to the rest of the school and other schools. They did however feel strongly about the fact that they did not have the expertise to initiate something like this, and suggested that someone from the
outside help them, or that teachers trained by an outside body assist. One learner suggested that comedians or celebrities must be used to carry out the message in a fun and interactive way.

Learners suggested that similar programmes should already have been presented from a very young age. They did however feel that drug enforcement was not effective and that drug dealers should be eliminated before the problem will cease. One learner also related how a book about drug abuse and the effects it had on the main character contributed towards his choice to stay drug free. If books of this nature could be made available as an active part of the curriculum, the message could reach more learners.

Other suggestions included that more information on the origin of drugs be included in future programmes, and, if possible, shorter programmes should be presented to smaller groups at regular intervals (e.g. once a week). Learners should be allowed to be actively involved in these suggested sessions, with more varied activities including music and drama. The suggestion was also made that more attention should be paid to the precipitating factors of drug abuse, and that professional help should be made available to those already using substances.

### 4.5.7 Perceived reasons for drug abuse

Learners said that peers use drugs to feel good, and because they "want to be cool". One learner explained that if "you don't know how to roll the dice and take your drugs... Ya... You feel like an outcast" thus explaining the very real influence of peer group pressure.

They further reported that people in general are not aware of the negative consequences of drug abuse when they start using drugs. Abuse of drugs such as cannabis is viewed as not having serious short-term consequences, and is therefore not seen to be a serious threat. Learners were adamant that if they were aware of the consequences, they still would not have sufficient skills to handle peer pressure associated with drug usage. Additionally, it is accepted in certain social circles that specific drugs enhances one's ability to concentrate and perform better in sports. Other drugs such as cannabis have medicinal qualities, and that it enhances one's attraction to the opposite sex.

The use of cannabis is often associated with the Rastafarian culture, which is seen to be "very cool". Because they believe in the use of cannabis for religious purposes, many learners aspire to become part of this subculture. One learner said that people often say that they are Rastafarians just to justify their drug abuse while they do not participate in any of the other Rastafarian practices.

Some learners were of opinion that learners use drugs when they do not have any constructive hobbies or anything better to do. Yet others said that using drugs were a way to feel better about negative home circumstances. Hopelessness regarding job opportunities and the absence of parental authority were seen to be major contributing factors to drug abuse.

### 4.5.8 Some programme presenters were more effective in addressing the issue in an enioyable manner

Although some presenters were seen to be boring, the ones that were more effective were perceived to be

- Funny, yet believable when they told kids those drugs "would make [them]... crazy".
- Treated learners with respect
- Encouraged learners to be open and honest
- Were very active
- Didn't moralize
- Were friendly.


### 4.5.9 Conclusion

Focus group discussions indicate that the outcome of the programme was evaluated positively and perceived by the learners as being effective at addressing the issues. They did however indicate that the learners would have liked to be more involved and active throughout the programme and that a longer-term programme was preferred. Although some learners had thought it to be a big joke and would have stayed home if they knew the programme would be presented, most learners in the group felt that the programme was a positive experience. Additionally, they requested similar interventions on HIV/Aids.

### 4.6 Summary

As mentioned previously, although data obtained from the learner survey fail to indicate any significant changes in behaviour for the group as a whole, focus group interviews indicate that learners perceived the programme as being effective and useful, and report several gains that learners identified during focus group discussions.

## Chapter 5

The following chapter will explore elements generated from results detailed in chapter 4.

## Discussion

According to Akerlund (2000) a sustainable program state priorities and systems, are community driven, are of high quality, have ongoing evaluation and strong management and fiscal practices. In addition the program should be of reasonable cost, have the potential for replication, allow for modifications to meet changing community needs and provide technology transfer and other byproducts. Measured against these criteria Project Awareness certainly has room for improvement, but if it is taken into account that the project was run and implemented by volunteer workers in various professions, then the magnitude of the effort certainly becomes evident. Although the programme did not produce any tangible proof of behavioural change, the implementation of similar programmes is of paramount importance in providing learners with much needed knowledge and skills. In addition to this, it broadens our understanding of factors that influence behaviour. Additionally, the evaluation also did not attempt to indicate whether learners already engaged in risk behaviour decided to change their behaviour in accordance with the messages of the programme. It is recognized that true behaviour change is unlikely without the secondary and tertiary level interventions originally intended by the project. The purpose of the focused school intervention was to prevent risk behaviour amongst the learners not yet engaged in it and that can only really be measured in a few years' time. It is recognised that true behaviour change is unlikely without the secondary and tertiary level interventions originally intended by the project. To summarise the crux of the matter in the words of one of the learners who participated in the programme:
"Maybe it should be taken more seriously...More people should be told about it; maybe more programs can be done"

In addition to the previously mentioned recommendations in the results chapter, it is recommended that the programme is co-ordinated with initiatives of the Central Drug Authority, Local Drug Action Committees and Provincial Drug Forums as stipulated in the National Drug Master Plan (1999). Although the amount of human resources successfully mobilised in this project was quite amazing, liaising with other bodies might have made more financial resources available thus relieving the strain on presenters and allowing them to be better equipped (e.g. with items such as colour photo's of drugs etc). It is also recommended that educators and support staff be trained in order to incorporate some of these programmes' objectives into the general curriculum, as well as implement a more standardized programme. The following
sections will detail some discussion around various programmatic aspects and is presented in the order of analysis detailed in chapter 4.

### 5.1 Behavioural Survey

Results of the behavioural survey items indicated that there was no significance change for the whole group of learners between the pre- and post-test analysis. The research instrument used to assess behavioural change limited the possible results and did not indicate any change in behaviour after the programme due to problems with some of its items. The learners indicated in the focus groups that, although behavioural change was not likely to occur after the programme, learners might have been prevented from experimenting with drugs after the programme. This could be confirmed by the fact that the behavioural survey indicated some change in attitude regarding certain drugs and the use thereof.

The lack of adequate power analysis (the ability of a test to detect an effect, given that the effect actually exists) at the start of the research procedure needs to be mentioned at this point. There has been some indication that the effect sizes for drug prevention programmes have generally been limited (Mays \& Pope, 2006). The scale of measurement included in this study also did not provide for much variance opportunities, further limiting the chances of obtaining a large effect size. If the effect size is predicted to be low, then the statistical power of the measurements and analysis needs to be very high in order to measure this effect. In this case, non-parametric tests with relatively small samples certainly did not contribute towards the statistical power of the analyses. It was thus expected that a certain degree of spuriousness would be encountered in the analysis (Aron \& Aron, 1997).

Rocha-Silva et al. (1996) further pointed out that it is widely acknowledged that all data-gathering instruments have built-in validity problems. Survey questionnaires, whether self-completed or not, is no exception, this relates in particular to studies on drinking or drug taking among adolescents (Fossey, 1994; Loretto, 1994; May, 1992). May (1992:110) point out that:
"....in spite of difficulties, surveys has provided valuable insight into the nature of the phenomenon of youthful drinking, from both a regional and a national perspective. ...What is most important, though, is to recognize and explicitly acknowledge that survey research can never determine the distribution of alcohol and other drug use in any absolute sense across the young population as a whole".

It is necessary to clarify some methodological aspects before the opening of discussion around the programme analysis. Additionally, it was planned to identify three control schools in terms of the evaluation of the intervention. Due to problems in locating a third control group school with similar demographic characteristics, it was decided to exclude data of schools in the control group from the analysis.

The questionnaire proved to be somewhat problematic even though the items were based on those used by Rocha-Silva et al. (1996), and no issues were detected during the pilot phase. It was discovered that some questions were being misunderstood by the learners on analysis of the first school's data, specifically pertaining to the use of over- the- counter drugs (as the medical usage thereof could be associated with abuse). When this problem was identified, researchers and field workers were instructed to verbally explain questions to learners; yet results still remained incommensurable with other findings. (For example, 37\% of learners indicated in the pre-test that they had abused over-the-counter pain relieving drugs in the past 30 days, whereas other research (Rocha-Silva et al. 1996), indicated that this is usually less than $10 \%$.

Additionally, there seemed to be some confusion regarding the prevalence of LSD and Steroids usage. Although some learners indicated that they did not think it was right to use hardcore drugs, and that they did not use any of the other drugs surveyed, some of them indicated that they had used LSD (90\% of learners surveyed during pre-test and 93\% of learners during posttest) and steroids (a pre-test measurement of $91 \%$ of all learners and a post-test score of $87 \%$ ) in the 30-day period preceding measurement. Since this combination of answers seemed highly unlikely, it was concluded that some confusion might have arisen because of the street names for LSD, which was also indicated, on the questionnaire (Candy, Smarties), and the reference to steroids as muscle builders. This was rectified after the first measurement instance (first school data collection process) by removing some of the street names from the questionnaire, in addition to specifically stating that the remaining street names were not to mislead learners.

A serious shortcoming of the questionnaire was the lack of questions pertaining to the use of cannabis. Although the questionnaire to some extent measured the learner's attitude regarding cannabis usage, no actual measure of personal cannabis usage was included. Focus group data did however indicate that the use of this substance was particularly prevalent amongst high school learners. Shortcomings in the research design and statistical power of the analyses thus seriously hindered the adequate explication of results.

According to Conner and Norman (1995), Iongitudinally, both poor refusal skills and risk-taking were associated with higher alcohol use. High personal competence was associated with lower
alcohol use in both the eighth and tenth grades, but had no long-term effects on alcohol use. Findings highlight the close interplay between perceived competence and refusal skill efficacy, both of which should be included as essential components of school-based prevention strategies. Becker (1974) and Rosenstock (1974) have incorporated self-efficacy into their Health Belief Model, mainly by reinterpreting what used to be "barriers" to action, while Ajzen $(1988,1991)$ has extended the Theory of Reasoned Action to the Theory of Planned Behaviour by adding a predictor labeled "perceived behavioural control". Analysis on the whole group level indicated that there was a negative significance (behavioural change but in a negative direction) in terms of questions related to refusal skills where peer pressure was involved (item 3), however, analysis indicates that the under-eighteen group saw the "uncertain" category decrease by $55 \%$ across schools one, two, four, five and six. More learners that were uncertain on how to deal with peer pressure said no after the programme (55\%) in five of the schools.

Kirkpatrick's second and third levels respectively focus on the skills, knowledge and attitude that learners have gained as a result of the intervention. Additionally, it aims to expose the extent to which behavioural change has or has not taken place. Behavioural intention was measured by asking the individuals the likelihood that they will perform certain drug related behaviour. Analysis of items geared towards measuring behavioural aspects in the survey indicated no statistically significant difference. Attitude toward substance abuse, perceived behavioural control, and beliefs about the subjective norm concerning drugs was assessed. Situational factors such as the presence of peers (subjective norms) and normative beliefs play a critical part in behavioural decisions. Interestingly enough, questions relating to self-worth and peer pressure as a predicator to substance abuse and prevention featured prominently within the foregoing results, on both a qualitative and quantitative platform (as seen in survey results for item 3.4 as well as data gleaned from the focus groups).

### 5.2 Proqrammatic Delivery and Content

According to Burkhart and Lopez (2002) an important factor in most school prevention programmes is its delivery. According to their research, most secondary school based interventions cue a "joint performance" (p.9) delivery system, wherein educators and professionals cooperatively deliver programmes. This cooperation then, in turn, seems to generally correlate with more favourable evaluation results. According to the National Institute of Drug Abuse (2003), the evaluation of the effectiveness of an intervention should adhere to basic prevention principles, including the enhancement of protective factors. It should target all forms of substance abuse, should include a skills sub-component and attitudinal reinforcement of those skills (including anti-drug norms), and in the case of adolescents, include interactive components such as discussions and role plays. When compared to these guidelines, the programme design
of this intervention compares relatively favourably, as seen in the high involvement level of learners during the interactive sections of the intervention as indicated by results obtained from the observational and focus group data.

Additionally, the National Institute of Drug Abuse further outlines that successful prevention programmes should be long term, with repeated interventions across time with a family involvement component to strengthen the programme's impact. It this regard, although the original programme outline was to include multiple interventions over a series of time including wider community involvement, the intervention does meet the required baseline of successful programme design.

As previously stated, delivery of content varied greatly across the six schools (presented by six different presenters in each school, which made it key to investigate observational data at site level in order to determine whether this had an impact on results obtained from the evaluation. According to Tobler (2001) non-interactive preventative substance abuse programme content show a far smaller reduction in prevalence rate, while interactive programs shows a much more significant reduction. Tobler (2001) further found that smaller interactive programmes are usually more successful, probably due to program protocol being more closely followed. In general, observational data seems to indicate that there were a sufficient number of interactive activities in order to maintain a relevantly sufficient level of task-involvement amongst the learners.

When reviewing the results against the backdrop of Kirkpatrick's Model, level one postulates that if learners have a positive reaction to the initiative during its implementation, it is more likely that positive outcomes will result. Although reactional output is by no means equivalent to actual behavioural or attitudinal change, data gathered on this level proved to be insightful in gaining information that could be used to improve future interventions. More specifically, the reactional measures on level one were useful as to determine whether various course components managed to maintain the learner's interest, as well as the amount and appropriateness of interactive exercises provided during the intervention. The program was generally able to grasp the learner's attention although both observational measures and the focus group data indicated that learners needed a more practically oriented programme. The parts that involved learners were evaluated very positively in the focus groups, and proved to keep the learners more taskinvolved. When activities dragged on for too long, learners also seemed to loose interest in the program. The need for more interactive activities was stressed, and it was suggested that shock tactics be used to show learners what the real consequences of drug abuse was. The perceived value and transferability to a greater context manifested itself in focus group data, where learners
indicated a greater awareness, however, transferability to a real life context could not be accurately determined.

The Health Belief Model is essentially a decision making paradigm with elements of rationality, but its main focus is on perception, with disease-threat as central concept. It is clear that the likelihood that learners will adopt a valued health behaviour (abstaining from substance abuse), or change a detrimental habit (ceasing or decreasing alcohol consumption) may therefore depend on three sets of cognitions mentioned in the Health Belief Model in Chapter Two: (a) the expectancy that one is at risk ("My risk of getting cancer from smoking is above average"), (b) the expectancy that behavioural change would reduce the threat ("If I quit smoking, I will reduce my risk"), and (c) the expectancy that one is sufficiently capable of adopting a positive behaviour or refraining from a risky habit ("I am capable of quitting smoking permanently"). Self-efficacy can therefore be identified as a critical aspect to the prevention process. Learners stressed the fact that talking alone would not stop them from experimenting / using substances. A variety of reasons was given for substance abuse that ranged from peer pressure and a fear of being rejected, to the relief from hopelessness regarding lost or non-existing job opportunities or other family conditions. It was suggested that the programme did touch on the lack of knowledge and the inability to handle peer pressure, but that additional training would be necessary to address some other factors contributing to substance abuse.

Dielman (1995) reports that changes in attitude and knowledge, does not always necessarily correlate with subsequent behavioural changes. The lack of change in knowledge about substance abuse might be explained by the fact that all the learners did not receive the same information due to different presenters and across schools. Additionally, it is difficult to ascertain change in knowledge from answers to open ended questions. From the focus group data it became evident that the learners did in fact acquire some knowledge regarding the consequences of substance abuse. The opportunity to practice skills pertaining to effective handling of peer pressure was also seen as a valuable contribution made by the programme. The programme and its contents were thus perceived by learners to have had at least some positive outcomes (perceived benefit).

Overall, the program did attempt to influence the learners' ability to choose from behaviours other than substance abuse. They were made aware of other goals that might not be attainable if they did indulge in substance abuse (self-efficacy). In terms of the health belief model the programme was perceived to be successful to some degree in triggering appropriate health behaviour only amongst learners that did not already use drugs. The lack in behavioural change did however confirm that other aspects (from the ones addressed in the programme) might be necessary in
order for learners to take action in line with the belief that their health might be in danger (perceived threat). An additional explanation for the lack of significant change amongst learners could also be that the percentage of substance abuse was low, which makes it more difficult to detect any behavioural change.

It is possible that each model applies to different situations. For example, the fear-based nature of the Health Belief Model may be most appropriate in adult populations or those already involved in substance abuse, or in those where prevention of the complications of substance abuse is a key issue. This model may not be applicable among children who are blind to their vulnerabilities, as requested by learners to have these interventions at an earlier age during the focus groups. A categorisation of situations by levels of need and type of population may be valuable for delineation of when each model is appropriate. Emotions (depression, anxiety, and arousal) are important aspects of behaviour. Depression and anxiety may be particularly important aspects of substance abuse. According to Bagozzi, Baumgartner and Pieters (1998) only investigators in the tradition of Theory of Planned Behaviour have made substantial attempts to incorporate emotion-related variables. In future research, it seems that the greatest benefits would be attained by pursuing research within the Theory of Planned Behaviour tradition.

One can but wonder if there isn't a need to add cultural aspects of disease perception into the model as well as in prevention programme content. Cultural definitions of disease and illness vary, for example beliefs about the intake of certain substances viewed by Western society as harmful, yet viewed medicinally elsewhere. It is therefore important to recognize that accurate knowledge and misconceptions can coexist. Sigelman, Rinehart, Sorongon, Bridges and Wirtz (1993) cautions that learners should be taught not only not only what a given substance does to undermine health but what it does not do, which, in the case of the intervention, may have been an effective way to train around learner's seemingly acceptable attitude towards the usage of dagga and the debate that was triggered between learners in some of the schools and the specific presenters of the programme.

In order to overcome any programmatic disadvantages of being implemented in various cultural and social contexts (wherein standardisation becomes difficult due to heterogeneity encountered in schools across South Africa), some programme presenters resort to adapting material themselves instead of following the set programme in the moderators manual (Burkhart \& Lopez, 2002, p.12). The presentation of content followed the guidelines of the original programme, but was adapted to the specific needs of the implementation environment. Presenters showed a high level of adaptability during the delivery of this programme, using both adaptive techniques and self-developed material (mostly in the form of handouts) during this programme, often substituting
their own handouts when not being able to show a video due to lack of electricity. Thus, the programme was not delivered uniformly across sites.

Regarding Kirkpatrick's fourth level of measurement (the results or payoff level), no measurement was conducted; however, levels of cooperation with other departments and stakeholders can be deemed a resounding success during the implementation of this intervention when looking at the implementation of the programme. Combining resources of fifteen organizations within the larger school focused intervention, this programme is a step in the right direction where the focus was on knowledge, competencies and skills assembled and therefore assisted in the improvement of learner knowledge, attitudes and behaviour where substance abuse is concerned (as indicated in the focus group results).

### 5.3 Observational Data

The modality of presentation, the amount of time spent on each activity, and the presenter's capability to handle discipline, were found to be more accurate predictors of non-task - learner involvement than the actual programmatic content. Although the presenters were flexible enough to adapt to the different limiting circumstances, the lack of standardisation across presenters, programmatic content and various school related factors might have negative implications for the attainment of outcome-related goals in general.

Programme sections that require learner attention for a long period of time should be moved to the first program segment, or shortened and varied with more interactive activities. Activities after learners have returned from break also generally correlated higher task -noninvolvement levels. It is suggested that some form of energiser be included in the programme after each break. Furthermore, more interactive modalities could be utilised to part with information that is more important. Activities could be shortened in order to keep the learners interested, and to allow presenters to adequately manage the time allocated to the programme.

Themes that were identified to be effective across the majority of schools and presenters during the second half of the programme included interactive activities such as videos and the "protective jacket" exercises, (protective factors are pinned on a learner's jacket) and debates. Small group discussions proved to be more effective when the instructions were given clearly, and groups were small enough that the learners had to participate. In future, presenters may want to consider writing down the questions of the learners as they are asked. Learners could then be divided into small groups to discuss these questions, ensuring that everyone has the opportunity to participate. This will also aid the presenter to comment on learner feedback.

Programme content could be enhanced by updating language to speak more directly to the learner's cultural and direct experiences, and care should be taken to explain any terminology that may have been unfamiliar to some learners.

On a logistical level, the presenters involved proved to be both resourceful and flexible, improvising often around difficult circumstances (lack of resources, time constraints and lack of human resources), and should be commended for their overall commitment to the project.

### 5.4 Gender and aqe related factors

Learners in the older age bands (a significantly smaller proportion of the sample as illustrated in figure 7), interestingly had a minimal number of responses in the "uncertain" category (4\% of the total respondents in those age bands across both the pre-and post-test), reporting either "yes" or "no" responses in the survey. According to Bocknek (1980), who makes a case for age and gender specific interventions, this is congruent with older adolescents' "absolute idealism", where the adolescent is likely to ignore subtle differences and tend to judge in strongly polarized extremes due to limited experience of the reality and complexity of adult life, which may account for the low number of survey responses in the "uncertain" category amongst the older age bands as detailed in chapter 4. It is argued that older adolescents will respond to interventions which are direct, linked to role models and peer education.

The National Institute on Drug Abuse (2006) has conducted longitudinal research, which has shown that gender differences play a role from the very earliest opportunity to use drugs. Females and males tend to abuse different drugs, that the effects of drugs are different in terms of gender, and that some approaches to treatment are more successful depending on gender. Griffin, Weiss, Mirin, and Lange (1989) confirm that, though more males than females use drugs, the consequences of drug use by women are often more severe, and after initial use, women may proceed more rapidly to drug abuse than men. Although analysis of data revealed no significant differences between responses investigated by gender, there seems to be a strong case for more gender specific programmes as well as more research to understand gender differences in terms of substance abuse.

### 5.5 The proaramme in relation to other interventions

According to Sussman (1996) drug abuse prevention programs that have worked with general populations of younger adolescents in junior high and middle school in the United States are less likely to be effective with older, at-risk high school students. Learners in high schools present a complex mix of behavioural and social problems and come into daily contact with many other students who use drugs and have a favorable attitude toward substances. Caulkins, Liccardo,

Paddock and Chiesa (2002) believe that while cutting-edge prevention programs are a wise use of public funds, it is mainly because they are relatively cheap and because drug use is so costly to society, and not because the programs, even the model ones, eliminate a large proportion of drug use. In fact, the best estimates obtained by Caulkins and his colleagues in the United States are that prevention reduces lifetime consumption of tobacco by $2.3 \%$, abuse of alcohol by $2.2 \%$, and use of cocaine by $3 . \%$. Caulkins et al. (2002) stresses however, that most of the reductions in use occur several years after the program is implemented, so the present value of those reductions, discounted at 4\% per year, is only about half as great as their nominal value.

Considering that longitudinal and much more comprehensive projects like The Lions-Quest Skills for Adolescence, which consists of 40 sessions (lower rates of lifetime ( $27.24 \% \mathrm{vs}$. $30.5 \%$ ) and recent marijuana use ( $11.32 \%$ vs. $13.79 \%$ ), and Project TND, which consists of 12 sessions (successfully effecting cigarettes, marijuana, alcohol, and hard drug use at a 1-year follow-up) ,show marginal success rates, it seems impressive that a one day, limited cross-sectional substance abuse prevention programme can affect some positive change despite its limitations. In fact, according to Cagampang, Barth, Korpi and Kirby (1997), smaller-scale interventions appeared to be more effective than large-scale programs. Cagampang et al. (1997) argues that it may be that, in large-scale studies, it becomes harder to control for confounding variables that may have an adverse impact on the outcomes. Additionally, Cagampang et al. (1997) points out that the length or duration of the programme, which has often been singled out, as a potential explanation of the absence of significant behavioural effects in larger-scale evaluations, does not appear to be consistently associated with desired behaviour.

Despite some glaring differences in terms of duration approach and resources, there are some similarities between these larger initiatives and the programme under investigation - all of these initiatives recognise the need for participatory activities, including small group activities, roleplaying exercises, guided classroom discussions and videos that assist learners in establishing anti-substance norms and resist pro-substance pressures. It is clear that there seem to be mixed results when it comes to substance abuse programmes. It is therefore advisable that preventive interventions focus on the specific needs and associated risk factors of the target group, and that one size does not necessarily fit all where prevention is concerned.

### 5.6 Conclusion

At post-test measurement, results of the behavioural survey failed to reveal significant change, however, focus group participants rated the program favourably on several parameters; indicating that the learners viewed the programme as being effective in addressing substance abuse issues. Additionally, learners were able to identify several gains in terms of knowledge, skills, empowerment and heightened awareness during focus group discussions.

In addition to the previously mentioned recommendations in the results chapter, it is recommended that the programme is co-ordinated with initiatives of the Central Drug Authority, Local Drug Action Committees and Provincial Drug Forums as stipulated in the National Drug Master Plan (1999). Although the amount of human resources successfully mobilised in this project was quite amazing, liaising with other bodies might have made more financial resources available thus relieving the strain on presenters and allowing them to be better equipped (e.g. with items such as colour photo's of drugs etc). It is also recommended that educators and support staff be trained in order to incorporate some of these programmes' objectives into the general curriculum, as well as implement a more standardised programme.

The findings of this study lend modest support to school-based substance abuse interventions with foci on strengthening certain protective factors among adolescents in a school setting, as well as certain programmatic components to be included in future interventions. Interventions, which involve the collaborating of various stakeholders towards a common outcome, should be encouraged and acknowledged as an integral part in the battle against substance abuse among youth in South Africa.

As such, a short-term substance abuse prevention programme can positively affect learner's outlook despite its weaknesses. The study's data lay the foundation for additional work to advance substance abuse prevention programme design and delivery, perhaps around the aspect of ethniticity, gender, age and cultural bias. More interdisciplinary prevention and research should be conducted around substance abuse in South Africa. There should be a movement away from Eurocentric approaches towards creative solution to suit Africa's culturally vibrant and diverse groupings.

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## Appendix A

## Presenter's Manual

## PROJECT AWARENESS

# A MULTI - DISCIPLINARY, WHOLE SCHOOL, ONE DAY INTERVENTION 

GRADE 10
SUBSTANCE ABUSE
A MANUAL FOR PRESENTERS

COMPILED BY:
J VAN STADEN
M KALJAN
L MOTAUNG
S ROOSENDAAL
M SMITH
P BARKHUIZEN
C JANSEN
N LOUW

## SUBSTANCE ABUSE

8:30-9:00
INTRODUCTION AND SETTING THE SCENE
AIM: ESTABLISHING A RELATIONSHIP OF TRUST
$\checkmark$ Greet learners in a friendly manner, suing their own language if possible
$\checkmark$ Facilitator introduces him/herself
$\checkmark$ If the group is small, ask learners to introduce themselves
$\checkmark$ Ask their ages
$\checkmark$ Explain why this visit to the school is taking place
$\checkmark$ Set the ground rules for good communication. Learners say, facilitator writes on board/paper (i.e. speak one at a time; respect each other's opinions, punctuality after break etc.)

## WE RESPECT EACH OTHER: <br> WE TALK ONE AT A TIME

## ICE BREAKER 1

## AIM: PROBLEM STATEMENT

$\checkmark$ Request the learners to close their eyes for 3 minutes
$\checkmark$ During these 3 minutes, they should think and dream of their goals/things they would like to attain/accomplish in their lives, one day ("what do you dream of becoming, doing, on day?)
$\checkmark$ From these dreams they should then each select the one most important/attractive dream for him/her
$\checkmark$ As many as possible learners should get an opportunity to write their special dream/goal on the black board
$\checkmark$ A short discussion follows during which the facilitator ask the learners to describe the way they think dreams come true/materialize
$\checkmark$ The discussion should, amongst others, preferably cover the fact that RESPONSIBLE DECISIONS determine a successful future
$\checkmark$ Make a list of things which the learners think might prevent the realization of their dreams

ONE DAY I WOULD LIKE TO......

9:00-10:00

## FIRST ACTIVITY

AIM: HANDLING PEER PRESSURE BY USING THE FOLLOWING SKILLS:

## 1. ASSERTIVENESS

## 2. NEGOTIATION

## 3. PROBLEM SOLVING

## 4. CONFLICT RESOLUTION

Divide the class into groups of 8-10 learners

## INSTRUCTIONS TO GROUPS 1 AND 2:

Ronnie is invited to a party at his friend's house. At the party, he is first convinced by his friends, Pete and Joe, to drink some beer and then to smoke a little dagga. Ronnie, at first, doesn't want to, but his friends give him many reasons why he should drink and smoke dagga. Ronnie can't handle the situation and eventually gives in to their pressure.

## INSTRUCTIONS TO GROUPS 3 AND 4:

Louise goes to a street party and her friends, Mina and Josi, try to convince her to drink some Ecstasy tablets so that she can enjoy the dancing. They give her many reasons for drinking the tablets. Louise manages to refuse and gives her reasons for not wanting to use the tablets.

1. Act out the situation described above
2. Act out a discussion between Mina and Josi the next day. They don't feel well and wish that they had not used the Ecstasy. They discuss their admiration for Louise and wish that they had made better choices.
$\checkmark$ Learners are guided to discuss the role-plays they have observed. They voice their opinions and feelings and these are written on a flip-chart
$\checkmark$ Evaluate the sills that were used and discuss how they could improve
$\checkmark$ Show a picture of a drug addict (show a video snippet) and discuss the consequences of alcohol and drug abuse
$\checkmark$ Touch the feelings of the learners without being over-dramatic

## SECOND ACTIVITY

## AIM: PROBLEM SOLVING: ALTERNATIVES TO USING DRUGS

$\checkmark$ Give out newspaper articles (stories) to groups
$\checkmark$ Read the articles to the class if their English is not very good
$\checkmark$ Groups have to discuss why the person in the article started using the substance (Drug)
$\checkmark$ What could have been a happy ending - groups brainstorm possible alternatives to handling stress which caused the alcohol or drug abuse in each story


WHAT ELSE COULD I HAVE DONE............?

## NEWS ARTICLES:

## NEWS ARTICLE 1

## TEENAGER (15 YRS) DEAD

The police confirmed having found a corpse in Church Street West last week. The body was identified by Me Wilson, the mother of the deceased 15 year old boy, called Sam. Sam died as a result of an overdose of the drug Cocaine (also known as "crack, snow, stuff, candy, coke or rocks" by youths familiar with the substance). Me Wilson reported that Sam mixed with friends who pressurized Sam to start smoking at a very young age. Same carried on from smoking cigarettes and dagga to taking ever-increasing amounts of drugs. Same chose to be "DIFFERENT" from the beginning and reacted very negatively to whatever disciplinary measures his parents could think of. He used to say that he wanted to be COOL and that nobody really understood him. During the last six months, Sam was very irritated, anxious, aggressive, and restless, lost a lot of weight and couldn't sleep at night. He underwent a total personality change - he turned into a total loner and none of his friends visited him anymore. Sam's heart just stopped beating last Saturday night. The school where Sam used to be up to two years ago, indicated that there wouldn't be learners attending Sam's funeral on Wednesday.

## NEWS ARTICLE 2

## STREET BASH LEADS TO RAPE

On Saturday Mmapula went to a street bash in Atteridgeville (Kudu Street). Someone slipped something into her drink while she was not watching. She woke up in the hospital the following day and could not remember what had happened to her. She was in pain. She went to the doctor at Kalafong and was examined. The doctor told her that she had been raped. She will receive counseling at the hospital. Some of the people, who were present at the party, said some boys put shabba (a drug) in Mmapula's cool drink.

## NEWS ARTICLE 3

## 15 YEAR OLD EXPERIENCES A "TRIP" TO REMEMBER

A 15-year old school boy is in a critical condition at a Pretoria Hospital after experiencing a massive heart attack. According to sources, the scholar was at a Rave party when the attack occurred. The reason for the massive heart attack was that the scholar consumed drugs which he mixed with coke at the club. Apparently the scholar has prepared for a night of "raving", "drugging" and experiencing a "trip". Early that evening he went to a pharmacy and purchased diet mix and ephedrine (other medicines). At the race he combined these drugs with Ecstasy tablets. After a while the scholar's heart rate rose dramatically to approximately 200 beats per minute and friends rushed him to a local hospital.

This is a common occurrence at Rave clubs. Parents should be aware of the dangers and harmful effects of drug abuse amongst their children. Doctors managed to save this scholar's life but your child may not be lucky next time.

AIM: CONSEQUENCES FOR SUBSTANCE ABUSE

## IDEAS FOR ACTION AT OUR SCHOOL

$\checkmark$ Show video extracts of the consequences of alcohol and drug abuse

OR
$\checkmark$ Ask a teenager in rehabilitation to come and address the learners; to tell how and why she/he started using substances, and what the consequences were
$\checkmark$ Ask learners for ideas for a plan of action at their school (i.e. graffiti wall, establishing support groups etc)

Facilitate role plays ${ }^{\star^{1}}$
$\checkmark$

## ACTION! ACTION! ACTION!

## 12:30-13:00

## EVALUATION AND WRAPPING UP

## AIM: CLOSURE AND PLANNING FOLLOW-UP

$\checkmark$ Put up a picture of a jacket or ask one of the learners to put on a jacket
$\checkmark$ Tell the learners that this is "My bullet proof jacket". It protects me against injury, pain and death
$\checkmark$ Each learner gets a piece of paper on which he/she has to write ONE way of preventing alcohol and drug abuse
$\checkmark$ Learners pin/stick their "advice" for survival to the jacket
$\checkmark$ The "protection messages" are read to the class
$\checkmark$ Learners are asked to fill in the evaluation form in which they also indicate:

1. Whether they need help themselves
2. Would like to join a support group of learners with problems
3. Would like to be trained so that they can help others

[^3]

I WANT TO HELP OTHERS

## Appendix B

## Behavioural Survey

Note: Comments indicated in red italics were explained verbally to the learners, and were not included in the printed questionnaire

## (DATE)

## (SCHOOL)

Introduce yourself - explain why you are conducting the survey, and explain what the results will be used for. Make it clear that learners do not have to participate and that they are free to abstain from filling out the survey should they wish to do so. Assure them that all information will be handled in a responsible way and they will remain anonymous at all times. Repeat the instructions in the learners' native language. Explain the survey question for question and make sure that everyone is up to speed before proceeding to the next question

This is a questionnaire about drugs, alcohol and students' behaviour. There are no right or wrong answers, we need to know what you think and do. Do not put your name on the form.

Please answer all the questions.

1. Firstly, tell us a little about yourself:

| How old are you? |  |
| :--- | :---: |
| Are you a boy/girl? (make a cross to indicate your <br> answer) | yoy / Girl |
|  |  |

2. Have you used any of the following substances during the past $\mathbf{3 0}$ days?

|  | Uncertain | Yes | No |
| :--- | :---: | :---: | :---: |


| Substances that one can buy over the counter to relieve pain (e.g. Grandpa /Syndol / Disprin) (for non medicinal purposes) | Uncertain | Yes | No |
| :---: | :---: | :---: | :---: |
| Substances that one can buy over the counter without a prescription (e.g., cough medicine/allergy medicine/Lennon's) | Uncertain | Yes | No |
| Substances that help people sleep/rest (e.g. Amytal/Nembutal) | Uncertain | Yes | No |
| Substances that help people relax/calm (e.g. Valium/Librium/Ativan) | Uncertain | Yes | No |
| Substances that help people to stay awake/give more energy (e.g. diet pills/uppers/amphetamines) | Uncertain | Yes | No |
| LSD (acid/candy/green goblins/smarties/strawberry fields) | Uncertain | Yes | No |
| Mandrax | Uncertain | Yes | No |
| Cocaine (coke/crack) (not coco or coca cola) | Uncertain | Yes | No |
| Heroin (junk/smack) | Uncertain | Yes | No |
| Ecstasy (E) (a name of a drug) | Uncertain | Yes | No |
| Substances that relieve severe pain and for which a doctors' prescription is needed (e.g.morphine/opium/Welconal) for the purpose of getting high | Uncertain | Yes | No |
| Steroids (muscle builders, substances used to increase one's physical performance | Uncertain | Yes | No |
| Tobacco/cigarettes | Uncertain | Yes | No |
| Alcohol | Uncertain | Yes | No |
| 5 or more drinks with alcohol on at least one occasion | Uncertain | Yes | No |

3. If you are with friends enjoying yourself and someone offers you a drink/smoke to help you enjoy the party more, what would you do?

| Accept it and drink it/smoke it | Uncertain | Yes | No |
| :--- | :---: | :---: | :---: |
| Accept it but do not drink/smoke it | Uncertain | Yes | No |
| Want to refuse but give in when they insist | Uncertain | Yes | No |
| Refuse it even if the friends don't like it | Uncertain | Yes | No |

4. Which of the following substances do you think you will use when you are older?

| Tobacco/cigarettes | Uncertain | Yes | No |
| :--- | :---: | :---: | :---: |
| Alcohol | Uncertain | Yes | No |
| Dagga (grass/ "boom"/marijuana) | Uncertain | Yes | No |
| Over the counter substances (non medicinal <br> purposes) | Uncertain | Yes | No |
| Hardcore drugs (e.g. Cocaine, LSD) | Uncertain | Yes | No |

5. Do you agree or disagree with the following?

| People my age should try drugs to find out <br> what it is like | Agree | In between | Disagree |
| :--- | :--- | :--- | :--- |
| People who have tried dagga once should <br> go to jail |  | In between | Disagree |

6. Is it all right for someone your age to use:

| Tobacco/ <br> Cigarettes | Uncertain | Yes | No |
| :--- | :---: | :---: | :---: |
| Alcohol | Uncertain | Yes | No |
| Dagga | Uncertain | Yes | No |


| Over the counter <br> substances (non medicinal <br> purposes) | Uncertain | Yes | No |
| :--- | :---: | :---: | :---: |
| Hardcore drugs (Cocaine, <br> LSD, etc) | Uncertain | Yes | No |


| 7. How many of your friends use drugs? | Most | Some | None |
| :---: | :---: | :---: | :---: |

8. If you use drugs, how will you know if your behaviour becomes a problem or is dangerous?
$\qquad$
$\qquad$
$\qquad$
9. Where would you go if you had a drug problem?
$\qquad$

Thank you.

## Appendix C

Observation summary sheet
SUMMARY OF OBSERVATIONS, 23 MAY 2000

| Class | 10A |
| :---: | :---: |
| Total nr. Children | XX |
| Total children observed | XXX |
| Total nr. observations | XX |
| $\checkmark$ (involved) | $\mathrm{X}(\mathrm{X} \%)$ |
| $\times$ (not involved) | $\mathrm{X}(\%)$ |

## Observation sheet

# D.H. PETA <br> GRADE TEN PROGRAMME OBSERVATION SHEET 

DATE..........
CLASS......
ROW......
PRESENTER...........

1. Use this form to record whether each child at each desk in your row is-

Task-involved: for example, he/she is watching the presenter, asking questions, sharing an experience, busy with whatever task has been given to the children to do
Not task-involved: for example, he/she are not looking at the presenter, is busy with own papers or is talking to a classmate at an inappropriate time
2. Observe each child every $5^{\text {th }}$ minute, beginning with the first full 5 minutes on the list below.
3. If the child is task-involved, record a tick [ $\sqrt{ }$ ] opposite his/her desk number. If the child is not task-involved, record a cross [ x$]$.
4. If possible, please record type of behaviour when child is not task-involved, for example talking, etc.
5. Indicate breaks or any other interruptions in the programme

|  | DESK NUMBERS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Interval | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |  |
| 5 |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |
| 30 |  |  |  |  |  |  |  |
| 35 |  |  |  |  |  |  |  |
| 40 |  |  |  |  |  |  |  |
| 45 |  |  |  |  |  |  |  |
| 50 |  |  |  |  |  |  |  |
| 55 |  |  |  |  |  |  |  |
| 60 |  |  |  |  |  |  |  |
| 65 |  |  |  |  |  |  |  |
| 70 |  |  |  |  |  |  |  |
| 75 |  |  |  |  |  |  |  |
| 80 |  |  |  |  |  |  |  |
| 85 |  |  |  |  |  |  |  |
| 90 |  |  |  |  |  |  |  |

## Appendix D

## Moderators Guide Focus Groups

Good morning everyone
(Introduce yourself, ensure all respondents that the information gathered will be handled in the strictest confidence, and give the learners an estimate of the time it will take to complete the focus group. Advise the learners that they are free to withdraw from participation at any time)

We are here to listen to your opinions about the drug prevention programme, which was presented here a little while ago. We want you to talk freely about anything that you think might be useful to us. The conversation will be tape-recorded so that we can remember what you have said. No one but my colleague and I will listen to the tape. Remember that you are not forced to participate. If you feel that you do not want to participate, please leave now so that we do not have any disturbance during the conversation. If you decide to stay however, you will be expected to express your honest views. It is very important that everyone tells us what you feel and think even if you do not agree with the others in the group. You would also be expected to treat everything said in this conversation as confidential, in other words, you are not allowed to tell anybody else what was said here.

Before we start, is there anyone that would like to leave? Are there any questions?

1. First of all, I want you to discuss whether you think a drug prevention programme was necessary and why/not? (10 minutes)
2. What were the good (best) things about the programme? ( 10 min )
3. What was bad (worst) about the programme? ( 10 min )
4. Do you have any suggestions on how such a programme can be more effective? ( 10 min )
5. Do you think that the programme actually made a difference ( 10 min )
6. Anything else you would like to add? ( 5 min )

## Key words:

Presenter?
Duration?
Format?
Knowledge?
Behavioural change?

Thank you very much for your co-operation.

## Appendix E

## ESOMAR Guideline

## Tape and video-recording and client observation <br> of interviews and group discussions

## Introduction

Tape and video recording of interviews are now commonly used in research and widely accepted by respondents. Two issues arise under the ICC/ESOMAR International Code of Marketing and Social Research Practice:
(1) What form of permission should be obtained from respondents when such techniques are used?
(2) How far, and under what safeguards, may tape or video recordings be played or supplied to people outside the research organisation carrying out the research?

Video-recording presents the most obvious problems. First, it is far more likely that a respondent may be identified from a video than from a tape recording. Second, it is also more likely that requests will be made by clients, advertising agencies etc to see a video recording, and/or to have a copy of this, than in the case of a tape recording.

If a copy of a video recording passes out of the hands of the research organisation it becomes even more important, although more difficult, to ensure its proper use and to protect respondents' anonymity. This problem is most acute in the case of business-to-business, medical and other research among special sub-groups of the population where there is much higher probability that some of the respondents may be identifiable by people who subsequently see the recording; but in principle it applies to all types of surveys.

Public interest in data protection and with avoiding unnecessary intrusions on privacy means that researchers must therefore ensure that tape and video recording is used with great care and with appropriate safeguards for the rights of respondents. This is provided for by Rule 7 of the International Code. The present Guideline sets out in more detail the ways in which this Rule should be applied in practice.

Similar considerations arise where an interview or group discussion is to be observed by a client or his representatives (including advertising agency staff, etc.), whether for quality control purposes or to gain a better understanding of the findings of the research. This is especially the case where the fact of being observed is not easily apparent to respondents, for example where
the observation is in a separate viewing room via closed circuit television. The final recommendation in this Guideline therefore deals with client observation of interviews.

## Recommendations

## Respondents' agreement to the use of recording

1. Respondents must be told - normally at the beginning of the interview or group discussion that tape or video recording is to be used. Such recording must not be used where any respondent objects to it. (The same procedure must also be followed where closed circuit television is to be used.)
2. The only exceptions where notification in advance is not essential are:
(i) where a recording is made exclusively for supervisory, control or analysis purposes and where it will be seen or heard only by the interviewer, moderator, supervisor or researcher working on the survey
(ii) In a situation where the respondents' awareness that a recording is being made might lead to atypical behaviour. Examples could be studies of how people handle a product or package or carry out a particular task. (However, experience shows that in most interview or discussion situations prior knowledge that a recording is being made does not - when correctly handled distort respondents' responses.)

In such cases respondents must still be told about the recording at the end of the interview, and be given the opportunity to hear or see the relevant parts of the recording and to have these destroyed if they so wish.

## Client rights to copies of the original data

Under Rule 22 of the International Code the client is entitled to be supplied, at cost, with duplicate copies of the original survey information obtained from respondents provided that this has been anonymised. Where this information is held in the form of audio or video recordings, rather than on questionnaires, there is usually no problem if it is supplied to the client in the form of anonymised transcripts or anonymous audio recordings (although in both cases care may be needed to remove identifying comments or other clues from the material). In the case of video recordings the danger of respondent identification is much greater; and in this and other cases where the anonymity Rule might be at risk the following recommendations must be followed.

## Safeguards on the release of recordings

4. Recordings must not be allowed out of the hands of the researcher or research organisation carrying out the study unless explicit permission has previously been obtained from all the respondents included in the recording.
5. Where such permission is to be obtained the researcher must ensure that respondents are given as much relevant information as possible about the future use of the recording, in particular:

- to whom the recording is to be given
- to whom it is likely to be shown
- for what purposes it is likely to be used

6. In particularly sensitive cases, the possibility (where technically feasible) of blurring or obscuring the identifying characteristics of respondents should be considered when a video recording is to be released outside the research organisation. In certain cases it may be sufficient to release the soundtrack only.
7. When a recording is released in conformity with these recommendations it should be labeled with the appropriate restrictions on the purposes for which it may be used. The researcher must also ensure, under Rule 29 of the International Cole, that the recipient of the recording is aware of the requirements of the Code and the need to abide by these (the restrictions on the use of recordings should be made known at the start of the project where there is any possibility that the client might later ask to see copies of these). The recipient should be told that permission must be obtained from the researcher (and where appropriate the respondents) before the recording is used for any other purpose not previously agreed; and that under no circumstances may the recording be used for non-research purposes such as promotion or direct sales activities.
8. If any part of a recording is to be played (but not handed over) by the researcher to anyone other than authorised research personnel within his own organisation, the researcher must ensure that the requirements of Rule 4 of the International Code are fully met. No reference may be made to the identity of any of the respondents involved without their prior permission.

## Client observation of interviews

9. In certain cases clients and their representatives may be allowed under the International Code to observe an interview or group discussion at the time it is carried out (with or without the simultaneous use of recording equipment). Wherever this happens the researcher must ensure
that all such observers are fully aware of the requirements of the International Code and agree to abide by these.
10. The researcher must also try to ensure that such observers do not include people who are likely to know, or have any direct dealings with, any of the individual respondents being interviewed (for example client sales staff in the case of a survey among business managers or doctors). If there is any danger that this requirement will not be met, or that the respondents' rights to anonymity might be otherwise breached, respondents should be told in advance about the presence of the observer(s) and their consent obtained to this. The actual identity of the client need not be revealed unless asked for by the respondents. It is in any case good practice always to inform respondents, where this is not already obvious to them, that the interview or discussion is being observed by other persons.

## Appendix F

Learner Survey Variance Analysis: Age by School - Post Hoc Tests

## Multiple Comparisons

Dependent Variable: q1.1
Scheffe

|  |  |  |  |  | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (I) school | (J) school | Difference ( $1-\mathrm{J}$ ) | Std. Error | Sig. | Upper Bound | Lower Bound |
| School 1 | School 2 | 3.436(*) | . 278 | . 000 | 2.50 | 4.37 |
|  | School 3 | 3.293(*) | . 273 | . 000 | 2.37 | 4.21 |
|  | School 4 | 2.836(*) | . 278 | . 000 | 1.90 | 3.77 |
|  | School 5 | 2.810(*) | . 299 | . 000 | 1.80 | 3.82 |
|  | School 6 | 2.761(*) | . 335 | . 000 | 1.63 | 3.89 |
| School 2 | School 1 | -3.436(*) | . 278 | . 000 | -4.37 | -2.50 |
|  | School 3 | -. 144 | . 280 | . 998 | -1.09 | . 80 |
|  | School 4 | -. 600 | . 284 | . 489 | -1.56 | . 36 |
|  | School 5 | -. 626 | . 305 | . 522 | -1.65 | . 40 |
|  | School 6 | -. 675 | . 341 | . 562 | -1.82 | . 47 |
| School 3 | School 1 | -3.293(*) | . 273 | . 000 | -4.21 | -2.37 |
|  | School 2 | . 144 | . 280 | . 998 | -. 80 | 1.09 |
|  | School 4 | -. 456 | . 280 | . 752 | -1.40 | . 49 |
|  | School 5 | -. 482 | . 301 | . 766 | -1.50 | . 53 |
|  | School 6 | -. 531 | . 337 | . 778 | -1.67 | . 60 |
| School 4 | School 1 | -2.836(*) | . 278 | . 000 | -3.77 | -1.90 |
|  | School 2 | . 600 | . 284 | . 489 | -. 36 | 1.56 |
|  | School 3 | . 456 | . 280 | . 752 | -. 49 | 1.40 |
|  | School 5 | -. 026 | . 305 | 1.000 | -1.05 | 1.00 |
|  | School 6 | -. 075 | . 341 | 1.000 | -1.22 | 1.07 |
| School 5 | School 1 | -2.810(*) | . 299 | . 000 | -3.82 | -1.80 |
|  | School 2 | . 626 | . 305 | . 522 | -. 40 | 1.65 |
|  | School 3 | . 482 | . 301 | . 766 | -. 53 | 1.50 |
|  | School 4 | . 026 | . 305 | 1.000 | -1.00 | 1.05 |
|  | School 6 | -. 049 | . 358 | 1.000 | -1.26 | 1.16 |
| School 6 | School 1 | -2.761(*) | . 335 | . 000 | -3.89 | -1.63 |
|  | School 2 | . 675 | . 341 | . 562 | -. 47 | 1.82 |
|  | School 3 | . 531 | . 337 | . 778 | -. 60 | 1.67 |
|  | School 4 | . 075 | . 341 | 1.000 | -1.07 | 1.22 |
|  | School 5 | . 049 | . 358 | 1.000 | -1.16 | 1.26 |

* The mean difference is significant at the .05 level.

Appendix G: Results Matrix

|  |  | School One |  | School Two |  | School Three |  | School Four |  | School Five |  | School Six |  | Total |  | Percentage Change ${ }^{2}$ <br> Pre- and Post-Test (Whole Group) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PreTest | PostTest | Pre-Test | PostTest | PreTest | PostTest | PreTest | PostTest | PreTest | PostTest | PreTest | PostTest | Pre- <br> Test | PostTest |  |
|  | Question 2: Have you used any of the following substances over the past 30 days? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.1 | - Yes | 6(6\% ${ }^{5}$ ) | 21(18\%) | 15(16\%) | 20(18\%) | 24(26\%) | 22(19\%) | 18(19\%) | 21(18\%) | 23(25\%) | 20(18\%) | 8(9\%) | 10(9\%) | 94 | 114 | 21\% |
| Over the counter pain relief substances ${ }^{3}$ | - No | 24(38\%) | 11(25\%) | 14(22\%) | 8(18\%) | 8(13\%) | 8(18\%) | 12(19\%) | 9(21\%) | 0\% | 3(7\%) | 5(8\%) | 5(11\%) | 63 | 44 | -30\% |
|  | - Uncertain Significance ${ }^{4}$ | 43(43\%) | 1(20\%) | 1(14\%) | 1(20\%) | 0\% | 2(40\%) | 0\% | 0\% | 0\% | 0\% | 3(43\%) | 1(20\%) | 7 | 5 | -29\% |
| 2.2 | - Yes | 11(11\%) | 21(18\%) | 13(13\%0 | 20(18\%) | 21(21\%) | 22(19\%) | 21(21\%) | 21(18\%) | 23(23\%) | 20(18\%) | 13(13\%) | 10(9\%) | 102 | 114 | 12\% |
| Over the counter substances e.g. cough medicines | - No | 19(37\%) | 11(25\%) | 15(29\%) | 8(18\%) | 8(15\%) | 8(18\%) | 9(17\%) | 9(21\%) | 0\% | 3(7\%) | 1(2\%) | 5(11\%) | 52 | 44 | -15\% |
|  | - Uncertain | 3(30\%) | 1(20\%) | 2(20\%) | 1(20\%) | 3(30\%) | 2(40\%) | 0\% | 0\% | 0\% | 0\% | 2(20\%) | 1(20\%) | 10 | 5 | -50\% |
|  | Significance |  |  |  | 0.092 |  |  |  |  |  |  |  |  |  |  |  |
| 2.3 | - Yes | 18(13\%) | 24(17\%) | 28(20\%) | 28(19\%) | 28(20\%) | 30(21\%) | 29(20\%) | 27(19\%) | 23(16\%) | 22(15\%) | 15(11\%) | 14(10\%) | 15 | 145 | 867\% |
| Substances that helps one sleep | - No | 8(67\%) | 9(82\%) | 1(8\%) | 0\% | 2(17\%) | 1(9\%) | 0\% | 0\% | 0\% | 0\% | 1(8\%) | 1(9\%) | 1 | 11 | 1000\% |
|  | - Uncertain | 7(70\%) | 0\% | 1(10\%) | 2(33\%) | 1(10\%) | 0\% | 1(10\%) | 2(33\%) | 0\% | 1(17\%) | 0\% | 1(17\%) | 0 | 6 | 600\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.4 | - Yes | 20(14\%) | 22(15\%) | 29(20\%) | 28(19\%) | 28(20\%) | 31(21\%) | 29(20\%) | 29(20\%) | 23(16\%) | 22(15\%) | 14(10\%) | 13(9\%) | 143 | 145 | 1\% |
| Substances that helps one relax | - No | 11(79\%) | 7(88\%) | 0\% | 0\% | 0\% | 0\% | 1(7\%) | 0\% | 0\% | 0\% | 2(14\%) | 1(13\%) | 14 | 8 | -43\% |
|  | - Uncertain | 2(33\%) | 4(44\%) | 1(17\%) | 1(11\%) | 3(50\%) | 1(11\%) | 0\% | 0\% | 0\% | 11(1\%) | 0\% | 2(22\%) | 6 | 9 | 50\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.5 Substances that helps one stay awake | - Yes | 16(11\%) | 18(13\%) | 29(21\%) | 25(18\%) | 31(22\%) | 31(23\%) | 28(20\%) | 29(21\%) | 21(15\%) | 19(14\%) | 15(11\%) | 16(12\%) | 140 | 138 | -1\% |

[^4]

| 2.12 | Yes | 25(17\%) | 13(9\%) | 28(18\%) | 29(21\%) | 32(21\%) | 30(21\%) | 29(19\%) | 30(21\%) | 23(15\%) | 23(16\%) | 13(9\%) | 16(11\%) | 150 | 141 | -6\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Steroids | No | 5(71\%) | 13(93\%) | 0\% | 0\% | 0\% | 1(7\%) | 1(14\%) | 0\% | 0\% | 0\% | 1(14\%) | 0\% | 7 | 14 | 100\% |
|  | - Uncertain <br> Significance | 1(33\%) | 6(75\%) | 0\% | 1(13\%) | 0\% | 1(13\%) | 0\% | 0\% | 0\% | 0\% | 2(67\%) | 0\% | 3 | 8 | 167\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|} \hline 2.13 \\ \text { Tobacco/Cigarettes } \end{array}$ | Yes | 21(20\%) | 15(15\%) | 21(20\%) | 23(23\%) | 28(26\%) | 25(25\%) | 17(16\%) | 17(17\%) | 12(11\%) | 12(12\%) | 8(8\%) | 8(8\%) | 107 | 100 | -7\% |
|  | No | 10(19\%) | 18(31\%) | 9(17\%) | 6(10\% | 4(8\%) | 6(10\%) | 11(21\%) | 10(17\%) | 11(21\%) | 10(17\%) | 8(15\%) | 8(14\%) | 53 | 58 | 9\% |
|  | Uncertain | 2(50\%) | 0\% | 0\% | 1(17\%) | 0\% | 1(17\%) | 2(50\%) | 3(50\%) | 0\% | 1(17\%) | 0\% | 0\% | 4 | 6 | 50\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.14 | Yes | 18(20\%) | 15(15\%) | 22(24\%) | 23(23\%) | 24(26\%) | 25(25\%) | 12(13\%) | 17(17\%) | 11(12\%) | 12(12\%) | 5(5\%) | 8(8\%) | 92 | 100 | 9\% |
| Alcohol | No | 13(20\%) | 18(31\%) | 7(11\%) | 6(10\%) | 7(11\%) | 6(10\%) | 17(26\%) | 10(17\%) | 12(18\%) | 10(17\%) | 10(15\%) | 8(14\%) | 66 | 58 | -12\% |
|  | Uncertain | 1(20\%) | 0\% | 1(20\%) | 1(17\%) | 1(20\%) | 1(17\%) | 1(20\%) | 3(50\%) | 0\% | 1(17\%) | 1(20\%) | 0\% | 5 | 6 | 20\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.15 | Yes | 18(15\%) | 18(14\%) | 27(22\%) | 27(21\%) | 29(24\%) | 31(24\%) | 23(19\%) | 22(17\%) | 16(13\%) | 18(14\%) | 10(8\%) | 11(9\%) | 123 | 127 | 3\% |
| Five/more alcoholic beverages at once | No | 14(37\%) | 15(52\%) | 3(8\%) | 1(3\%) | 3(8\%) | 1(3\%) | 5(13\%) | 5(17\%) | 7(18\%) | 4(14\%) | 6(16\%) | 3(10\%) | 38 | 29 | -24\% |
|  | Uncertain | 1(33\%) | 0\% | 0\% | 2(25\%) | 0\% | 0\% | 2(67\%) | 3(38\%) | 0\% | 1(13\%) | 0\% | 2(25\%) | 3 | 8 | 167\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Question 3: If you are at a party and someone offers you a drink/smoke to enjoy the party more, what would you do |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 Accept it and drink/smoke it | Yes | 22(18\%) | 22(18\%) | 24(20\%) | 24(20\%) | 27(22\%) | 28(23\%) | 22(18\%) | 21(17\%) | 15(12\%) | 15(12\%) | 11(9\%) | 13(11\%) | 121 | 123 | 2\% |
|  | No | 7 (28\%) | $7(35 \%)$ | 3(12\%) | 2(10\%) | 2(8\%) | 1(5\%) | 4(16\%) | 3(15\%) | 7 (28\%) | 6(30\%) | 2(8\%) | 1(5\%) | 25 | 20 | -20\% |
|  | - Uncertain | 3(18\%) | 4(20\%) | 3(18\%) | 3(15\%) | 3(18\%) | 3(15\%) | 4(24\%) | 6(30\%) | 1(6\%) | 2(10\%) | 3(18\%) | 2(10\%) | 17 | 20 | 18\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.2 Accept it but not drink/smoke it | - Yes | 11(13\%) | 22(23\%) | 13(15\%) | 18(19\%) | 21(24\%) | 16(17\%) | 14(16\%) | 15(16\%) | 18(21\%) | 16(17\%) | 11(13\%) | 9(9\%) | 88 | 96 | 9\% |
|  | - No | 15(24\%) | 9(18\%) | 15(24\%) | 7(14\%) | 10(16\%) | 14(28\%) | 15(24\%) | 13(26\%) | 4(6\%) | 4(8\%) | 4(6\%) | 4(8\%) | 63 | 51 | -19\% |
|  | - Uncertain | 5(46\%) | 2(13\%) | 2(18\%) | 5(31\%) | 1(9\%) | 2(13\%) | 1(9\%) | 2(13\%) | 1(9\%) | 2(13\%) | 1(9\%) | 3(19\%) | 11 | 16 | 45\% |
|  | Significance |  | 0.092 |  | 0.016 |  |  |  |  |  |  |  |  |  |  |  |
| 3.3 Want to refuse, but then give in | - Yes | 14(12\%) | 20(16\%) | 25(21\%) | 25(20\%) | 27(22\%) | 26(21\%) | 24(20\%) | 23(19\%) | 23(19\%) | 17(14\%) | 9(7\%) | 12(10\%) | 122 | 123 | 1\% |
|  | - No | 11(50\%) | 7(41\%) | 2(9\%) | 1(6\%) | 1(5\%) | 3(18\%) | 4(18\%) | 4(24\%) | 0\% | 2(12\%) | 4(18\%) | 0\% | 4 | 17 | 325\% |
|  | - Uncertain | 7(27\%) | 4(21\%) | 3(16\%) | 4(21\%) | 4(21\%) | 3(16\%) | 2(11\%) | 2(11\%) | 0\% | 2(11\%) | 3(16\%) | 4(21\%) | 3 | 19 | 533\% |
|  | Significance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




## Appendix H

Bivariate analysis of variance with repeated measures on one factor - Question 8

## General Linear Model

## Between-Subjects Factors

|  |  | N |
| :--- | :--- | ---: |
| SCHOOL | 1.00 | 33 |
|  | 2.00 | 30 |
|  | 3.00 | 32 |
|  | 4.00 | 30 |
|  | 5.00 | 23 |
|  | 6.00 | 16 |
|  | 9.00 | 51 |

## Within-Subjects Factors

Measure: TIME

| B_OR_A | Dependent <br> Variable |
| :--- | :--- |
| 1 | Q8 |
| 2 | PQ8 |

Multivariate Tests ${ }^{\text {b }}$

| Effect |  | Value | F | Hypothesis df | Error df | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| B_OR_A | Pillai's Trace | .005 | $1.032^{\mathrm{a}}$ | 1.000 | 208.000 | .311 |
|  | Wilks' Lambda | .995 | $1.032^{\mathrm{a}}$ | 1.000 | 208.000 | .311 |
|  | Hotelling's Trace | .005 | $1.032^{\mathrm{a}}$ | 1.000 | 208.000 | .311 |
|  | Roy's Largest Root | .005 | $1.032^{\mathrm{a}}$ | 1.000 | 208.000 | .311 |
| B_OR_A*SCHOOL | Pillai's Trace | .021 | $.757^{\mathrm{a}}$ | 6.000 | 208.000 | .604 |
|  | Wilks' Lambda | .979 | $.757^{\mathrm{a}}$ | 6.000 | 208.000 | .604 |
|  | Hotelling's Trace | .022 | $.757^{\mathrm{a}}$ | 6.000 | 208.000 | .604 |
|  | Roy's Largest Root | .022 | $.757^{\mathrm{a}}$ | 6.000 | 208.000 | .604 |

a. Exact statistic
b.

Design: Intercept+SCHOOL
Within Subjects Design: B_OR_A

Tests of Within-Subjects Effects
Measure: TIME

| Source |  | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| B_OR_A | Sphericity Assumed | .774 | 1 | .774 | 1.032 | .311 |
|  | Greenhouse-Geisser | .774 | 1.000 | .774 | 1.032 | .311 |
|  | Huynh-Feldt | .774 | 1.000 | .774 | 1.032 | .311 |
|  | Lower-bound | .774 | 1.000 | .774 | 1.032 | .311 |
| B_OR_A *SCHOOL | Sphericity Assumed | 3.403 | 6 | .567 | .757 | .604 |
|  | Greenhouse-Geisser | 3.403 | 6.000 | .567 | .757 | .604 |
|  | Huynh-Feldt | 3.403 | 6.000 | .567 | .757 | .604 |
|  | Lower-bound | 3.403 | 6.000 | .567 | .757 | .604 |
| Error(B_OR_A) | Sphericity Assumed | 155.843 | 208 | .749 |  |  |
|  | Greenhouse-Geisser | 155.843 | 208.000 | .749 |  |  |
|  | Huynh-Feldt | 155.843 | 208.000 | .749 |  |  |
|  | Lower-bound | 155.843 | 208.000 | .749 |  |  |

Tests of Between-Subjects Effects
Measure: TIME
Transformed Variable: Average

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Intercept | 1313.868 | 1 | 1313.868 | 702.440 | .000 |
| SCHOOL | 23.424 | 6 | 3.904 | 2.087 | .056 |
| Error | 389.050 | 208 | 1.870 |  |  |

## Post Hoc Tests School

| Multiple Comparisons |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure: TIME |  |  |  |  |  |  |  |
|  | (I) SCHOOL | (J) SCHOOL | Mean Difference (I-J) | Std. Error | Sig. | 95\% Confidence Interval |  |
|  |  |  |  |  |  | Lower Bound | Upper Bound |
| Scheffe | 1 | 2 | -. 1894 | . 2440 | . 996 | -1.0640 | . 6852 |
|  |  | 3 | -. 3404 | . 2399 | . 918 | -1.2006 | . 5198 |
|  |  | 4 | . 1273 | . 2440 | 1.000 | -. 7474 | 1.0019 |
|  |  | 5 | 4.611E-02 | . 2627 | 1.000 | -. 8957 | . 9879 |
|  |  | 6 | . 4252 | . 2946 | . 911 | -. 6310 | 1.4814 |
|  |  | 9 | . 2763 | . 2160 | . 949 | -. 4983 | 1.0509 |
|  | 2 | 1 | . 1894 | . 2440 | . 996 | -. 6852 | 1.0640 |
|  |  | 3 | -. 1510 | . 2458 | . 999 | -1.0322 | . 7301 |
|  |  | 4 | . 3167 | . 2497 | . 951 | -. 5786 | 1.2119 |
|  |  | 5 | . 2355 | . 2680 | . 993 | -. 7254 | 1.1964 |
|  |  | 6 | . 6146 | . 2994 | . 648 | -. 4588 | 1.6879 |
|  |  | 9 | . 4657 | . 2225 | . 626 | -. 3321 | 1.2635 |
|  | 3 | 1 | . 3404 | . 2399 | . 918 | -. 5198 | 1.2006 |
|  |  | 2 | . 1510 | . 2458 | . 999 | -. 7301 | 1.0322 |
|  |  | 4 | . 4677 | . 2458 | . 727 | -. 4134 | 1.3488 |
|  |  | 5 | . 3865 | . 2644 | . 906 | -. 5613 | 1.3344 |
|  |  | 6 | . 7656 | . 2961 | . 355 | -. 2960 | 1.8272 |
|  |  | 9 | . 6167 | . 2181 | . 244 | -. 1652 | 1.3986 |
|  | 4 | 1 | -. 1273 | . 2440 | 1.000 | -1.0019 | . 7474 |
|  |  | 2 | -. 3167 | . 2497 | . 951 | -1.2119 | . 5786 |
|  |  | 3 | -. 4677 | . 2458 | . 727 | -1.3488 | . 4134 |
|  |  | 5 | -8.1159E-02 | . 2680 | 1.000 | -1.0421 | . 8798 |
|  |  | 6 | . 2979 | . 2994 | . 986 | -. 7754 | 1.3713 |
|  |  | 9 | . 1490 | . 2225 | . 998 | -. 6487 | . 9468 |
|  | 5 | 1 | -4.6113E-02 | . 2627 | 1.000 | -. 9879 | . 8957 |
|  |  | 2 | -. 2355 | . 2680 | . 993 | -1.1964 | . 7254 |
|  |  | 3 | -. 3865 | . 2644 | . 906 | -1.3344 | . 5613 |
|  |  | 4 | 8.116E-02 | . 2680 | 1.000 | -. 8798 | 1.0421 |
|  |  | 6 | . 3791 | . 3148 | . 962 | -. 7496 | 1.5078 |
|  |  | 9 | . 2302 | . 2429 | . 989 | -. 6407 | 1.1010 |
|  | 6 | 1 | -. 4252 | . 2946 | . 911 | -1.4814 | . 6310 |
|  |  | 2 | -. 6146 | . 2994 | . 648 | -1.6879 | . 4588 |
|  |  | 3 | -. 7656 | . 2961 | . 355 | -1.8272 | . 2960 |
|  |  | 4 | -. 2979 | . 2994 | . 986 | -1.3713 | . 7754 |
|  |  | 5 | -. 3791 | . 3148 | . 962 | -1.5078 | . 7496 |
|  |  | 9 | -. 1489 | . 2771 | 1.000 | -1.1424 | . 8446 |
|  | 9 | 1 | -. 2763 | . 2160 | . 949 | -1.0509 | . 4983 |
|  |  | 2 | -. 4657 | . 2225 | . 626 | -1.2635 | . 3321 |
|  |  | 3 | -. 6167 | . 2181 | . 244 | -1.3986 | . 1652 |
|  |  | 4 | -. 1490 | . 2225 | . 998 | -. 9468 | . 6487 |
|  |  | 5 | -. 2302 | . 2429 | . 989 | -1.1010 | . 6407 |
|  |  | 6 | . 1489 | . 2771 | 1.000 | -. 8446 | 1.1424 |

## Appendix I

## Bivariate analysis of variance with repeated measures on one factor Question 9

Between-Subjects Factors
General Linear Model
Within-Subjects Factors
Measure: TIME

| B_OR_A | Dependent <br> Variable |
| :--- | :--- |
| 1 | Q9 |
| 2 | PQ9 |


|  |  | N |
| :--- | :--- | :--- |
| SCHOOL | 1.00 | 33 |
|  | 2.00 | 30 |
|  | 3.00 | 32 |
|  | 4.00 | 30 |
|  | 5.00 | 23 |
|  | 6.00 | 16 |
|  | 9.00 | 51 |

Multivariate Tests ${ }^{\text {b }}$

| Effect |  | Value | F | Hypothesis df | Error df | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| B_OR_A | Pillai's Trace | .001 | $.114^{\mathrm{a}}$ | 1.000 | 208.000 | .736 |
|  | Wilks' Lambda | .999 | $.114^{\mathrm{a}}$ | 1.000 | 208.000 | .736 |
|  | Hotelling's Trace | .001 | $.114^{\mathrm{a}}$ | 1.000 | 208.000 | .736 |
|  | Roy's Largest Root | .001 | $.114^{\mathrm{a}}$ | 1.000 | 208.000 | .736 |
| B_OR_A*SCHOOL | Pillai's Trace | .037 | $1.337^{\mathrm{a}}$ | 6.000 | 208.000 | .242 |
|  | Wilks' Lambda | .963 | $1.337^{\mathrm{a}}$ | 6.000 | 208.000 | .242 |
|  | Hotelling's Trace | .039 | $1.337^{\mathrm{a}}$ | 6.000 | 208.000 | .242 |
|  | Roy's Largest Root | .039 | $1.337^{\mathrm{a}}$ | 6.000 | 208.000 | .242 |

a. Exact statistic
b.

Tests of Within-Subjects Effects
Design: Intercept+SCHOOL Within Subjects Design: B_OR_f
Measure: TIME

| Source |  | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| B_OR_A | Sphericity Assumed | $8.023 \mathrm{E}-02$ | 1 | $8.023 \mathrm{E}-02$ | .114 | .736 |
|  | Greenhouse-Geisser | $8.023 \mathrm{E}-02$ | 1.000 | $8.023 \mathrm{E}-02$ | .114 | .736 |
|  | Huynh-Feldt | $8.023 \mathrm{E}-02$ | 1.000 | $8.023 \mathrm{E}-02$ | .114 | .736 |
|  | Lower-bound | $8.023 \mathrm{E}-02$ | 1.000 | $8.023 \mathrm{E}-02$ | .114 | .736 |
| B_OR_A *SCHOOL | Sphericity Assumed | 5.650 | 6 | .942 | 1.337 | .242 |
|  | Greenhouse-Geisser | 5.650 | 6.000 | .942 | 1.337 | .242 |
|  | Huynh-Feldt | 5.650 | 6.000 | .942 | 1.337 | .242 |
|  | Lower-bound | 5.650 | 6.000 | .942 | 1.337 | .242 |
| Error(B_OR_A) | Sphericity Assumed | 146.457 | 208 | .704 |  |  |
|  | Greenhouse-Geisser | 146.457 | 208.000 | .704 |  |  |
|  | Huynh-Feldt | 146.457 | 208.000 | .704 |  |  |
|  | Lower-bound | 146.457 | 208.000 | .704 |  |  |

Tests of Between-Subjects Effects
Measure: TIME
Transformed Variable: Average

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Intercept | 2071.074 | 1 | 2071.074 | 1580.744 | .000 |
| SCHOOL | 48.192 | 6 | 8.032 | 6.130 | .000 |
| Error | 272.519 | 208 | 1.310 |  |  |

## Post Hoc Tests

| Multiple Comparisons |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure: TIME |  |  |  |  |  |  |  |
|  | (1) SCHOOL | (J) SCHOOL | Mean Difference (I-J) | Std. Error | Sig. | 95\% Confidence Interval |  |
|  |  |  |  |  |  | Lower Bound | Upper Bound |
| Scheffe | 1 | 2 | -. 2879 | . 2042 | . 920 | -1.0199 | . 4441 |
|  |  | 3 | -.8452* | . 2008 | . 009 | -1.5651 | -. 1252 |
|  |  | 4 | -8.7879E-02 | . 2042 | 1.000 | -. 8199 | . 6441 |
|  |  | 5 | 6.719E-02 | . 2198 | 1.000 | -. 7210 | . 8554 |
|  |  | 6 | -7.9545E-02 | . 2466 | 1.000 | -. 9636 | . 8045 |
|  |  | 9 | -.6604* | . 1808 | . 042 | -1.3087 | -1.2134E-02 |
|  | 2 | 1 | . 2879 | . 2042 | . 920 | -. 4441 | 1.0199 |
|  |  | 3 | -. 5573 | . 2057 | . 295 | -1.2947 | . 1802 |
|  |  | 4 | . 2000 | . 2090 | . 988 | -. 5493 | . 9493 |
|  |  | 5 | . 3551 | . 2243 | . 867 | -. 4492 | 1.1593 |
|  |  | 6 | . 2083 | . 2506 | . 995 | -. 6900 | 1.1067 |
|  |  | 9 | -. 3725 | . 1862 | . 676 | -1.0402 | . 2951 |
|  | 3 | 1 | .8452* | . 2008 | . 009 | . 1252 | 1.5651 |
|  |  | 2 | . 5573 | . 2057 | . 295 | -. 1802 | 1.2947 |
|  |  | 4 | .7573* | . 2057 | . 039 | $1.984 \mathrm{E}-02$ | 1.4947 |
|  |  | 5 | .9124* | . 2213 | . 011 | . 1191 | 1.7056 |
|  |  | 6 | . 7656 | . 2478 | . 151 | -. 1229 | 1.6541 |
|  |  | 9 | . 1847 | . 1825 | . 984 | -. 4697 | . 8392 |
|  | 4 | 1 | 8.788E-02 | . 2042 | 1.000 | -. 6441 | . 8199 |
|  |  | 2 | -. 2000 | . 2090 | . 988 | -. 9493 | . 5493 |
|  |  | 3 | -.7573* | . 2057 | . 039 | -1.4947 | -1.9838E-02 |
|  |  | 5 | . 1551 | . 2243 | . 998 | -. 6492 | . 9593 |
|  |  | 6 | 8.333E-03 | . 2506 | 1.000 | -. 8900 | . 9067 |
|  |  | 9 | -. 5725 | . 1862 | . 156 | -1.2402 | $9.514 \mathrm{E}-02$ |
|  | 5 | 1 | -6.7194E-02 | . 2198 | 1.000 | -. 8554 | . 7210 |
|  |  | 2 | -. 3551 | . 2243 | . 867 | -1.1593 | . 4492 |
|  |  | 3 | -.9124* | . 2213 | . 011 | -1.7056 | -. 1191 |
|  |  | 4 | -. 1551 | . 2243 | . 998 | -. 9593 | . 6492 |
|  |  | 6 | -. 1467 | . 2635 | . 999 | -1.0914 | . 7979 |
|  |  | 9 | -. 7276 | . 2033 | . 051 | -1.4565 | $1.234 \mathrm{E}-03$ |
|  | 6 | 1 | 7.955E-02 | . 2466 | 1.000 | -. 8045 | . 9636 |
|  |  | 2 | -. 2083 | . 2506 | . 995 | -1.1067 | . 6900 |
|  |  | 3 | -. 7656 | . 2478 | . 151 | -1.6541 | . 1229 |
|  |  | 4 | -8.3333E-03 | . 2506 | 1.000 | -. 9067 | . 8900 |
|  |  | 5 | . 1467 | . 2635 | . 999 | -. 7979 | 1.0914 |
|  |  | 9 | -. 5809 | . 2319 | . 397 | -1.4124 | . 2506 |
|  | 9 | 1 | .6604* | . 1808 | . 042 | $1.213 \mathrm{E}-02$ | 1.3087 |
|  |  | 2 | . 3725 | . 1862 | . 676 | -. 2951 | 1.0402 |
|  |  | 3 | -. 1847 | . 1825 | . 984 | -. 8392 | . 4697 |
|  |  | 4 | . 5725 | . 1862 | . 156 | -9.5135E-02 | 1.2402 |
|  |  | 5 | . 7276 | . 2033 | . 051 | -1.2336E-03 | 1.4565 |
|  |  | 6 | . 5809 | . 2319 | . 397 | -. 2506 | 1.4124 |

## Appendix J

Survey: NParametric Tests - Gender - Male: McNemar Test -

## Crosstabs

| Q2.1 \& PQ2.1 |  |  |
| :---: | :---: | :---: |
| Q2.1 | PQ2.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 27 | 10 |
| $\mathbf{1}$ | 9 | 16 |




Q2.6 \& PQ2.6


Q3.3 \& PQ3.3


Q4.3 \& PQ4.3


| Q2.3 \& PQ 2.3 |  |  |
| :---: | :---: | :---: |
| Q2.3 | PQ 2.3 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 57 | 2 |
| $\mathbf{1}$ | 0 | 0 |



Q3.4 \& PQ3.4

| Q3.4 | PQ3.4 |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 11 | 12 |
| $\mathbf{1}$ | 2 | 1 |


| Q4.4 \& PQ4.4 |  |  |
| :---: | :---: | :---: |
| Q4.4 | PQ 4.4 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 29 | 8 |
| $\mathbf{1}$ | 6 | 13 |



| Q2.12 \& PQ2.12 |  |  |
| :---: | :---: | :---: |
| Q2.12 | PQ2.12 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 53 | 2 |
| $\mathbf{1}$ | 4 | 3 |



Q4.1 \& PQ4.1

| Q4.1 | $\mathrm{PQ4.1}$ |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 43 | 1 |
| $\mathbf{1}$ | 3 | 7 |


| Q5.1 \& PQ5.1 |  |  |
| :---: | :---: | :---: |
| Q5.1 | PQ5.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 47 | 1 |
| $\mathbf{1}$ | 3 | 1 |

Q6.3 \& PQ6.3


| Q5.2 \& PQ5.2 |  |  |
| :---: | :---: | :---: |
| Q5.2 | $\mathbf{P Q} 5.2$ |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 20 | 7 |
| $\mathbf{1}$ | 5 | 10 |



| Q6.1 \& PQ6.1 |  |  |
| :---: | :---: | :---: |
| Q6.1 | PQ6.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 44 | 5 |
| $\mathbf{1}$ | 3 | 8 |




Test Statistics

|  | $\begin{aligned} & \text { Q2.1 \& } \\ & \text { PQ2.1 } \end{aligned}$ | $\begin{aligned} & \text { Q2.2 \& } \\ & \text { PQ2.2 } \end{aligned}$ | $\begin{aligned} & \text { Q2.3 \& } \\ & \text { PQ2.3 } \end{aligned}$ | $\begin{aligned} & \text { Q2.4 \& } \\ & \text { PQ2.4 } \end{aligned}$ | $\begin{aligned} & \text { Q2.5 \& } \\ & \text { PQ2.5 } \end{aligned}$ | $\begin{aligned} & \text { Q2.6 \& } \\ & \text { PQ2.6 } \end{aligned}$ | $\begin{aligned} & \text { Q2.7 \& } \\ & \text { PQ2.7 } \end{aligned}$ | $\begin{aligned} & \text { Q2.8 \& } \\ & \text { PQ2.8 } \end{aligned}$ | $\begin{aligned} & \text { Q2.9 \& } \\ & \text { PQ2.9 } \end{aligned}$ | $\begin{aligned} & \text { Q2.10 \& } \\ & \text { PQ2.10 } \end{aligned}$ | $\begin{aligned} & \text { Q2.11 \& } \\ & \text { PQ2.11 } \end{aligned}$ | $\begin{aligned} & \text { Q2.12 \& } \\ & \text { PQ2.12 } \end{aligned}$ | $\begin{aligned} & \text { Q2.13 \& } \\ & \text { PQ2.13 } \end{aligned}$ | $\begin{aligned} & \text { Q2.14 \& } \\ & \text { PQ2.14 } \end{aligned}$ | $\begin{aligned} & \text { Q2.15 \& } \\ & \text { PQ2.15 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 62 | 62 | 59 | 61 | 63 | 51 | 64 | 66 | 64 | 67 | 59 | 62 | 64 | 62 | 63 |
| Chi- <br> Square(a) |  | . 893 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asymp. Sig. |  | . 345 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exact Sig. <br> (2-tailed) | 1.000(b) |  | .500(b) | .375(b) | .727(b) | .500(b) | 1.000(b) | .625(b) | .688(b) | 1.000(b) | .791(b) | .688(b) | .109(b) | 1.000(b) | .607(b) |
| a Continuity Corrected; b Binomial distribution used; c McNemar Test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  |  | Q3.1 \& | Q3.2 \& | Q3.3 \& | Q3.4 \& | Q4.1 \& | Q4.2 \& | Q4.3 \& | Q4.4 \& |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 63 | 50 | 56 | 48 | 26 | 54 | 54 | 61 | 56 | 69 |
| Chi- <br> Square(a) |  |  |  |  |  |  |  |  |  |  |
| Asymp. Sig. |  |  |  |  |  |  |  |  |  |  |
| Exact Sig. (2- <br> tailed) | $.607(\mathrm{~b})$ | $.688(\mathrm{~b})$ | $.690(\mathrm{~b})$ | $.302(\mathrm{~b})$ | $.013(\mathrm{~b})$ | $.625(\mathrm{~b})$ | $.804(\mathrm{~b})$ | $.289(\mathrm{~b})$ | $.791(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |


|  |  <br> PQ5.1 |  <br> PQ5.2 |  <br> PQ6.1 |  <br> PQ6.2 |  <br> PQ6.3 |  <br> PQ6.4 |  <br> PQ6.5 |  <br> PQ7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 52 | 42 | 60 | 53 | 61 | 55 | 67 | 25 |
| Chi-Square(a) |  |  |  |  |  |  |  |  |
| Asymp. Sig. |  |  |  |  |  |  |  |  |
| Exact Sig. (2- <br> tailed) | $.625(\mathrm{~b})$ | $.774(\mathrm{~b})$ | $.727(\mathrm{~b})$ | $.375(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $.804(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |

## Appendix K

## Survey: NParametric Tests - Gender - Female: McNemar Test Crosstabs

| The McNemar Test for Q2.7 \& PQ2.7 is not performed because both variables are not dichotomous with the |
| :--- |
| same values. |


| Q2.1 \& PQ2.1 |  |  |
| :---: | :---: | :---: |
| Q2.1 | PQ2.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 34 | 17 |
| $\mathbf{1}$ | 9 | 26 |



Q3.4 \& PQ3.4


Q4.1 \& PQ4. 1


Q4.2 \& PQ4.2


Q4.3 \& PQ4.3

| Q3.4 | PQ3.4 |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 14 | 18 |
| $\mathbf{1}$ | 0 | 0 |


| Q4.4 \& PQ4.4 |  |  |
| :---: | :---: | :---: |
| Q4.4 | PQ 4.4 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 47 | 8 |
| $\mathbf{1}$ | 8 | 11 |


| Q6.1 \& PQ6.1 |  |  |
| :---: | :---: | :---: |
| Q6.1 | PQ6.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 72 | 5 |
| $\mathbf{1}$ | 1 | 6 |

\[

\]

Test Statistics

|  | $\begin{gathered} \text { Q2.1 } \\ \& \\ \text { PQ2.1 } \end{gathered}$ | $\begin{gathered} \text { Q2.2 \& } \\ \text { PQ2.2 } \end{gathered}$ | $\begin{gathered} \text { Q2.3 \& } \\ \text { PQ2.3 } \end{gathered}$ | $\begin{gathered} \text { Q2.4 \& } \\ \text { PQ2.4 } \end{gathered}$ | $\begin{aligned} & \text { Q2.5 \& } \\ & \text { PQ2.5 } \end{aligned}$ | $\begin{aligned} & \text { Q2.6 \& } \\ & \text { PQ2.6 } \end{aligned}$ | $\begin{gathered} \text { Q2.9 \& } \\ \text { PQ2.9 } \end{gathered}$ | $\begin{aligned} & \text { Q2.10 \& } \\ & \text { PQ2.10 } \end{aligned}$ |  |  | $\begin{gathered} \mathrm{Q} 2.13 \\ \& \\ \mathrm{PQ} 2.13 \end{gathered}$ | $\begin{gathered} \text { Q2.14 } \\ \text { \& } \\ \text { PQ2.14 } \end{gathered}$ | $\begin{gathered} \text { Q2.15 } \\ \& \\ \text { PQ2.15 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 86 | 87 | 87 | 86 | 87 | 91 | 91 | 89 | 88 | 87 | 95 | 92 | 91 |
| ChiSquare(a) | 1.885 |  |  |  |  |  |  |  |  |  |  |  |  |
| Asymp. Sig. | . 170 |  |  |  |  |  |  |  |  |  |  |  |  |
| Exact Sig. (2tailed) |  | .424(b) | .227(b) | .344(b) | 1.000(b) | .125(b) | 1.000(b) | 1.000(b) | .804(b) | .180(b) | .092(b) | .143(b) | .581(b) |


|  | Q3.1 \& | Q3.2 \& | Q3.3 \& | Q3.4 \& | Q4.1 \& | Q4.2 \& | Q4.3 \& | Q4.4 \& |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PQ3.1 | PQ3.2 | PQ3.3 | PQ3.4 | PQ4.1 | PQ4.2 | PQ4.3 | PQ4.4 | PQ4.5 |
| N | 81 | 79 | 80 | 32 | 83 | 67 | 93 | 74 | 94 |
| Chi- <br> Square(a) |  | .516 |  |  |  |  |  |  |  |
| Asymp. Sig. |  | .472 |  |  |  |  |  |  |  |
| Exact Sig. | $1.000(\mathrm{~b})$ |  | $1.000(\mathrm{~b})$ | $.000(\mathrm{~b})$ | $.625(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $.250(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $.500(\mathrm{~b})$ |



|  |  <br> PQ5.1 |  <br> PQ5.2 |  <br> PQ6.1 |  <br> PQ6.2 |  <br> PQ6.4 |  <br> $\mathrm{PQ6.5}$ |  <br> $\mathrm{PQ7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 82 | 45 | 84 | 72 | 70 | 92 | 51 |
| Chi-Square(a) |  |  |  |  |  |  |  |
| Asymp. Sig. |  |  |  |  |  |  |  |
| Exact Sig. (2- <br> tailed) | $1.000(\mathrm{~b})$ | $.688(\mathrm{~b})$ | $.219(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $.388(\mathrm{~b})$ | $.500(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |

## Appendix L

## WHOLE GROUP - NPar Tests - Crosstabulation

| Q2.1 \& PQ2.1 |  |  |
| :---: | :---: | :---: |
| Q2.1 | PQ 2.1 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 61 | 27 |
| $\mathbf{1}$ | 18 | 42 |


| Q2.5 \& PQ2.5 |  |  |
| :---: | :---: | :---: |
| Q2.5 | PQ2.5 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 125 | 7 |
| $\mathbf{1}$ | 10 | 8 |


| Q2.9 \& PQ2.9 |  |  |
| :---: | :---: | :---: |
| Q2.9 | PQ2.9 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 147 | 5 |
| $\mathbf{1}$ | 3 | 0 |


| Q2.13 \& PQ2.13 |  |  |
| :---: | :---: | :---: |
| Q2.13 | PQ 2.13 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 101 | 5 |
| $\mathbf{1}$ | 18 | 35 |


| Q3.2 \& PQ3.2 |  |  |
| :---: | :---: | :---: |
| Q3.2 | PQ 3.2 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 56 | 24 |
| $\mathbf{1}$ | 32 | 23 |


| Q4.2 \& PQ4.2 |  |  |
| :---: | :---: | :---: |
| Q4.2 | $\mathrm{PQ4.2}$ |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 72 | 10 |
| $\mathbf{1}$ | 11 | 28 |

Q5.1 \& PQ5.1

| Q2.2 \& PQ2.2 |  |  |
| :---: | :---: | :---: |
| Q2.2 | PQ 2.2 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 78 | 21 |
| $\mathbf{1}$ | 32 | 18 |



Q5.2 \& PQ5. 2

| Q2.3 \& PQ2.3 |  |  |
| :---: | :---: | :---: |
| Q2.3 | PQ2.3 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 129 | 5 |
| $\mathbf{1}$ | 8 | 4 |



Q6.1 \& PQ6. 1

| Q2.4 \& PQ2.4 |  |  |
| :---: | :---: | :---: |
| Q2.4 | PQ2.4 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 130 | 4 |
| $\mathbf{1}$ | 11 | 2 |



Q6. 2 \& PQ6. 2

| Q5.1 | $\mathbf{P Q 5 . 1}$ |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 122 | 4 |
| $\mathbf{1}$ | 5 | 3 |


| Q5.2 | PQ 5.2 |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 45 | 9 |
| $\mathbf{1}$ | $\mathbf{9}$ | 24 |


| Q6.1 | PQ6.1 |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 116 | 10 |
| $\mathbf{1}$ | 4 | 14 |


| Q6.2 | PQ6.2 |  |
| :---: | :---: | :---: |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 100 | $\mathbf{1}$ |
| $\mathbf{1}$ | 5 | 19 |


| Q6.3 \& PQ6.3 |  |  |
| :---: | :---: | :---: |
| Q6.3 | PQ 6.3 |  |
|  | $\mathbf{0}$ | $\mathbf{1}$ |
| $\mathbf{0}$ | 145 | 2 |
| $\mathbf{1}$ | 3 | 1 |



Test Statistics

|  | $\begin{gathered} \text { Q2.1 } \\ \& \\ \text { PQ2.1 } \end{gathered}$ | $\begin{gathered} \text { Q2.2 } \\ \& \\ \text { PQ2.2 } \end{gathered}$ | $\begin{aligned} & \text { Q2.3 \& } \\ & \text { PQ2.3 } \end{aligned}$ | $\begin{gathered} \text { Q2.4 \& } \\ \text { PQ2.4 } \end{gathered}$ | $\begin{gathered} \text { Q2.5 \& } \\ \text { PQ2.5 } \end{gathered}$ | $\begin{gathered} \text { Q2.6 \& } \\ \text { PQ2.6 } \end{gathered}$ | $\begin{gathered} \text { Q2.7 \& } \\ \text { PQ2.7 } \end{gathered}$ | $\begin{aligned} & \text { Q2.8 \& } \\ & \text { PQ2.8 } \end{aligned}$ | $\begin{aligned} & \text { Q2.9 \& } \\ & \text { PQ2.9 } \end{aligned}$ | $\begin{aligned} & \text { Q2.10 \& } \\ & \text { PQ2.10 } \end{aligned}$ | $\begin{gathered} \text { Q2.11 } \\ \& \\ \mathrm{PQ} 2.11 \end{gathered}$ | $\begin{gathered} \mathrm{Q} 2.12 \\ \& \\ \mathrm{PQ} 2.12 \end{gathered}$ | $\begin{gathered} \text { Q2.13 } \\ \& \\ \text { PQ2.13 } \end{gathered}$ | $\begin{gathered} \mathrm{Q} 2.14 \\ \& \\ \mathrm{PQ} 2.14 \end{gathered}$ | $\begin{gathered} \text { Q2.15 } \\ \& \\ \text { PQ2.15 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 148 | 149 | 146 | 147 | 150 | 142 | 159 | 160 | 155 | 156 | 147 | 149 | 159 | 154 | 154 |
| Chi- <br> Square(a) | 1.422 | 1.887 |  |  |  |  |  |  |  |  | . 000 |  |  | . 781 | . 893 |
| Asymp. Sig. | . 233 | . 170 |  |  |  |  |  |  |  |  | 1.000 |  |  | . 377 | . 345 |
| Exact Sig. (2tailed) |  |  | .581(b) | .118(b) | .629(b) | .031(b) | 1.000(b) | .625(b) | .727(b) | 1.000(b) |  | .118(b) | .011(b) |  |  |


|  |  <br> PQ3.1 |  <br> PQ3.2 |  <br> PQ3.3 |  <br> PQ3.4 |  <br> PQ4.1 |  <br> PQ4.2 |  <br> PQ4.3 |  <br> PQ4.4 |  <br> PQ4.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 131 | 135 | 128 | 58 | 137 | 121 | 154 | 130 | 163 |
| Chi-Square(a) |  | .875 |  | 22.781 |  |  |  | .033 |  |
| Asymp. Sig. |  | .350 |  | .000 |  |  |  | .855 |  |
| Exact Sig. (2- <br> tailed) | $.581(\mathrm{~b})$ |  | $.541(\mathrm{~b})$ |  | $1.000(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |  | $.500(\mathrm{~b})$ |


|  |  <br> PQ5.1 |  <br> PQ5.2 |  <br> PQ6.1 |  <br> PQ6.2 |  <br> PQ6.3 |  <br> PQ6.4 |  <br> PQ6.5 |  <br> PQ7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 134 | 87 | 144 | 125 | 151 | 125 | 159 | 76 |
| Chi-Square(a) |  |  |  |  |  | .893 |  |  |
| Asymp. Sig. |  |  |  |  |  | .345 |  |  |
| Exact Sig. (2- <br> tailed) | $1.000(\mathrm{~b})$ | $1.000(\mathrm{~b})$ | $.180(\mathrm{~b})$ | $.219(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |  | $1.000(\mathrm{~b})$ | $1.000(\mathrm{~b})$ |

## Appendix M

## AGE BY GENDER (WHOLE GROUP)

|  | q1.2 |  | Statistic | Std. Error |
| :--- | :--- | :--- | ---: | ---: |
| q1.1 | Boy | Mean | 16.58 | .217 |
|  |  | Median | 16.00 |  |
|  |  | Std. Deviation | 1.802 |  |
|  | Girl | Mean | 15.89 | .154 |
|  |  | Median | 16.00 |  |
|  |  | Std. Deviation | 1.498 |  |

Independent Samples Test

|  |  |  | q1.1 |
| :--- | :--- | :--- | :--- |
| Levene's Test for Equality of Variances | F | Equal variances assumed | 7.027 |
|  | Sig. | Equal variances assumed | .009 |
| t-test for Equality of Means | t | Equal variances assumed | 2.653 |
|  | df | Equal variances not assumed | 2.576 |
|  | Sig. (2-tailed) | Equal variances assumed | 162 |
|  |  | Equal variances assumed | .009 |
|  |  | Equal variances not assumed | .011 |
|  |  | Equal variances assumed | .685 |
|  |  | Equal variances not assumed | .685 |

Crosstabulations: Pre- and post-test results
Question 2.1 - Pre-test
Crosstab



## Question 2.1 Post-test

## Crosstab

| school |  |  |  | pq2.1 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 2 | 5 | 0 | 7 |
|  |  |  | \% within page (Binned) | 28.6\% | 71.4\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.1 | 33.3\% | 19.2\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 2 | 6 | 0 | 8 |
|  |  |  | \% within page (Binned) | 25.0\% | 75.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.1 | 33.3\% | 23.1\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 2 | 10 | 1 | 13 |
|  |  |  | \% within page (Binned) | 15.4\% | 76.9\% | 7.7\% | 100.0\% |
|  |  |  | \% within pq2.1 | 33.3\% | 38.5\% | 100.0\% | 39.4\% |
|  |  | Older than 20 | Count | 0 | 5 | 0 | 5 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.1 | .0\% | 19.2\% | .0\% | 15.2\% |
|  |  | Total | Count | 6 | 26 | 1 | 33 |
|  |  |  | \% within page (Binned) | 18.2\% | 78.8\% | 3.0\% | 100.0\% |
|  |  |  | \% within pq2.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 12 | 14 | 3 | 29 |
|  |  |  | \% within page (Binned) | 41.4\% | 48.3\% | 10.3\% | 100.0\% |
|  |  |  | \% within pq2.1 | 100.0\% | 93.3\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.1 | .0\% | 6.7\% | .0\% | 3.3\% |
|  |  | Total | Count | 12 | 15 | 3 | 30 |
|  |  |  | \% within page (Binned) | 40.0\% | 50.0\% | 10.0\% | 100.0\% |
|  |  |  | \% within pq2.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 20 | 11 | 1 | 32 |
|  |  |  | \% within page (Binned) | 62.5\% | 34.4\% | 3.1\% | 100.0\% |
|  |  |  | \% within pq2.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |



## Question 2.2 - Pre- test

## Crosstab

| school |  |  | q2.2 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Yes | No | Uncertain | Yes |
| page <br> (Binned) | Under 16 | Count | 0 | 7 | 0 | 7 |
|  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  | \% within q2.2 | .0\% | 36.8\% | .0\% | 21.2\% |
|  | Under 18 | Count | 2 | 5 | 1 | 8 |
|  |  | \% within page (Binned) | 25.0\% | 62.5\% | 12.5\% | 100.0\% |
|  |  | \% within q2.2 | 18.2\% | 26.3\% | 33.3\% | 24.2\% |
|  | Under 20 | Count | 5 | 6 | 2 | 13 |
|  |  | \% within page (Binned) | 38.5\% | 46.2\% | 15.4\% | 100.0\% |
|  |  | \% within q2.2 | 45.5\% | 31.6\% | 66.7\% | 39.4\% |
|  | Older than 20 | Count | 4 | 1 | 0 | 5 |
|  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |


|  |  |  | \% within q2.2 | 36.4\% | 5.3\% | .0\% | 15.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count | 11 | 19 | 3 | 33 |
|  |  |  | \% within page (Binned) | 33.3\% | 57.6\% | 9.1\% | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page | Under 16 | Count | 12 | 15 | 2 | 29 |
|  |  |  | \% within page (Binned) | 41.4\% | 51.7\% | 6.9\% | 100.0\% |
|  |  |  | \% within q2.2 | 92.3\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.2 | 7.7\% | .0\% | .0\% | 3.3\% |
|  |  |  | Count \% within page (Binned) | $\begin{gathered} 13 \\ 43.3 \% \end{gathered}$ | 15 $50.0 \%$ | 2 $6.7 \%$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page | Under 16 | Count | 21 | 8 | 3 | 32 |
|  | (Binned) |  | \% within page (Binned) | 65.6\% | 25.0\% | 9.4\% | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 21 | 8 | 3 | 32 |
|  |  |  | \% within page (Binned) | 65.6\% | 25.0\% | 9.4\% | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 18 | 6 |  | 24 |
|  | (B) |  | \% within page (Binned) | 75.0\% | 25.0\% |  | 100.0\% |
|  |  |  | \% within q2.2 | 85.7\% | 66.7\% |  | 80.0\% |
|  |  | Under 18 | Count | 3 | $2$ |  | $5$ |
|  |  |  | \% within page (Binned) | 60.0\% | 40.0\% |  | $100.0 \%$ |
|  |  |  | \% within q2.2 | 14.3\% | 22.2\% |  | 16.7\% |
|  |  | Under 20 | Count | 0 | 1 |  | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.2 | .0\% | 11.1\% |  | 3.3\% |
|  |  |  | Count | 21 | 9 |  | 30 |
|  |  |  | \% within page (Binned) | 70.0\% | 30.0\% |  | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% |  | 100.0\% |
| School 5 | page | Under 16 | Count | 19 |  |  | 19 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.2 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.2 | 17.4\% |  |  | 17.4\% |
|  |  |  | Count | 23 |  |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% |  |  | 100.0\% |
| School 6 | page | Under 16 | Count | 9 | 1 | 2 | 12 |
|  | (Binned) |  | \% within page (Binned) | 75.0\% | 8.3\% | 16.7\% | 100.0\% |
|  |  |  | \% within q2.2 | 69.2\% | 100.0\% | 100.0\% | 75.0\% |
|  |  | Under 18 | Count | 4 4 | 0 | 0 | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.2 | 30.8\% | .0\% | .0\% | 25.0\% |
|  |  |  | Count | 13 | 1 | 2 | 16 |
|  |  |  | \% within page (Binned) | 81.3\% | 6.3\% | 12.5\% | 100.0\% |
|  |  |  | \% within q2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 2.2 - Post-test

Crosstab

| school |  |  |  | pq2.2 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page <br> (Binned) | Under 16 | Count | 7 | 0 | 0 | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 33.3\% | .0\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 4 | 4 | 0 | 8 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 19.0\% | 36.4\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 7 | 6 | 0 | 13 |
|  |  |  | \% within page (Binned) | 53.8\% | 46.2\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 33.3\% | 54.5\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 3 | 1 | 1 | 5 |
|  |  |  | \% within page (Binned) | 60.0\% | 20.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 14.3\% | 9.1\% | 100.0\% | 15.2\% |
|  |  | Total | Count | 21 | 11 | 1 | 33 |
|  |  |  | \% within page (Binned) | 63.6\% | 33.3\% | 3.0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 19 | 8 | 1 | 28 |
|  |  |  | \% within page (Binned) | 67.9\% | 28.6\% | 3.6\% | 100.0\% |
|  |  |  | \% within pq2.2 | 95.0\% | 100.0\% | 100.0\% | 96.6\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.2 | 5.0\% | .0\% | .0\% | 3.4\% |
|  |  | otal | Count | 20 | 8 | 1 | 29 |
|  |  |  | \% within page (Binned) | 69.0\% | 27.6\% | 3.4\% | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 22 | 8 | 2 | 32 |
|  |  |  | \% within page (Binned) | 68.8\% | 25.0\% | 6.3\% | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 22 | 8 | 2 | 32 |
|  |  |  | \% within page (Binned) | 68.8\% | 25.0\% | 6.3\% | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 18 | 6 |  | 24 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 85.7\% | 66.7\% |  | 80.0\% |
|  |  | Under 18 | Count ${ }_{\text {\% within page (Binned) }}$ | 3 $60.0 \%$ | 20.0\% |  | 5 $100.0 \%$ |
|  |  |  | \% within page (Binned) | 60.0\% | 40.0\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 14.3\% | 22.2\% |  | 16.7\% |
|  |  | Under 20 | Count \% within page (Binned) | $0$ .0\% | $\begin{gathered} 1 \\ 100.0 \% \end{gathered}$ |  |  |
|  |  |  | \% within page (Binned) \% within pq2.2 | .0\% | $\begin{gathered} \text { 100.0\% } \\ \text { 11.1\% } \end{gathered}$ |  | $\begin{gathered} \text { 100.0\% } \\ 3.3 \% \end{gathered}$ |
|  |  | Total | Count | 21 | 9 |  | 30 |
|  |  |  | \% within page (Binned) | 70.0\% | 30.0\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% |  | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 16 | 3 |  | 19 |
|  |  |  | \% within page (Binned) | 84.2\% | 15.8\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 80.0\% | 100.0\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 20.0\% | .0\% |  | 17.4\% |
|  |  | Total | Count | 20 | 3 |  | 23 |
|  |  |  | \% within page (Binned) | 87.0\% | 13.0\% |  | 100.0\% |
|  |  |  | \% within pq2.2 | 100.0\% | 100.0\% |  | 100.0\% |
| School 6 | page | Under 16 | Count | 7 | 5 | 0 | 12 |


| (Binned) |  | \% within page (Binned) | $58.3 \%$ | $41.7 \%$ | $.0 \%$ | $100.0 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within pq2.2 | $70.0 \%$ | $100.0 \%$ | $.0 \%$ | $75.0 \%$ |
|  | Under 18 | Count | 3 | 0 | 1 | 4 |
|  |  | \% within page (Binned) | $75.0 \%$ | $.0 \%$ | $25.0 \%$ | $100.0 \%$ |
|  | Total | \% within pq2.2 | $30.0 \%$ | $.0 \%$ | $100.0 \%$ | $25.0 \%$ |
|  |  | Count | 10 | 5 | 1 | 16 |
|  |  | \% within page (Binned) | $62.5 \%$ | $31.3 \%$ | $6.3 \%$ | $100.0 \%$ |
|  | \% within pq2.2 | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |  |

## Question 2.3 - Pre-test

## Crosstab

| school |  |  |  | q2.3 |  |  | $\begin{aligned} & \hline \text { Total } \\ & \hline \text { Yes } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count <br> \% within page (Binned) \% within q2.3 | $\begin{gathered} 3 \\ 42.9 \% \end{gathered}$ | $\begin{gathered} 3 \\ 42.9 \% \end{gathered}$ | $\begin{gathered} 1 \\ 14.3 \% \end{gathered}$ | $\begin{gathered} 7 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |
|  |  |  |  | $\begin{aligned} & 42.9 \% \\ & 16.7 \% \end{aligned}$ | $37.5 \%$ | 14.3\% | 21.2\% |
|  |  | Under 18 | Count <br> \% within page (Binned) \% within q2.3 |  |  |  | $\begin{gathered} 8 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  | 50.0\% | 12.5\% |  |  |
|  |  |  |  | 22.2\% | 12.5\% | 42.9\% | $24.2 \%$ |
|  |  | Under 20 | Count <br> $\%$ within page (Binned) \% within q2.3 | 7 | 4 | $\begin{gathered} 2 \\ 15.4 \% \end{gathered}$ | $13$ |
|  |  |  |  | $\begin{aligned} & 53.8 \% \\ & 38.9 \% \end{aligned}$ | 30.8\% |  | $100.0 \%$ |
|  |  |  |  |  | $\begin{gathered} 50.0 \% \\ 0 \end{gathered}$ | 15.4\% |  |
|  |  | Older than 20 | Count <br> $\%$ within page (Binned) $\%$ within q2.3 | 4 |  | 28.6\% | 5 |
|  |  |  |  | 80.0\% | .0\% | 20.0\% | 100.0\% |
|  |  |  |  | 22.2\% | .0\% | 14.3\% | 15.2\% |
|  |  | Total | Count <br> \% within page (Binned) \% within q2.3 | 18 | 8 | 7 | 33 |
|  |  |  |  | 54.5\% | 24.2\% | 21.2\% | 100.0\% |
|  |  |  |  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count <br> \% within page (Binned) \% within q2.3 | 27 | 1 | 1 | 29 |
|  |  |  |  | 93.1\% | 3.4\% | 3.4\% | 100.0\% |
|  |  |  |  | 96.4\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count <br> $\%$ within page (Binned) \% within q2.3 | 1 | 0 | 0 | 1 |
|  |  |  |  | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  |  | 3.6\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count <br> $\%$ within page (Binned) $\%$ within q2.3 | $28$ | $\begin{gathered} 1 \\ 3.3 \% \end{gathered}$ | $\begin{gathered} 1 \\ 3.3 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  | $\begin{gathered} \text { 93.3\% } \\ \text { 100.0\% } \end{gathered}$ |  | 3.3\% 100.0\% | $\begin{gathered} 100.0 \% \\ 31 \end{gathered}$ |
| School 3 | page | Under 16 | Count <br> \% within page (Binned) $\%$ within q2.3 | $\begin{gathered} 100.0 \% \\ 28 \\ 90.3 \% \\ 100.0 \% \end{gathered}$ | 2$6.5 \%$ | 1 <br> $2 \%$ |  |
|  | (Binned) |  |  |  |  |  | $\begin{gathered} 31 \\ 100.0 \% \end{gathered}$ |
|  | Total |  |  |  | $\begin{gathered} 100.0 \% \\ 2 \end{gathered}$ | 100.0\% | 100.0\% |
|  |  |  |  | Count |  | $\begin{gathered} \text { 100.0\% } \\ 28 \end{gathered}$ | 1 | 31 |
|  |  |  | \% within page (Binned) \% within q2.3 | $\begin{gathered} \text { 90.3\% } \\ \text { 100.0\% } \end{gathered}$ | 6.5\% | 3.2\% | 100.0\% |
| School 4 | page (Binned) | Under 16 |  |  | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count <br> \% within page (Binned) \% within q2.3 | $23$ |  | 1 | 24 |
|  |  |  |  |  |  | 4.2\% | 100.0\% |
|  |  |  |  | $\begin{aligned} & 95.8 \% \\ & 79.3 \% \end{aligned}$ |  | 100.0\% | 80.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) <br> \% within q2.3 Count | $\begin{gathered} 5 \\ 100.0 \% \\ 17.2 \% \\ 1 \end{gathered}$ |  | 0 | $\begin{gathered} 5 \\ 100.0 \% \\ 16.7 \% \\ 1 \end{gathered}$ |
|  |  | Under 20 |  |  |  | .0\% |  |
|  |  |  |  |  |  | .0\% |  |
|  |  |  |  |  |  | 0 |  |


|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within q2.3 | 3.4\% |  | .0\% | 3.3\% |
|  |  |  | Count | 29 |  | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% |  | 3.3\% | 100.0\% |
|  |  |  | \% within q2.3 | 100.0\% |  | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 19 |  |  | 19 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.3 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.3 | 17.4\% |  |  | 17.4\% |
|  |  |  | Count | 23 |  |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.3 | 100.0\% |  |  | 100.0\% |
| School 6 | page | Under 16 | Count | 11 | 1 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 91.7\% | 8.3\% |  | 100.0\% |
|  |  |  | \% within q2.3 | 73.3\% | 100.0\% |  | 75.0\% |
|  |  | Under 18 | Count \% within page (Binned) | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ |  | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) $\%$ within q2.3 | $\begin{gathered} 100.0 \% \\ 26.7 \% \end{gathered}$ | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ |  | $\begin{gathered} \text { 100.0\% } \\ 25.0 \% \end{gathered}$ |
|  |  |  | Count | 15 | 1 |  | 16 |
|  |  |  | \% within page (Binned) | 93.8\% | 6.3\% |  | 100.0\% |
|  |  |  | \% within q2.3 | 100.0\% | 100.0\% |  | 100.0\% |

## Question 2.3 - Post-test

## Crosstab




## Question 2.4 Pre-test

Crosstab

| school |  |  |  | q2.4 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 5 | 2 | 0 | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 28.6\% | .0\% | 100.0\% |
|  |  |  | \% within q2.4 | 25.0\% | 18.2\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 5 | 3 | 0 | 8 |
|  |  |  | \% within page (Binned) | 62.5\% | 37.5\% | .0\% | 100.0\% |
|  |  |  | \% within q2.4 | 25.0\% | 27.3\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 9 | 2 | 2 | 13 |
|  |  |  | \% within page (Binned) | 69.2\% | 15.4\% | 15.4\% | 100.0\% |
|  |  |  | \% within q2.4 | 45.0\% | 18.2\% | 100.0\% | 39.4\% |
|  |  | Older than 20 | Count | 1 | 4 | 0 | 5 |


|  |  |  | \% within page (Binned) | 20.0\% | 80.0\% | .0\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within q2.4 | 5.0\% | 36.4\% | .0\% | 15.2\% |
|  |  |  | Count | 20 | 11 | 2 | 33 |
|  |  |  | \% within page (Binned) | 60.6\% | 33.3\% | 6.1\% | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page | Under 16 | Count | 28 |  | 1 | 29 |
|  | (Binned) |  | \% within page (Binned) | 96.6\% |  | 3.4\% | 100.0\% |
|  |  |  | \% within q2.4 | 96.6\% |  | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 |  | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within q2.4 | 3.4\% |  | .0\% | 3.3\% |
|  |  |  | Count | 29 |  | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% |  | 3.3\% | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% |  | 100.0\% | 100.0\% |
| School 3 | page <br> (Binned) | Under 16 | Count \% within page (Binned) | $\begin{gathered} 28 \\ 90.3 \% \end{gathered}$ |  | $\begin{gathered} 3 \\ 9.7 \% \end{gathered}$ | $\begin{gathered} 31 \\ 100.0 \% \end{gathered}$ |
|  | (Binned) |  | \% within page (Binned) \% within q2.4 | $\begin{gathered} \text { 90.3\% } \\ \text { 100.0\% } \end{gathered}$ |  | $\begin{gathered} 9.7 \% \\ \text { 100.0\% } \end{gathered}$ | $\begin{aligned} & 100.0 \% \\ & 100.0 \% \end{aligned}$ |
|  |  |  | Count | 28 |  | 3 | 31 |
|  |  |  | \% within page (Binned) | 90.3\% |  | 9.7\% | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% |  | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 23 | 1 |  | 24 |
|  | (Binned) |  | \% within page (Binned) | 95.8\% | 4.2\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 79.3\% | 100.0\% |  | 80.0\% |
|  |  | Under 18 | Count | 5 | 0 |  | $5$ |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 17.2\% | . $0 \%$ |  | 16.7\% |
|  |  | Under 20 | Count | 1 | 0 |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 3.4\% | .0\% |  | 3.3\% |
|  |  |  | Count | 29 | 1 |  | 30 |
|  |  |  | \% within page (Binned) | 96.7\% | 3.3\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% | 100.0\% |  | 100.0\% |
| School 5 | page | Under 16 | Count | 19 |  |  | 19 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.4 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.4 | 17.4\% |  |  | 17.4\% |
|  |  |  | Count | 23 |  |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% |  |  | 100.0\% |
| School 6 | page | Under 16 | Count | 10 | 2 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 83.3\% | 16.7\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 71.4\% | 100.0\% |  | 75.0\% |
|  |  | Under 18 | Count | 4 | 0 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 28.6\% | .0\% |  | 25.0\% |
|  |  |  | Count | 14 | 2 |  | 16 |
|  |  |  | \% within page (Binned) | 87.5\% | 12.5\% |  | 100.0\% |
|  |  |  | \% within q2.4 | 100.0\% | 100.0\% |  | 100.0\% |

## Question 2.4 - Post-test

Crosstab


| (Binned) | \% within page (Binned) | $91.7 \%$ | $8.3 \%$ | $.0 \%$ | $100.0 \%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within pq2.4 | $84.6 \%$ | $100.0 \%$ | $.0 \%$ | $75.0 \%$ |
|  | Under 18 | Count | 2 | 0 | 2 | 4 |
|  |  | \% within page (Binned) | $50.0 \%$ | $.0 \%$ | $50.0 \%$ | $100.0 \%$ |
|  | Total | \% within pq2.4 | $15.4 \%$ | $.0 \%$ | $100.0 \%$ | $25.0 \%$ |
|  |  | Count | 13 | 1 | 2 | 16 |
|  |  | \% within page (Binned) | $81.3 \%$ | $6.3 \%$ | $12.5 \%$ | $100.0 \%$ |
|  |  | \% within pq2.4 | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

## Question 2.5 - Pre-test

## Crosstab




## Question 2.5 - Post-test

## Crosstab

| school |  |  |  | pq2.5 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | $\begin{gathered} \hline \text { page } \\ \text { (Binned) } \end{gathered}$ | Under 16 | Count | 5 | 1 | 1 | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 14.3\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq2.5 | 27.8\% | 11.1\% | 33.3\% | 23.3\% |
|  |  | Under 18 | Count | 4 | 2 | 1 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 28.6\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq 2.5 | 22.2\% | 22.2\% | 33.3\% | 23.3\% |
|  |  | Under 20 | Count | 7 | 5 | 0 | 12 |
|  |  |  | \% within page (Binned) | 58.3\% | 41.7\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.5 | 38.9\% | 55.6\% | .0\% | 40.0\% |
|  |  | Older than 20 | Count | 2 | 1 | 1 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | 25.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.5 | 11.1\% | 11.1\% | 33.3\% | 13.3\% |
|  |  | otal | Count | 18 | 9 | 3 | 30 |
|  |  |  | \% within page (Binned) | 60.0\% | 30.0\% | 10.0\% | 100.0\% |
|  |  |  | \% within pq2.5 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | $\begin{gathered} \text { page } \\ \text { (Binned) } \end{gathered}$ | Under 16 | Count | 24 | 4 | 1 | 29 |
|  |  |  | \% within page (Binned) | 82.8\% | 13.8\% | 3.4\% | 100.0\% |
|  |  |  | \% within pq2.5 | 96.0\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.5 | 4.0\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count | 25 | 4 | 1 | 30 |
|  |  |  | \% within page (Binned) | 83.3\% | 13.3\% | 3.3\% | 100.0\% |



## Question 2.6 - Pre-test

## Crosstab

| school |  |  |  | q2.6 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count | 4 | 1 | 2 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | $14.3 \%$ | $28.6 \%$ | 100.0\% |
|  |  |  | \% within q2.6 | 23.5\% | 11.1\% | 33.3\% | 21.9\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within q2.6 | 35.3\% | 11.1\% | 16.7\% | 25.0\% |
|  |  | Under 20 | Count | 5 | 5 | 2 | 12 |
|  |  |  | \% within page (Binned) | 41.7\% | 41.7\% | 16.7\% | 100.0\% |
|  |  |  | \% within q2.6 | 29.4\% | 55.6\% | 33.3\% | 37.5\% |



## Question 2.6 - Post-test

## Crosstab

| school |  |  |  | pq2.6 |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 5 | 1 | 6 |
|  |  |  | \% within page (Binned) | 83.3\% | 16.7\% | 100.0\% |
|  |  |  | \% within pq2.6 | 23.8\% | 16.7\% | 22.2\% |
|  |  | Under 18 | Count | 6 | 2 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.6 | 28.6\% | 33.3\% | 29.6\% |
|  |  | Under 20 | Count | 7 | 2 | 9 |
|  |  |  | \% within page (Binned) | 77.8\% | 22.2\% | 100.0\% |
|  |  |  | \% within pq2.6 | 33.3\% | 33.3\% | 33.3\% |
|  |  | Older than 20 | Count | 3 | 1 | 4 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.6 | 14.3\% | 16.7\% | 14.8\% |
|  |  | Total | Count | 21 | 6 | 27 |
|  |  |  | \% within page (Binned) | 77.8\% | 22.2\% | 100.0\% |
|  |  |  | \% within pq2.6 | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 28 | 1 | 29 |
|  |  |  | \% within page (Binned) | 96.6\% | 3.4\% | 100.0\% |
|  |  |  | \% within pq2.6 | 96.6\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.6 | 3.4\% | .0\% | 3.3\% |
|  |  | Total | Count \% within page (Binned) | $\begin{gathered} 29 \\ 96.7 \% \end{gathered}$ | $\begin{gathered} 1 \\ 3.3 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq2.6 | $\begin{gathered} \text { 96.7\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{gathered} \text { 3.3\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |
| School 3 | page <br> (Binned) | Under 16 | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.6 | 100.0\% |  | 100.0\% |
|  |  | Total | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.6 | 100.0\% |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 22 | 2 | 24 |
|  |  |  | \% within page (Binned) | 91.7\% | 8.3\% | 100.0\% |
|  |  |  | \% within pq2.6 | 78.6\% | 100.0\% | 80.0\% |
|  |  | Under 18 |  | $\stackrel{5}{100} 0$ |  | $\stackrel{5}{100} 0$ |
|  |  |  | \% within page (Binned) \% within pq2.6 | $\begin{gathered} \text { 100.0\% } \\ 17.9 \% \end{gathered}$ | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ | $\begin{gathered} \text { 100.0\% } \\ 16.7 \% \end{gathered}$ |
|  |  | Under 20 | Count | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | . $0 \%$ | 100.0\% |
|  |  |  | \% within pq2.6 | 3.6\% | .0\% | 3.3\% |
|  |  | Total | Count | 28 | 2 | 30 |
|  |  |  | \% within page (Binned) | 93.3\% | 6.7\% | 100.0\% |
|  |  |  | \% within pq2.6 | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page <br> (Binned) | Under 16 | Count | 19 |  | 19 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.6 | 82.6\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.6 | 17.4\% |  | 17.4\% |
|  |  | Total | Count | 23 |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.6 | 100.0\% |  | 100.0\% |



Question 2.7 - Pre-test

Crosstab

| school |  |  |  | q2.7 |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 6 | 1 | 7 |
|  |  |  | \% within page (Binned) | 85.7\% | 14.3\% | 100.0\% |
|  |  |  | \% within q2.7 | 18.8\% | 100.0\% | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.7 | 25.0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 13 | 0 | 13 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.7 | 40.6\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 5 | 0 | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.7 | 15.6\% | .0\% | 15.2\% |
|  |  | Total | Count | 32 | 1 | 33 |
|  |  |  | \% within page (Binned) | 97.0\% | 3.0\% | 100.0\% |
|  |  |  | \% within q2.7 | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 29 |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 96.7\% |  | 96.7\% |
|  |  | Under 18 | Count | 1 |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 3.3\% |  | 3.3\% |
|  |  | Total | Count \% within page (Binned) | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |  | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) $\%$ within q2.7 | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |  | $\begin{aligned} & 100.0 \% \\ & 100.0 \% \end{aligned}$ |
| School 3 | page (Binned) | Under 16 | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 100.0\% |  | 100.0\% |
|  |  | Total | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 100.0\% |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 |  | 24 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 80.0\% |  | 80.0\% |
|  |  | Under 18 | Count | ${ }^{5}$ |  | ${ }^{5}$ |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within q2.7 | 16.7\% |  | 16.7\% |



## Question 2.7 - Post-test

## Crosstab

| school |  |  |  | pq2.7 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 5 | 1 | 0 | 6 |
|  |  |  | \% within page (Binned) | 83.3\% | 16.7\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.7 | 18.5\% | 100.0\% | .0\% | 19.4\% |
|  |  | Under 18 | Count | 6 | 0 | 2 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | .0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.7 | 22.2\% | .0\% | 66.7\% | 25.8\% |
|  |  | Under 20 | Count | 12 | 0 | 1 | 13 |
|  |  |  | \% within page (Binned) | 92.3\% | .0\% | 7.7\% | 100.0\% |
|  |  |  | \% within pq2.7 | 44.4\% | .0\% | 33.3\% | 41.9\% |
|  |  | Older than 20 | Count | 4 | 0 | 0 | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.7 | 14.8\% | .0\% | .0\% | 12.9\% |
|  | Total |  | Count | 27 | 1 | 3 | 31 |
|  |  |  | \% within page (Binned) | 87.1\% | 3.2\% | 9.7\% | 100.0\% |
|  |  |  | \% within pq2.7 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 29 |  |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.7 | 96.7\% |  |  | 96.7\% |
|  |  | Under 18 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.7 | 3.3\% |  |  | 3.3\% |



## Question 2.8 - Pre-test

## Crosstab




## Question 2.8 - Post-test

## Crosstab

| school |  |  |  | pq2.8 |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Yes |
| School 1 | page (Binned) | Under 16 | Count | 7 | 0 | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.8 | 21.9\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.8 | 25.0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 13 | 0 | 13 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.8 | 40.6\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 4 | 1 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq2.8 | 12.5\% | 100.0\% | 15.2\% |
|  |  | Total | Count | 32 | 1 | 33 |
|  |  |  | \% within page (Binned) | 97.0\% | 3.0\% | 100.0\% |
|  |  |  | \% within pq2.8 | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page <br> (Binned) | Under 16 | Count | 29 |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 96.7\% |  | 96.7\% |
|  |  | Under 18 | Count | 1 |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 3.3\% |  | 3.3\% |
|  |  | otal | Count \% within page (Binned) | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |  | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq2.8 | 100.0\% |  | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 100.0\% |  | 100.0\% |
|  |  | Total | Count | 32 |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 100.0\% |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 |  | 24 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 80.0\% |  | 80.0\% |
|  |  | Under 18 | Count | 5 |  | ${ }^{5}$ |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 16.7\% |  | 16.7\% |
|  |  | Under 20 | Count | 1 |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 3.3\% |  | 3.3\% |
|  |  | Total | Count | 30 |  | 30 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 100.0\% |  | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 19 |  | 19 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 82.6\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.8 | 17.4\% |  | 17.4\% |
|  |  | Total | Count | 23 |  | 23 |



Question 2.9 - Pre-test
Crosstab

| school |  |  |  | q2.9 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count | 7 | 0 | 0 | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.9 | 25.0\% | .0\% | .0\% | 21.9\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within q2.9 | 21.4\% | 33.3\% | 100.0\% | 25.0\% |
|  |  | Under 20 | Count | 11 | 1 | 0 | 12 |
|  |  |  | \% within page (Binned) | 91.7\% | 8.3\% | .0\% | 100.0\% |
|  |  |  | \% within q2.9 | 39.3\% | 33.3\% | .0\% | 37.5\% |
|  |  | Older than 20 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.9 | 14.3\% | 33.3\% | .0\% | 15.6\% |
|  |  | Total | Count | 28 | 3 | 1 | 32 |
|  |  |  | \% within page (Binned) | 87.5\% | 9.4\% | 3.1\% | 100.0\% |
|  |  |  | \% within q2.9 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 29 |  |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.9 | 96.7\% |  |  | 96.7\% |
|  |  | Under 18 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.9 | 3.3\% |  |  | 3.3\% |
|  |  | Total | Count \% within page (Binned) | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |  |  | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q2.9 | 100.0\% |  |  | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 30 |  |  | 30 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.9 | 100.0\% |  |  | 100.0\% |
|  |  | Total | Count | 30 |  |  | 30 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.9 | 100.0\% |  |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 |  |  | 24 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q2.9 | 80.0\% |  |  | 80.0\% |
|  |  | Under 18 | Count | 5 |  |  | 5 |



## Question 2.9 - Post-test

## Crosstab

| school |  |  |  | pq2.9 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School 1 | page <br> (Binned) | Under 16 | Count | 6 | 1 | 0 | 7 |
|  |  |  | \% within page (Binned) | 85.7\% | 14.3\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.9 | 23.1\% | 50.0\% | .0\% | 23.3\% |
|  |  | Under 18 | Count | 7 | 0 | 1 | 8 |
|  |  |  | \% within page (Binned) | 87.5\% | .0\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq2.9 | 26.9\% | .0\% | 50.0\% | 26.7\% |
|  |  | Under 20 | Count | 10 | 1 | 0 | 11 |
|  |  |  | \% within page (Binned) | 90.9\% | 9.1\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.9 | 38.5\% | 50.0\% | .0\% | 36.7\% |
|  |  | Older than 20 | Count | 3 | 0 | 1 | 4 |
|  |  |  | \% within page (Binned) | 75.0\% | .0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.9 | 11.5\% | .0\% | 50.0\% | 13.3\% |
|  | Total |  | Count | 26 | 2 | 2 | 30 |
|  |  |  | \% within page (Binned) | 86.7\% | 6.7\% | 6.7\% | 100.0\% |
|  | page (Binned) |  | \% within pq2.9 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 |  | Under 16 | Count | 28 | 1 |  | 29 |
|  |  |  | \% within page (Binned) | 96.6\% | 3.4\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 96.6\% | 100.0\% |  | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |


|  |  |  | \% within pq2.9 | 3.4\% | .0\% | 3.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count | 29 | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% | 3.3\% | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page | Under 16 | Count | 31 | 1 | 32 |
|  | (Binned) |  | \% within page (Binned) | 96.9\% | 3.1\% | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 31 | 1 | 32 |
|  |  |  | \% within page (Binned) | 96.9\% | 3.1\% | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 23 | 1 | 24 |
|  | (Binned) |  | \% within page (Binned) | 95.8\% | 4.2\% | 100.0\% |
|  |  |  | \% within pq2.9 | 79.3\% | 100.0\% | 80.0\% |
|  |  | Under 18 | Count | 5 | 0 | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.9 | 17.2\% | .0\% | 16.7\% |
|  |  | Under 20 | Count | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | . $0 \%$ | 100.0\% |
|  |  |  | \% within pq2.9 | 3.4\% | .0\% | 3.3\% |
|  |  |  | Count | 29 | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% | 3.3\% | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 18 |  | 18 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 81.8\% |  | 81.8\% |
|  |  | Under 18 | Count | 4 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 18.2\% |  | 18.2\% |
|  |  |  | Count | 22 |  | 22 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% |  | 100.0\% |
| School 6 | page | Under 16 | Count | 12 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 75.0\% |  | 75.0\% |
|  |  | Under 18 | Count | 4 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 25.0\% |  | 25.0\% |
|  |  |  | Count | 16 |  | 16 |
|  |  |  | \% within page (Binned) | 100.0\% |  | 100.0\% |
|  |  |  | \% within pq2.9 | 100.0\% |  | 100.0\% |

## Question 2.10 - Pre-test

## Crosstab




## Question 2.10 - Post-test

## Crosstab

| school |  |  |  | pq2.10 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 5 | 2 |  | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 28.6\% |  | 100.0\% |
|  |  |  | \% within pq2.10 | 17.9\% | 66.7\% |  | 22.6\% |
|  |  | Under 18 | Count | 7 | 0 |  | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq2.10 | 25.0\% | .0\% |  | 22.6\% |
|  |  | Under 20 | Count | 12 | 0 |  | 12 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq2.10 | 42.9\% | .0\% |  | 38.7\% |
|  |  | Older than 20 | Count | 4 | 1 |  | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% |  | 100.0\% |
|  |  |  | \% within pq2.10 | 14.3\% | 33.3\% |  | 16.1\% |
|  |  | Total | Count | 28 | 3 |  | 31 |
|  |  |  | \% within page (Binned) | 90.3\% | 9.7\% |  | 100.0\% |
|  |  |  | \% within pq2.10 | 100.0\% | 100.0\% |  | 100.0\% |
| School 2 | page <br> (Binned) | Under 16 | Count | 28 |  | 1 | 29 |
|  |  |  | \% within page (Binned) | 96.6\% |  | 3.4\% | 100.0\% |
|  |  |  | \% within pq2.10 | 96.6\% |  | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 |  | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within pq2.10 | 3.4\% |  | .0\% | 3.3\% |
|  |  | Total | Count | 29 |  | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% |  | 3.3\% | 100.0\% |
|  |  |  | \% within pq2.10 | 100.0\% |  | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.10 | 100.0\% |  |  | 100.0\% |
|  |  | Total | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.10 | 100.0\% |  |  | 100.0\% |
| School 4 | page <br> (Binned) | Under 16 | Count | 23 |  | 1 | 24 |
|  |  |  | \% within page (Binned) | 95.8\% |  | 4.2\% | 100.0\% |
|  |  |  | \% within pq2.10 | 79.3\% |  | 100.0\% | 80.0\% |
|  |  | Under 18 | Count | ${ }^{5}$ |  | 0 | ${ }^{5}$ |
|  |  |  | \% within page (Binned) | 100.0\% |  | . $0 \%$ | 100.0\% |
|  |  |  | \% within pq2.10 | 17.2\% |  | .0\% | 16.7\% |
|  |  | Under 20 | Count | 1 |  | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within pq2.10 | 3.4\% |  | .0\% | 3.3\% |
|  |  | Total | Count | 29 |  | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% |  | 3.3\% | 100.0\% |
|  |  |  | \% within pq2.10 | 100.0\% |  | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 19 |  |  | 19 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.10 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.10 | 17.4\% |  |  | 17.4\% |
|  |  | Total | Count | 23 |  |  | 23 |



## Question 2.11 - Pre-test

Crosstab



## Question 2.11 - Post-test

Crosstab

| school |  |  |  | pq2.11 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page <br> (Binned) | Under 16 | Count <br> \% within page (Binned) | $\begin{gathered} 6 \\ 85.7 \% \\ 25.0 \% \end{gathered}$ | $\begin{gathered} 1 \\ 14.3 \% \end{gathered}$ | 0 | $7$ |
|  |  |  |  |  |  |  |  |
|  |  |  | \% within pq2.11 |  | 14.3\% | .0\% | 21.2\% |
|  |  | Under 18 | Count <br> \% within page (Binned) \% within pq2.11 | $6$ | $\begin{gathered} 1 \\ 12.5 \% \end{gathered}$ | 1 | 8 |
|  |  |  |  | $\begin{aligned} & 75.0 \% \\ & 25.0 \% \end{aligned}$ |  | $\begin{aligned} & 12.5 \% \\ & 50.0 \% \end{aligned}$ | 100.0\% |
|  |  |  |  |  | $\begin{aligned} & 12.5 \% \\ & 14.3 \% \end{aligned}$ |  | $24.2 \%$ |
|  |  | Under 20 | Count <br> \% within page (Binned) \% within pq2.11 | $9$ | $4$ | 0 |  |
|  |  |  |  | $\begin{aligned} & 69.2 \% \\ & 37.5 \% \end{aligned}$ | 30.8\% | .0\% | 100.0\% |
|  |  |  |  |  | 57.1\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count <br> \% within page (Binned) \% within pq2.11 | 3 | 1 | 1 | 5 |
|  |  |  |  | 60.0\% | 20.0\% | 20.0\% | 100.0\% |
|  |  |  |  | 12.5\% | 14.3\% | 50.0\% | 15.2\% |
|  |  | Total | Count <br> $\%$ within page (Binned) \% within pq2.11 | 24 | 7 | 2 | 33 |
|  |  |  |  | 72.7\% | 21.2\% | 6.1\% | 100.0\% |
|  |  |  |  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page | Under 16 | Count | 25 | 3 | 1 | 29 |
|  | (Binned) |  | \% within page (Binned) | 86.2\% | 10.3\% | 3.4\% | 100.0\% |
|  |  |  | \% within pq2.11 | 96.2\% | 100.0\% | 100.0\% | 96.7\% |
| Under 18 |  |  | Count | 1 | 0 | 0 | 1 |


|  |  |  | \% within page (Binned) $\%$ within pq2.11 | $\begin{gathered} 100.0 \% \\ 3.8 \% \end{gathered}$ | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ | $\begin{gathered} 100.0 \% \\ 3.3 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count \% within page (Binned) | $\begin{gathered} 26 \\ 86.7 \% \end{gathered}$ | $\begin{gathered} 3 \\ 10.0 \% \end{gathered}$ | $\begin{gathered} 1 \\ 3.3 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count \% within page (Binned) | $\begin{gathered} 26 \\ 81.3 \% \end{gathered}$ | $\begin{gathered} 2 \\ 6.3 \% \end{gathered}$ | $\begin{gathered} 4 \\ 12.5 \% \end{gathered}$ | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 26 | 2 | 4 | 32 |
|  |  |  | \% within page (Binned) | 81.3\% | 6.3\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 19 | 3 | 2 | 24 |
|  | (Binned) |  | \% within page (Binned) | 79.2\% | 12.5\% | 8.3\% | 100.0\% |
|  |  |  | \% within pq2.11 | 79.2\% | 75.0\% | 100.0\% | 80.0\% |
|  |  | Under 18 | Count \% within page (Binned) | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.11 | 20.8\% | .0\% | .0\% | 16.7\% |
|  |  | Under 20 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.11 | .0\% | 25.0\% | .0\% | 3.3\% |
|  |  |  | Count | 24 | 4 | 2 | 30 |
|  |  |  | \% within page (Binned) | 80.0\% | 13.3\% | 6.7\% | 100.0\% |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 16 | 3 |  | 19 |
|  | (Bis |  | \% within page (Binned) | 84.2\% | 15.8\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 80.0\% | 100.0\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 20.0\% | .0\% |  | 17.4\% |
|  |  |  | Count | 20 | 3 |  | 23 |
|  |  |  | \% within page (Binned) | 87.0\% | 13.0\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% |  | 100.0\% |
| School 6 | page | Under 16 | Count | 8 | 4 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 66.7\% | 33.3\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 80.0\% | 66.7\% |  | 75.0\% |
|  |  | Under 18 | Count | 2 | 2 |  | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 20.0\% | 33.3\% |  | 25.0\% |
|  |  |  | Count | 10 | 6 |  | 16 |
|  |  |  | \% within page (Binned) | 62.5\% | 37.5\% |  | 100.0\% |
|  |  |  | \% within pq2.11 | 100.0\% | 100.0\% |  | 100.0\% |

## Question 2.12 - Pre-test

## Crosstab

| school |  |  |  | q2.12 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Uncertain |  |
| School 1 | $\begin{gathered} \text { page } \\ \text { (Binned) } \end{gathered}$ |  |  | Under 16 | Count | 4 | 3 | 0 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 42.9\% | .0\% | 100.0\% |
|  |  |  | \% within q2.12 | 30.8\% | 23.1\% | .0\% | 21.9\% |
|  |  | Under 18 | Count | 3 | 2 | 3 | 8 |
|  |  |  | \% within page (Binned) | 37.5\% | 25.0\% | 37.5\% | 100.0\% |
|  |  |  | \% within q2.12 | 23.1\% | 15.4\% | 50.0\% | 25.0\% |



## Question 2.12 - Post-test

## Crosstab

| school |  |  |  | pq2.12 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 5 | 2 | 0 | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 28.6\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.12 | 20.0\% | 40.0\% | .0\% | 22.6\% |
|  |  | Under 18 | Count | 7 | 1 | 0 | 8 |
|  |  |  | \% within page (Binned) | 87.5\% | 12.5\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.12 | 28.0\% | 20.0\% | .0\% | 25.8\% |
|  |  | Under 20 | Count | 9 | 1 | 1 | 11 |
|  |  |  | \% within page (Binned) | 81.8\% | 9.1\% | 9.1\% | 100.0\% |
|  |  |  | \% within pq2.12 | 36.0\% | 20.0\% | 100.0\% | 35.5\% |
|  |  | Older than 20 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.12 | 16.0\% | 20.0\% | .0\% | 16.1\% |
|  |  | Total | Count | 25 | 5 | 1 | 31 |
|  |  |  | \% within page (Binned) | 80.6\% | 16.1\% | 3.2\% | 100.0\% |
|  |  |  | \% within pq2.12 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 27 |  |  | 27 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.12 | 96.4\% |  |  | 96.4\% |
|  |  | Under 18 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.12 | 3.6\% |  |  | 3.6\% |
|  |  | Total | Count <br> \% within page (Binned) | $\begin{gathered} 28 \\ 100.0 \% \end{gathered}$ |  |  | $\begin{gathered} 28 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.12 | 100.0\% |  |  | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count \% within page (Binned) | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |  |  | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq2.12 | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |  |  | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |
|  |  | Total | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.12 | 100.0\% |  |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 23 | 1 |  | 24 |
|  |  |  | \% within page (Binned) | 95.8\% | 4.2\% |  | 100.0\% |
|  |  |  | \% within pq2.12 | 79.3\% | 100.0\% |  | 80.0\% |
|  |  | Under 18 | Count \% within page (Binned) | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ | . 0 |  | 5 $100.0 \%$ |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  | Under 20 | \% within pq2.12 | $17.2 \%$ 1 | .0\% |  | $16.7 \%$ 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq2.12 | 3.4\% | .0\% |  | 3.3\% |
|  |  | Total | Count | 29 | 1 |  | 30 |
|  |  |  | \% within page (Binned) | 96.7\% | 3.3\% |  | 100.0\% |
|  |  |  | \% within pq2.12 | 100.0\% | 100.0\% |  | 100.0\% |
| School 5 | page <br> (Binned) | Under 16 | Count | 19 |  |  | 19 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.12 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |


|  |  |  | \% within pq2.12 | 17.4\% |  |  | 17.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Count | 23 |  |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq2.12 | 100.0\% |  |  | 100.0\% |
| School 6 | page (Binned) | Under 16 | Count | 11 | 1 | 0 | 12 |
|  |  |  | \% within page (Binned) | 91.7\% | 8.3\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.12 | 84.6\% | 100.0\% | .0\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 2 \\ 50.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 50.0 \% \end{gathered}$ | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.12 | 15.4\% | .0\% | 100.0\% | 25.0\% |
|  |  |  | Count | 13 | 1 | 2 | 16 |
|  |  |  | \% within page (Binned) | 81.3\% | 6.3\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq2.12 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 2.13 - Pre-test

## Crosstab



|  |  |  | \% within q2.13 | 88.2\% | 63.6\% | 100.0\% | 80.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 18 | Count <br> \% within page (Binned) | 1 $20.0 \%$ | 4 40.0 | . 0 \% | 5 $100.0 \%$ |
|  |  |  | \% within page (Binned) \% within q2.13 | $20.0 \%$ $5.9 \%$ | 80.0\% $36.4 \%$ | .0\% | $\begin{gathered} \text { 100.0\% } \\ \text { 16.7\% } \end{gathered}$ |
|  |  | Under 20 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q2.13 | 5.9\% | .0\% | .0\% | 3.3\% |
|  |  |  | Count | 17 | 11 | 2 | 30 |
|  |  |  | \% within page (Binned) | 56.7\% | 36.7\% | 6.7\% | 100.0\% |
|  |  |  | \% within q2.13 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 9 | 10 |  | 19 |
|  | (Binned) |  | \% within page (Binned) | 47.4\% | 52.6\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 75.0\% | 90.9\% |  | 82.6\% |
|  |  | Under 18 | Count | 3 | 1 |  | 4 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 25.0\% | 9.1\% |  | 17.4\% |
|  |  |  | Count | 12 | 11 |  | 23 |
|  |  |  | \% within page (Binned) | 52.2\% | 47.8\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 100.0\% | 100.0\% |  | 100.0\% |
| School 6 | page | Under 16 | Count | 7 | 5 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 58.3\% | 41.7\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 87.5\% | 62.5\% |  | 75.0\% |
|  |  | Under 18 | Count | 1 | 3 |  | 4 |
|  |  |  | \% within page (Binned) | 25.0\% | 75.0\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 12.5\% | 37.5\% |  | 25.0\% |
|  |  |  | Count | 8 | 8 |  | 16 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% |  | 100.0\% |
|  |  |  | \% within q2.13 | 100.0\% | 100.0\% |  | 100.0\% |

## Question 2.13 - Post-test

Crosstab


|  |  |  | \% within pq2.13 | 95.7\% | 100.0\% | 96.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 18 | Count | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.13 | 4.3\% | .0\% | 3.3\% |
|  | Total |  | Count <br> \% within page (Binned) | 23 $76.7 \%$ | 7 23.3 | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 28 | 4 | 32 |
|  |  |  | \% within page (Binned) | 87.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 28 | 4 | 32 |
|  |  |  | \% within page (Binned) | 87.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 18 | 6 | 24 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.13 | 81.8\% | 75.0\% | 80.0\% |
|  |  | Under 18 | Count \% within page (Binned) | $\begin{gathered} 3 \\ 60.0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 40.0 \% \end{gathered}$ | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq2.13 | 60.0\% 13.6\% | 40.0\% 25.0\% | 100.0\% $16.7 \%$ |
|  |  | Under 20 | Count | ${ }^{1}$ | 0 | $1$ |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.13 | 4.5\% | .0\% | 3.3\% |
|  |  | Total | Count | 22 | 8 | 30 |
|  |  |  | \% within page (Binned) | 73.3\% | 26.7\% | 100.0\% |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 11 | 8 | 19 |
|  |  |  | \% within page (Binned) | 57.9\% | 42.1\% | 100.0\% |
|  |  |  | \% within pq2.13 | 73.3\% | 100.0\% | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq2.13 | 26.7\% | .0\% | 17.4\% |
|  |  | Total | Count | 15 | 8 | 23 |
|  |  |  | \% within page (Binned) | 65.2\% | 34.8\% | 100.0\% |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page (Binned) | Under 16 | Count | 9 | 3 | 12 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq2.13 | 81.8\% | 60.0\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 2 \\ 500 \% \end{gathered}$ | $\begin{gathered} 2 \\ 50.0 \% \end{gathered}$ | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq2.13 | 50.0\% 18.2\% | 50.0\% $40.0 \%$ | $100.0 \%$ $25.0 \%$ |
|  |  | Total | Count | 11 | 5 | 16 |
|  |  |  | \% within page (Binned) | 68.8\% | 31.3\% | 100.0\% |
|  |  |  | \% within pq2.13 | 100.0\% | 100.0\% | 100.0\% |

## Question 2.14 - Pre-test

## Crosstab




## Question 2.14 - Post-test

Crosstab



## Question 2.15 - Pre-test

## Crosstab

| school |  |  |  | q2.15 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count <br> \% within page (Binned) \% within q2.15 |  | $\begin{gathered} 3 \\ 42.9 \% \end{gathered}$ | $0$ | $\begin{gathered} 7 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |
|  |  |  |  | $\begin{aligned} & 57.1 \% \\ & 22.2 \% \end{aligned}$ | 21.4\% | .0\% | 21.2\% |
|  |  | Under 18 | Count <br> $\%$ within page (Binned) $\%$ within q2.15 | 5 | $2$ | $\begin{gathered} 1 \\ 12.5 \% \end{gathered}$ | $\begin{gathered} 8 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  | 62.5\% | 25.0\% |  |  |
|  |  |  |  | 27.8\% | 14.3\% | 12.5\% | 24.2\% |
|  |  | Under 20 | Count | 6 | 7$53.8 \%$ | 0 | 13 |
|  |  |  | \% within page (Binned) | $\begin{aligned} & 46.2 \% \\ & 33.3 \% \end{aligned}$ |  | .0\% | 100.0\% |
|  |  |  | \% within q2.15 |  | $\begin{aligned} & 53.8 \% \\ & 50.0 \% \end{aligned}$ | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 3 | 2 | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ |  |
|  |  |  | \% within page (Binned) | 60.0\% | 40.0\% |  | 100.0\% |
|  |  |  | \% within q2.15 | 16.7\% | 14.3\% | .0\% | 15.2\% |
|  |  | Total | Count | 18 | 14 | $\begin{gathered} 1 \\ 3.0 \% \end{gathered}$ | 33 |
|  |  |  | \% within page (Binned) | 54.5\% | 42.4\% |  | 100.0\% |
|  |  |  | \% within q2.15 | 100.0\% | 100.0\% | $\begin{aligned} & \text { 3.0\% } \\ & \text { 100.0\% } \end{aligned}$ | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count \% within page (Binned) |  | 3 | $\begin{gathered} 29 \\ 100.0 \% \end{gathered}$ |  |
|  |  |  |  | 89.7\% | 10.3\% |  |  |  |
|  |  |  | \% within q2.15 | 96.3\% | 100.0\% |  | 96.7\% |
|  |  | Under 18 | Count | $\begin{gathered} 1 \\ 100.0 \% \end{gathered}$ | 0 |  | 1 |
|  |  |  | \% within page (Binned) |  | .0\% |  | 100.0\% |
|  |  |  | \% within q2.15 | 3.7\% | .0\% |  | 3.3\% |
|  | page (Binned) | Under 16 | Count | $\begin{gathered} 27 \\ 90.0 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 3 \\ 10.0 \% \end{gathered}$ |  | 30 |
|  |  |  | \% within page (Binned) |  |  |  | 100.0\% |
|  |  |  | \% within q2.15 |  | 100.0\% |  | 100.0\% |
| School 3 |  |  | Count | $\begin{gathered} 100.0 \% \\ 29 \end{gathered}$ | 3$9.4 \%$ |  | 32 |
|  |  |  | \% within page (Binned) | $\begin{gathered} 90.6 \% \\ 100.0 \% \end{gathered}$ |  |  | 100.0\% |
|  |  |  | \% within q2.15 |  | $\begin{gathered} 9.4 \% \\ 100.0 \% \end{gathered}$ |  | 100.0\% |
|  |  |  | Count | 29 | 3 |  | 32 |
|  |  |  | \% within page (Binned) | 90.6\% | 9.4\% |  | 100.0\% |
|  |  |  | \% within q2.15 | 100.0\% | 100.0\% |  | 100.0\% |



## Question 2.15 - Post-test

## Crosstab

| school |  |  |  | pq2.15 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page | Under 16 | Count | 3 | 4 |  | 7 |
|  | (Binned) |  | \% within page (Binned) | 42.9\% | 57.1\% |  | 100.0\% |
|  |  |  | \% within pq2.15 | 16.7\% | 26.7\% |  | 21.2\% |
|  |  | Under 18 | Count | 5 | 3 |  | 8 |
|  |  |  | \% within page (Binned) | 62.5\% | 37.5\% |  | 100.0\% |
|  |  |  | \% within pq2.15 | 27.8\% | 20.0\% |  | 24.2\% |
|  |  | Under 20 | Count | 8 | 5 |  | 13 |
|  |  |  | \% within page (Binned) | 61.5\% | 38.5\% |  | 100.0\% |
|  |  |  | \% within pq2.15 | 44.4\% | 33.3\% |  | 39.4\% |
|  |  | Older than 20 | Count | 2 | 3 |  | 5 |
|  |  |  | \% within page (Binned) | 40.0\% | 60.0\% |  | 100.0\% |
|  |  |  | \% within pq2.15 | 11.1\% | 20.0\% |  | 15.2\% |
|  |  | Total | Count | 18 | 15 |  | 33 |
|  |  |  | \% within page (Binned) | 54.5\% | 45.5\% |  | 100.0\% |
|  |  |  | \% within pq2.15 | 100.0\% | 100.0\% |  | 100.0\% |
| School 2 | page | Under 16 | Count | 26 | 1 | 2 | 29 |



## Question 3.1 - Pre-test

Crosstab



## Question 3.1 - Post-test

Crosstab

| school |  |  |  | pq3.1 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page <br> (Binned) | Under 16 | Count | 3 | 2 | 2 | 7 |
|  |  |  | \% within page (Binned) | 42.9\% | 28.6\% | 28.6\% | 100.0\% |
|  |  |  | \% within pq3.1 | 13.6\% | 28.6\% | 50.0\% | 21.2\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq3.1 | 27.3\% | 14.3\% | 25.0\% | 24.2\% |
|  |  | Under 20 | Count | 10 | 3 | 0 | 13 |
|  |  |  | \% within page (Binned) | 76.9\% | 23.1\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.1 | 45.5\% | 42.9\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 3 | 1 | 1 | 5 |
|  |  |  | \% within page (Binned) | 60.0\% | 20.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq3.1 | 13.6\% | 14.3\% | 25.0\% | 15.2\% |
|  |  | Total | Count | 22 | 7 | 4 | 33 |
|  |  |  | \% within page (Binned) | 66.7\% | 21.2\% | 12.1\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 23 | 2 | 3 | 28 |
|  |  |  | \% within page (Binned) | 82.1\% | 7.1\% | 10.7\% | 100.0\% |
|  |  |  | \% within pq3.1 | 95.8\% | 100.0\% | 100.0\% | 96.6\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.1 | 4.2\% | .0\% | .0\% | 3.4\% |
|  |  | Total | Count | 24 | 2 | 3 | 29 |
|  |  |  | \% within page (Binned) | 82.8\% | 6.9\% | 10.3\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 28 | 1 | 3 | 32 |
|  |  |  | \% within page (Binned) | 87.5\% | 3.1\% | 9.4\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 28 | 1 | 3 | 32 |
|  |  |  | \% within page (Binned) | 87.5\% | 3.1\% | 9.4\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 17 | 2 | 5 | 24 |
|  |  |  | \% within page (Binned) | 70.8\% | 8.3\% | 20.8\% | 100.0\% |
|  |  |  | \% within pq3.1 | 81.0\% | 66.7\% | 83.3\% | 80.0\% |
|  |  | Under 18 | Count | 4 | 0 | ${ }^{1}$ | ${ }^{5}$ |
|  |  |  | \% within page (Binned) | 80.0\% | .0\% | 20.0\% | $100.0 \%$ |
|  |  |  | \% within pq3.1 | 19.0\% | .0\% | 16.7\% | 16.7\% |
|  |  | Under 20 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.1 | .0\% | 33.3\% | .0\% | 3.3\% |
|  |  | Total | Count | 21 | 3 | 6 | 30 |
|  |  |  | \% within page (Binned) | 70.0\% | 10.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 11 | 6 | 2 | 19 |
|  |  |  | \% within page (Binned) | 57.9\% | 31.6\% | 10.5\% | 100.0\% |
|  |  |  | \% within pq3.1 | 73.3\% | 100.0\% | 100.0\% | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 | 0 | 4 |


|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within pq3.1 | 26.7\% | .0\% | .0\% | 17.4\% |
|  |  |  | Count | 15 | 6 | 2 | 23 |
|  |  |  | \% within page (Binned) | 65.2\% | 26.1\% | 8.7\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page | Under 16 | Count | 10 | 1 | 1 | 12 |
|  | (Binned) |  | \% within page (Binned) | 83.3\% | 8.3\% | 8.3\% | 100.0\% |
|  |  |  | \% within pq3.1 | 76.9\% | 100.0\% | 50.0\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 3 \\ 75.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | 1 $25.0 \%$ | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq3.1 | 23.1\% | .0\% | 50.0\% | 25.0\% |
|  |  |  | Count | 13 | 1 | 2 | 16 |
|  |  |  | \% within page (Binned) | 81.3\% | 6.3\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq3.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 3.2 - Pre-test

Crosstab

| school |  |  |  | q3.2 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page <br> (Binned) | Under 16 | Count | 2 | 3 | 2 | 7 |
|  |  |  | \% within page (Binned) | 28.6\% | 42.9\% | 28.6\% | 100.0\% |
|  |  |  | \% within q3.2 | 18.2\% | 20.0\% | 40.0\% | 22.6\% |
|  |  | Under 18 | Count | 3 | 5 | 0 | 8 |
|  |  |  | \% within page (Binned) | 37.5\% | 62.5\% | .0\% | 100.0\% |
|  |  |  | \% within q3.2 | 27.3\% | 33.3\% | .0\% | 25.8\% |
|  |  | Under 20 | Count | 5 | 4 | 2 | 11 |
|  |  |  | \% within page (Binned) | 45.5\% | 36.4\% | 18.2\% | 100.0\% |
|  |  |  | \% within q3.2 | 45.5\% | 26.7\% | 40.0\% | 35.5\% |
|  |  | Older than 20 | Count | 1 | 3 | 1 | 5 |
|  |  |  | \% within page (Binned) | 20.0\% | 60.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within q3.2 | 9.1\% | 20.0\% | 20.0\% | 16.1\% |
|  |  | Total | Count | 11 | 15 | 5 | 31 |
|  |  |  | \% within page (Binned) | 35.5\% | 48.4\% | 16.1\% | 100.0\% |
|  |  |  | \% within q3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 13 | 14 | 2 | 29 |
|  |  |  | \% within page (Binned) | 44.8\% | 48.3\% | 6.9\% | 100.0\% |
|  |  |  | \% within q3.2 | 100.0\% | 93.3\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q3.2 | .0\% | 6.7\% | .0\% | 3.3\% |
|  |  | Total | Count | 13 | 15 | 2 | 30 |
|  |  |  | \% within page (Binned) | 43.3\% | 50.0\% | 6.7\% | 100.0\% |
|  |  |  | $\%$ within q3.2 | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| School 3 | page (Binned) | Under 16 | Count | 21 | $\begin{gathered} 10 \\ 313 \% \end{gathered}$ | $\begin{aligned} & 1 \\ & 31 \% \end{aligned}$ |  |
|  |  |  | \% within page (Binned) $\%$ within q3.2 | $\begin{gathered} \text { 65.6\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{gathered} 31.3 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} \text { 3.1\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |
|  |  | Total | Count | 100.0\% 21 | $100.0 \%$ 10 | $100.0 \%$ 1 | $100.0 \%$ 32 |
|  |  |  | \% within page (Binned) | 65.6\% | 31.3\% | 3.1\% | 100.0\% |
|  |  |  | \% within q3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 10 | 13 | 1 | 24 |



## Question 3.2 - Post-test Crosstab

| school |  |  |  | pq3.2 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 6 | 0 | 1 | 7 |
|  |  |  | \% within page (Binned) | 85.7\% | .0\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq3.2 | 27.3\% | .0\% | 50.0\% | 21.2\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq3.2 | 27.3\% | 11.1\% | 50.0\% | 24.2\% |
|  |  | Under 20 | Count | 6 | 7 | 0 | 13 |
|  |  |  | \% within page (Binned) | 46.2\% | 53.8\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.2 | 27.3\% | 77.8\% | .0\% | 39.4\% |
|  |  | Ider than 20 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.2 | 18.2\% | 11.1\% | .0\% | 15.2\% |
|  |  | Total | Count | 22 | 9 | 2 | 33 |
|  |  |  | \% within page (Binned) | 66.7\% | 27.3\% | 6.1\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 18 | 6 | 5 | 29 |
|  |  |  | \% within page (Binned) | 62.1\% | 20.7\% | 17.2\% | 100.0\% |


|  |  |  | \% within pq3.2 | 100.0\% | 85.7\% | 100.0\% | 96.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 18 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.2 | .0\% | 14.3\% | .0\% | 3.3\% |
|  | Total |  | Count <br> \% within page (Binned) | $\begin{gathered} 18 \\ 60.0 \% \end{gathered}$ | 7 $23.3 \%$ | 5 $16.7 \%$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | $16$ | 14 | 2 | 32 |
|  |  |  | $\%$ within page (Binned) | $50.0 \%$ | 43.8\% | 6.3\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 16 | 14 | 2 | 32 |
|  |  |  | \% within page (Binned) | 50.0\% | 43.8\% | 6.3\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 13 | 9 | 2 | 24 |
|  |  |  | \% within page (Binned) | 54.2\% | 37.5\% | 8.3\% | 100.0\% |
|  |  |  | \% within pq3.2 | 86.7\% | 69.2\% | 100.0\% | 80.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 2 \\ 40.0 \% \end{gathered}$ | $\begin{gathered} 3 \\ 60.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq3.2 | 40.0\% 13.3\% | 60.0\% 23.1\% | .0\% | 100.0\% |
|  |  | Under 20 | Count | 0 | $1{ }^{1}$ | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.2 | .0\% | 7.7\% | .0\% | 3.3\% |
|  |  | Total | Count | 15 | 13 | 2 | 30 |
|  |  |  | \% within page (Binned) | 50.0\% | 43.3\% | 6.7\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 14 | 2 | 2 | 18 |
|  |  |  | \% within page (Binned) | 77.8\% | 11.1\% | 11.1\% | 100.0\% |
|  |  |  | \% within pq3.2 | 87.5\% | 50.0\% | 100.0\% | 81.8\% |
|  |  | Under 18 | Count | 2 | 2 | 0 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.2 | 12.5\% | 50.0\% | .0\% | 18.2\% |
|  |  | Total | Count | 16 | 4 | 2 | 22 |
|  |  |  | \% within page (Binned) | 72.7\% | 18.2\% | 9.1\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page (Binned) | Under 16 | Count | 8 | 2 | 2 | 12 |
|  |  |  | \% within page (Binned) | 66.7\% | 16.7\% | 16.7\% | 100.0\% |
|  |  |  | \% within pq3.2 | 88.9\% | 50.0\% | 66.7\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 1 \\ 25.0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 50.0 \% \end{gathered}$ | $\begin{gathered} 1 \\ 25.0 \% \end{gathered}$ | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within pq3.2 | 25.0\% 11.1\% | $50.0 \%$ $50.0 \%$ | 25.0\% | $100.0 \%$ 25.0\% |
|  |  | Total | Count | 9 | 4 | 3 | 16 |
|  |  |  | \% within page (Binned) | 56.3\% | 25.0\% | 18.8\% | 100.0\% |
|  |  |  | \% within pq3.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 3.3 - Pre-test

Crosstab


Question 3.3 - Post-test Crosstab


| School 6 | Total |  | Count | 17 | 2 | 2 | 21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within page (Binned) | 81.0\% | $9.5 \%$ | 9.5\% | 100.0\% |
|  | page <br> (Binned) | Under 16 | \% within pq3.3 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 11 |  | 1 | 12 |
|  |  |  | \% within page (Binned) | 91.7\% |  | 8.3\% | 100.0\% |
|  |  |  | \% within pq3.3 | 91.7\% |  | 25.0\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | 1 $25.0 \%$ |  | $\begin{gathered} 3 \\ 75.0 \% \end{gathered}$ | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq3.3 | 8.3\% |  | 75.0\% | 25.0\% |
|  |  | Total | Count | 12 |  | 4 | 16 |
|  |  |  | \% within page (Binned) | 75.0\% |  | 25.0\% | 100.0\% |
|  |  |  | \% within pq3.3 | 100.0\% |  | 100.0\% | 100.0\% |

## Question 3.4 - Pre-test

## Crosstab




## Question 3.4 - Post-test

Crosstab


|  |  |  | \% within page (Binned) \% within pq3.4 | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ | $\begin{gathered} 100.0 \% \\ 5.3 \% \end{gathered}$ | $\begin{aligned} & .0 \% \\ & .0 \% \end{aligned}$ | $\begin{gathered} 100.0 \% \\ 3.3 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count $\%$ within page (Binned) | $\begin{gathered} 8 \\ 26.7 \% \end{gathered}$ | $\begin{gathered} 19 \\ 63.3 \% \end{gathered}$ | $\begin{gathered} 3 \\ 10.0 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count \% within page (Binned) | 3 $9.7 \%$ | 25 $80.6 \%$ | 3 $9.7 \%$ | 31 $100.0 \%$ |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 3 | 25 | 3 | 31 |
|  |  |  | \% within page (Binned) | 9.7\% | 80.6\% | 9.7\% | 100.0\% |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 6 | 15 | 2 | 23 |
|  | (Binned) |  | \% within page (Binned) | 26.1\% | 65.2\% | 8.7\% | 100.0\% |
|  |  |  | \% within pq3.4 | 75.0\% | 83.3\% | 66.7\% | 79.3\% |
|  |  | Under 18 | Count | 1 | 3 | 1 | ${ }^{5}$ |
|  |  |  | \% within page (Binned) | 20.0\% | 60.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq3.4 | 12.5\% | 16.7\% | 33.3\% | 17.2\% |
|  |  | Under 20 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | . $0 \%$ | 100.0\% |
|  |  |  | \% within pq3.4 | 12.5\% | . $0 \%$ | .0\% | 3.4\% |
|  |  |  | Count | 8 | 18 | 3 | 29 |
|  |  |  | \% within page (Binned) | 27.6\% | 62.1\% | 10.3\% | 100.0\% |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 6 | 11 | 1 | 18 |
|  | (Binned) |  | \% within page (Binned) | 33.3\% | 61.1\% | 5.6\% | 100.0\% |
|  |  |  | \% within pq3.4 | 75.0\% | 84.6\% | 100.0\% | 81.8\% |
|  |  | Under 18 | Count | 2 | 2 | 0 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.4 | 25.0\% | 15.4\% | .0\% | 18.2\% |
|  |  |  | Count | 8 | 13 | 1 | 22 |
|  |  |  | \% within page (Binned) | 36.4\% | 59.1\% | 4.5\% | 100.0\% |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page | Under 16 | Count | 4 | 6 | 1 | 11 |
|  | (Binned) |  | \% within page (Binned) | 36.4\% | 54.5\% | 9.1\% | 100.0\% |
|  |  |  | \% within pq3.4 | 66.7\% | 75.0\% | 100.0\% | 73.3\% |
|  |  | Under 18 | Count | 2 | 2 | 0 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | 50.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq3.4 | 33.3\% | 25.0\% | .0\% | 26.7\% |
|  |  |  | Count | 6 | 8 | 1 | 15 |
|  |  |  | \% within page (Binned) | 40.0\% | 53.3\% | 6.7\% | 100.0\% |
|  |  |  | \% within pq3.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 4.1 - Pre-test

Crosstab

| school |  |  |  | q4.1 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | $\begin{gathered} \text { page } \\ \text { (Binned) } \end{gathered}$ | Under 16 | Count | 6 | 1 |  | 7 |
|  |  |  | \% within page (Binned) | 85.7\% | 14.3\% |  | 100.0\% |
|  |  |  | \% within q4.1 | 20.7\% | 25.0\% |  | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 |  | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q4.1 | 27.6\% | .0\% |  | 24.2\% |


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 20 |  |  |  |
|  |  |  |  |  |  |
|  |  |  | Count | 10 | 3 |

## Question 4.1 - Post-test

## Crosstab



| School 6 | page (Binned) | Under 16 | \% within page (Binned) | 60.9\% | 30.4\% | 8.7\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within pq4.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 10 | 1 | 1 | 12 |
|  |  |  | \% within page (Binned) | 83.3\% | 8.3\% | 8.3\% | 100.0\% |
|  |  |  | \% within pq4.1 | 76.9\% | 50.0\% | 100.0\% | 75.0\% |
|  |  | Under 18Total | Count \% within page (Binned) | $\begin{gathered} 3 \\ 75.0 \% \end{gathered}$ | 1 $25.0 \%$ | . 0 | $\begin{gathered} 4 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq4.1 | 23.1\% | 50.0\% | .0\% | 25.0\% |
|  |  |  | Count | 13 | 2 | 1 | 16 |
|  |  |  | \% within page (Binned) | 81.3\% | 12.5\% | 6.3\% | 100.0\% |
|  |  |  | \% within pq4.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 4.2 - Pre-test

Crosstab



## Question 4.2 - Post-test

Crosstab

| school |  |  |  | pq4.2 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count <br> \% within page (Binned) \% within pq4.2 | $\begin{gathered} 4 \\ 57.1 \% \end{gathered}$ | $\begin{gathered} 2 \\ 28.6 \% \end{gathered}$ | $\begin{gathered} 1 \\ 14.3 \% \end{gathered}$ | $\begin{gathered} 7 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |
|  |  |  |  | 17.4\% | 25.0\% | 50.0\% | 21.2\% |
|  |  | Under 18 | Count <br> $\%$ within page (Binned) | 6 | $2$ | 0 | $8$ |
|  |  |  |  | 75.0\% | 25.0\% | .0\% | 100.0\% |
|  |  | Under 20 | \% within pq4.2 |  | 25.0\% | .0\% | 24.2\% |
|  |  |  | Count | 10 | 3 | 0 | 13 |
|  |  |  | \% within page (Binned) | 76.9\% | 23.1\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.2 | 43.5\% | 37.5\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | $3$ | 1 | $1$ | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) | $60.0 \%$ | 20.0\% | 20.0\% |  |
|  |  |  | \% within pq4.2 | 13.0\% | 12.5\% | 50.0\% | 15.2\% |
|  |  | Total | Count | 23 | 8 | 2 | 33 |
|  |  |  | \% within page (Binned) | 69.7\% | 24.2\% | 6.1\% | 100.0\% |
|  |  |  | \% within pq4.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page | Under 16 | Count | $18$ | $7$ | $4$ | 29 |
|  | (Binned) |  | \% within page (Binned) | 62.1\% | 24.1\% |  | 100.0\% |
|  |  |  | \% within pq4.2 | 94.7\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.2 | $\begin{gathered} 5.3 \% \\ 19 \\ 63.3 \% \end{gathered}$ | $\begin{gathered} .0 \% \\ 7 \\ 23.3 \% \end{gathered}$ | $\begin{gathered} .0 \% \\ 4 \\ 13.3 \% \end{gathered}$ | $\begin{gathered} 3.3 \% \\ 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | Count <br> \% within page (Binned) |  |  |  |  |



## Question 4.3 - Pre-test

Crosstab

| school |  |  |  | q4.3 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 5 | 2 | 0 | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 28.6\% | .0\% | 100.0\% |
|  |  |  | \% within q4.3 | 17.9\% | 50.0\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 | 0 | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.3 | 28.6\% | .0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 11 | 1 | 1 | 13 |
|  |  |  | \% within page (Binned) | 84.6\% | 7.7\% | 7.7\% | 100.0\% |
|  |  |  | \% within q4.3 | 39.3\% | 25.0\% | 100.0\% | 39.4\% |
|  |  | Older than 20 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |


|  |  |  | \% within q4.3 | 14.3\% | 25.0\% | .0\% | 15.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count | 28 | 4 | 1 | 33 |
|  |  |  | \% within page (Binned) | 84.8\% | 12.1\% | 3.0\% | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page | Under 16 | Count | 26 | 1 | 2 | 29 |
|  | (Binned) |  | \% within page (Binned) | 89.7\% | 3.4\% | 6.9\% | 100.0\% |
|  |  |  | \% within q4.3 | 96.3\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.3 | 3.7\% | .0\% | .0\% | 3.3\% |
|  |  |  | Count \% within page (Binned) | 27 $90.0 \%$ | 1 $3.3 \%$ | $\begin{gathered} 2 \\ 6.7 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page | Under 16 | Count | 31 | 1 |  | 32 |
|  | (Binned) |  | \% within page (Binned) | 96.9\% | 3.1\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% |  | 100.0\% |
|  |  |  | Count | 31 | 1 |  | 32 |
|  |  |  | \% within page (Binned) | 96.9\% | 3.1\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% |  | 100.0\% |
| School 4 | page | Under 16 | Count | 24 |  |  | 24 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q4.3 | 82.8\% |  |  | 82.8\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q4.3 | 13.8\% |  |  | 13.8\% |
|  |  | Under 20 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q4.3 | 3.4\% |  |  | 3.4\% |
|  |  |  | Count | 29 |  |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% |  |  | 100.0\% |
| School 5 | page | Under 16 | Count | 18 | 1 |  | 19 |
|  | (Binned) |  | \% within page (Binned) | 94.7\% | 5.3\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 81.8\% | 100.0\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 18.2\% | .0\% |  | 17.4\% |
|  |  |  | Count | 22 | 1 |  | 23 |
|  |  |  | \% within page (Binned) | 95.7\% | 4.3\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% |  | 100.0\% |
| School 6 | page | Under 16 | Count | 12 | 0 |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 80.0\% | .0\% |  | 75.0\% |
|  |  | Under 18 | Count | 3 | 1 |  | $4$ |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 20.0\% | 100.0\% |  | 25.0\% |
|  |  |  | Count | 15 | 1 |  | 16 |
|  |  |  | \% within page (Binned) | 93.8\% | 6.3\% |  | 100.0\% |
|  |  |  | \% within q4.3 | 100.0\% | 100.0\% |  | 100.0\% |

## Question 4.3 - Post-test <br> Crosstab

|  |  |  |  | Yes | No | Uncertain | Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School 1 | page (Binned) | Under 16 | Count | 5 | 1 | 1 | 7 |
|  |  |  | \% within page (Binned) | 71.4\% | 14.3\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq4.3 | 17.9\% | 25.0\% | 100.0\% | 21.2\% |
|  |  | Under 18 | Count | 7 | 1 | 0 | 8 |
|  |  |  | \% within page (Binned) | 87.5\% | 12.5\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 25.0\% | 25.0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 11 | 2 | 0 | 13 |
|  |  |  | \% within page (Binned) | 84.6\% | 15.4\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 39.3\% | 50.0\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 5 | 0 | 0 | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 17.9\% | .0\% | .0\% | 15.2\% |
|  |  | Total | Count | 28 | 4 | 1 | 33 |
|  |  |  | \% within page (Binned) | 84.8\% | 12.1\% | 3.0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 23 | 2 | 4 | 29 |
|  |  |  | \% within page (Binned) | 79.3\% | 6.9\% | 13.8\% | 100.0\% |
|  |  |  | \% within pq4.3 | 95.8\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 4.2\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count | 24 | $\begin{gathered} 2 \\ 670 \end{gathered}$ | 4 ${ }^{4}$ |  |
|  |  |  | \% within page (Binned) | 80.0\% | 6.7\% | 13.3\% | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% |  |  | 100.0\% |
|  |  | Total | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% |  |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 |  | 0 | 24 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 82.8\% |  | .0\% | 80.0\% |
|  |  | Under 18 | Count | 4 |  |  |  |
|  |  |  | \% within page (Binned) <br> \% within pq4. 3 | $\begin{aligned} & 80.0 \% \\ & 138 \% \end{aligned}$ |  | 20.0\% | $100.0 \%$ |
|  |  | Under 20 | \% within pq4.3 Count | 13.8\% 1 |  | 100.0\% 0 | $16.7 \%$ 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within pq4.3 | 3.4\% |  | .0\% | 3.3\% |
|  |  | Total | Count | 29 |  | 1 | 30 |
|  |  |  | \% within page (Binned) | 96.7\% |  | 3.3\% | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% |  | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 19 |  |  | 19 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq4.3 | 82.6\% |  |  | 82.6\% |
|  |  | Under 18 | Count | 4 |  |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq4.3 | 17.4\% |  |  | 17.4\% |
|  |  | Total | Count | 23 |  |  | 23 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq4.3 | 100.0\% |  |  | 100.0\% |
| School 6 | page | Under 16 | Count | 12 |  |  | 12 |
|  | (Binned) |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |


|  | \% within pq4.3 | $75.0 \%$ |  | $75.0 \%$ |
| :---: | :---: | :---: | :---: | :---: |
| Under 18 | Count | 4 | 4 |  |
|  | \% within page (Binned) | $100.0 \%$ |  | $100.0 \%$ |
|  | \% within pq4.3 | $25.0 \%$ | $25.0 \%$ |  |
|  | Count | 16 | 16 |  |
|  | \% within page (Binned) | $100.0 \%$ | $100.0 \%$ |  |
|  | \% within pq4.3 | $100.0 \%$ |  | $100.0 \%$ |

## Question 4.4 - Pre-test

Crosstab

| school |  |  |  | q4.4 |  |  | Total Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page <br> (Binned) | Under 16 | Count | 2 | 4 | 1 | 7 |
|  |  |  | \% within page (Binned) | 28.6\% | 57.1\% | 14.3\% | 100.0\% |
|  |  |  | \% within q4.4 | 12.5\% | 30.8\% | 25.0\% | 21.2\% |
|  |  | Under 18 | Count | 5 | 2 | 1 | 8 |
|  |  |  | \% within page (Binned) | 62.5\% | 25.0\% | 12.5\% | 100.0\% |
|  |  |  | \% within q4.4 | 31.3\% | 15.4\% | 25.0\% | 24.2\% |
|  |  | Under 20 | Count | 7 | 4 | 2 | 13 |
|  |  |  | \% within page (Binned) | 53.8\% | 30.8\% | 15.4\% | 100.0\% |
|  |  |  | \% within q4.4 | 43.8\% | 30.8\% | 50.0\% | 39.4\% |
|  |  | Older than 20 | Count | 2 | 3 | 0 | 5 |
|  |  |  | \% within page (Binned) | 40.0\% | 60.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.4 | 12.5\% | 23.1\% | .0\% | 15.2\% |
|  |  | Total | Count | 16 | 13 | 4 | 33 |
|  |  |  | \% within page (Binned) | 48.5\% | 39.4\% | 12.1\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 4 | 18 | 6 | 28 |
|  |  |  | \% within page (Binned) | 14.3\% | 64.3\% | 21.4\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 85.7\% | 96.6\% |
|  |  | Under 18 | Count | 0 | 0 | 1 | 1 |
|  |  |  | \% within page (Binned) | .0\% | .0\% | 100.0\% | 100.0\% |
|  |  |  | \% within q4.4 | .0\% | .0\% | 14.3\% | 3.4\% |
|  |  | otal | Count | 4 | 18 | 7 | 29 |
|  |  |  | \% within page (Binned) | 13.8\% | 62.1\% | 24.1\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page <br> (Binned) | Under 16 | Count | 25 | 2 | 5 | 32 |
|  |  |  | \% within page (Binned) | 78.1\% | 6.3\% | 15.6\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 25 | 2 | 5 | 32 |
|  |  |  | \% within page (Binned) | 78.1\% | 6.3\% | 15.6\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 16 | 7 | 1 | 24 |
|  |  |  | \% within page (Binned) | 66.7\% | 29.2\% | 4.2\% | 100.0\% |
|  |  |  | \% within q4.4 | 80.0\% | 77.8\% | 100.0\% | 80.0\% |
|  |  | Under 18 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.4 | 20.0\% | 11.1\% | .0\% | 16.7\% |
|  |  | Under 20 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | . $0 \%$ | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.4 | . $0 \%$ | 11.1\% | .0\% | 3.3\% |
|  |  | Total | Count | 20 | 9 | 1 | 30 |


| School 5 | page (Binned) |  | \% within page (Binned) $\%$ within q4.4 | $\begin{gathered} 66.7 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} \text { 30.0\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{gathered} \text { 3.3\% } \\ \text { 100.0\% } \end{gathered}$ | $\begin{aligned} & \text { 100.0\% } \\ & \text { 100.0\% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 16 | Count | 18 |  | 1 | 19 |
|  |  |  | \% within page (Binned) | 94.7\% |  | 5.3\% | 100.0\% |
|  |  |  | \% within q4.4 | 81.8\% |  | 100.0\% | 82.6\% |
|  |  | Under 18 | Count | 4 |  | 0 | 4 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within q4.4 | 18.2\% |  | .0\% | 17.4\% |
|  |  |  | Count | 22 |  | 1 | 23 |
|  |  |  | \% within page (Binned) | 95.7\% |  | 4.3\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% |  | 100.0\% | 100.0\% |
| School 6 | page (Binned) | Under 16 | Count | 5 | 6 | 1 | 12 |
|  |  |  | \% within page (Binned) | 41.7\% | 50.0\% | 8.3\% | 100.0\% |
|  |  |  | \% within q4.4 | 62.5\% | 85.7\% | 100.0\% | 75.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) |  | $\stackrel{1}{0}$ |  |  |
|  |  |  | $\%$ within page (Binned) <br> \% within q4.4 | $\begin{aligned} & 75.0 \% \\ & 37.5 \% \end{aligned}$ | $\begin{aligned} & 25.0 \% \\ & 14.3 \% \end{aligned}$ | .0\% | $\begin{gathered} 100.0 \% \\ 25.0 \% \end{gathered}$ |
|  |  | Total | \% within q4.4 Count | $37.5 \%$ 8 | $14.3 \%$ 7 | $.0 \%$ 1 | $\begin{gathered} 25.0 \% \\ 16 \end{gathered}$ |
|  |  |  | \% within page (Binned) | 50.0\% | 43.8\% | 6.3\% | 100.0\% |
|  |  |  | \% within q4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 4.4 - Post-test

Crosstab

| school |  |  |  | pq4.4 |  |  | Total <br> Yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page(Binned) | Under 16 | Count | 3 | 3 | 1 | 7 |
|  |  |  | \% within page (Binned) | 42.9\% | 42.9\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq4.4 | 15.0\% | 37.5\% | 25.0\% | 21.9\% |
|  |  | Under 18 | Count | 5 | 1 | 2 | 8 |
|  |  |  | \% within page (Binned) | 62.5\% | 12.5\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq4.4 | 25.0\% | 12.5\% | 50.0\% | 25.0\% |
|  |  | Under 20 | Count | 8 | 4 | 0 | 12 |
|  |  |  | \% within page (Binned) | 66.7\% | 33.3\% | .0\% | 100.0\% |
|  |  |  | \% within pq4.4 | 40.0\% | 50.0\% | .0\% | 37.5\% |
|  |  | Older than 20 | Count | 4 | 0 | 1 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | .0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq4.4 | 20.0\% | .0\% | 25.0\% | 15.6\% |
|  | Total |  | Count | 20 | 8 | 4 | 32 |
|  |  |  | \% within page (Binned) | 62.5\% | 25.0\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 12 | 13 | 4 | 29 |
|  |  |  | \% within page (Binned) | 41.4\% | 44.8\% | 13.8\% | 100.0\% |
|  |  |  | \% within pq4.4 | 100.0\% | 100.0\% | 80.0\% | 96.7\% |
|  |  | Under 18 | Count | 0 | 0 | 1 | 1 |
|  |  |  | \% within page (Binned) | .0\% | .0\% | 100.0\% | 100.0\% |
|  |  |  | \% within pq4.4 | .0\% | .0\% | 20.0\% | 3.3\% |
|  |  | Total | Count | $12$ | $13$ |  | $30$ |
|  |  |  | $\%$ within page (Binned) | $40.0 \%$ | $43.3 \%$ | $16.7 \%$ | 100.0\% |
|  |  |  | \% within pq4.4 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count \% within page (Binned) | $\begin{gathered} 27 \\ 84.4 \% \end{gathered}$ | $\begin{gathered} 2 \\ 6.3 \% \end{gathered}$ | $\begin{gathered} 3 \\ 9.4 \% \end{gathered}$ | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |



## Question 4.5 - Pre-test

Crosstab

| school |  |  |  | q4.5 |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Yes |
| School 1 | page (Binned) | Under 16 | Count | 7 | 0 | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.5 | 21.9\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.5 | 25.0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 12 | 1 | 13 |
|  |  |  | \% within page (Binned) | 92.3\% | 7.7\% | 100.0\% |
|  |  |  | \% within q4.5 | 37.5\% | 100.0\% | 39.4\% |
|  |  | Older than 20 | Count | 5 | 0 | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q4.5 | 15.6\% | .0\% | 15.2\% |
|  |  |  | Count | 32 | 1 | 33 |



## Question 4.5 - Post-test

## Crosstab




Total

| Count | 16 |
| :---: | :---: |
| \% within page (Binned) | $100.0 \%$ |
| \% within pq4.5 | $100.0 \%$ |

100.0\%

## Question 5.1 - Pre-test

## Crosstab

| school |  |  |  | q5.1 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 | Agree | 9 | 0 |
| School 1 | page (Binned) | Under 16 | Count | 4 | 1 | 2 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 14.3\% | 28.6\% | 100.0\% |
|  |  |  | \% within q5.1 | 18.2\% | 12.5\% | 66.7\% | 21.2\% |
|  |  | Under 18 | Count | 7 | 0 | 1 | 8 |
|  |  |  | \% within page (Binned) | 87.5\% | .0\% | 12.5\% | 100.0\% |
|  |  |  | \% within q5.1 | 31.8\% | .0\% | 33.3\% | 24.2\% |
|  |  | Under 20 | Count | 6 | 7 | 0 | 13 |
|  |  |  | \% within page (Binned) | 46.2\% | 53.8\% | .0\% | 100.0\% |
|  |  |  | \% within q5.1 | 27.3\% | 87.5\% | .0\% | 39.4\% |
|  |  | Older than 20 | Count | 5 | 0 | 0 | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.1 | 22.7\% | .0\% | .0\% | 15.2\% |
|  |  | Total | Count | 22 | 8 | 3 | 33 |
|  |  |  | \% within page (Binned) | 66.7\% | 24.2\% | 9.1\% | 100.0\% |
|  |  |  | \% within q5.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 24 |  | 5 | 29 |
|  |  |  | \% within page (Binned) | 82.8\% |  | 17.2\% | 100.0\% |
|  |  |  | \% within q5.1 | 96.0\% |  | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 |  | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  | .0\% | 100.0\% |
|  |  |  | \% within q5.1 | 4.0\% |  | .0\% | 3.3\% |
|  |  | Total | Count | $\begin{gathered} 25 \\ 83 \text { 30 } \end{gathered}$ |  |  |  |
|  |  |  | \% within page (Binned) | 83.3\% |  | 16.7\% | 100.0\% |
|  |  |  | \% within q5.1 | 100.0\% |  | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 31 |  | 1 | 32 |
|  |  |  | \% within page (Binned) | 96.9\% |  | 3.1\% | 100.0\% |
|  |  |  | \% within q5.1 | 100.0\% |  | 100.0\% | 100.0\% |
|  |  | Total | Count | 31 |  | 1 | 32 |
|  |  |  | \% within page (Binned) | 96.9\% |  | 3.1\% | 100.0\% |
|  |  |  | \% within q5.1 | 100.0\% |  | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 23 | 1 | 0 | 24 |
|  |  |  | \% within page (Binned) | 95.8\% | 4.2\% | .0\% | 100.0\% |
|  |  |  | \% within q5.1 | 82.1\% | 100.0\% | .0\% | 80.0\% |
|  |  | Under 18 | Count | $4$ | 0 | $\begin{gathered} 1 \\ 00 \% \end{gathered}$ |  |
|  |  |  | \% within page (Binned) \% within q5.1 | $\begin{aligned} & \text { 80.0\% } \\ & \text { 14.3\% } \end{aligned}$ | .0\% | $\begin{gathered} \text { 20.0\% } \\ \text { 100.0\% } \end{gathered}$ | $100.0 \%$ |
|  |  | Under 20 | Count | $14.3 \%$ 1 | . 0 | 100.0\% 0 | $16.7 \%$ 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.1 | 3.6\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count | 28 | 1 | 1 | 30 |
|  |  |  | \% within page (Binned) | 93.3\% | 3.3\% | 3.3\% | 100.0\% |
|  |  |  | \% within q5.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page <br> (Binned) | Under 16 | Count | 14 |  | 5 | 19 |
|  |  |  | \% within page (Binned) | 73.7\% |  | 26.3\% | 100.0\% |
|  |  |  | \% within q5.1 | 77.8\% |  | 100.0\% | 82.6\% |



## Question 5.1 - Post-test

## Crosstab

| school |  |  |  | pq5.1 |  |  | Total <br> 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 | Agree | 9 |  |
| School 1 | page (Binned) | Under 16 | Count | 5 | 1 | 1 | 7 |
|  |  |  | \% within page (Binned) | $71.4 \%$ | 14.3\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq5.1 | 20.0\% | 25.0\% | 25.0\% | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 | 0 | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq5.1 | 32.0\% | .0\% | .0\% | 24.2\% |
|  |  | Under 20 | Count | 8 | 3 | 2 | 13 |
|  |  |  | \% within page (Binned) | 61.5\% | 23.1\% | 15.4\% | 100.0\% |
|  |  |  | \% within pq5.1 | 32.0\% | 75.0\% | 50.0\% | 39.4\% |
|  |  | Older than 20 | Count | 4 | 0 | 1 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | .0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq5.1 | 16.0\% | .0\% | 25.0\% | 15.2\% |
|  |  | Total | Count | 25 | 4 | 4 | 33 |
|  |  |  | \% within page (Binned) | 75.8\% | 12.1\% | 12.1\% | 100.0\% |
|  |  |  | \% within pq5.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 20 | 1 | 8 | 29 |
|  |  |  | \% within page (Binned) | 69.0\% | 3.4\% | 27.6\% | 100.0\% |
|  |  |  | \% within pq5.1 | 95.2\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq5.1 | 4.8\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count | 21 | 1 | 8 | 30 100 |
|  |  |  | \% within page (Binned) | 70.0\% | 3.3\% | 26.7\% | 100.0\% |
|  | page (Binned) |  | \% within pq5.1 Count | $\begin{gathered} 100.0 \% \\ 32 \end{gathered}$ | 100.0\% | 100.0\% | $\begin{gathered} 100.0 \% \\ 32 \end{gathered}$ |
| School 3 |  | Under 16 | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq5.1 | 100.0\% |  |  | 100.0\% |
|  |  | Total | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq5.1 | 100.0\% |  |  | 100.0\% |



## Question 5.2 - Pre-test

Crosstab

| school |  |  |  | q5.2 |  |  | Total 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 | Agree | 9 |  |
| School 1 | page (Binned) | Under 16 | Count | 4 | 1 | 2 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 14.3\% | 28.6\% | 100.0\% |
|  |  |  | \% within q5.2 | 36.4\% | 6.3\% | 33.3\% | 21.2\% |
|  |  | Under 18 | Count | 2 | 4 | 2 | 8 |
|  |  |  | \% within page (Binned) | 25.0\% | 50.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within q5.2 | 18.2\% | 25.0\% | 33.3\% | 24.2\% |
|  |  | Under 20 | Count | 3 | 8 | 2 | 13 |
|  |  |  | \% within page (Binned) | 23.1\% | 61.5\% | 15.4\% | 100.0\% |
|  |  |  | \% within q5.2 | 27.3\% | 50.0\% | 33.3\% | 39.4\% |
|  |  | Older than 20 | Count | 2 | 3 | 0 | 5 |
|  |  |  | \% within page (Binned) | 40.0\% | 60.0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.2 | 18.2\% | 18.8\% | .0\% | 15.2\% |
|  |  | Total | Count | 11 | 16 | 6 | 33 |
|  |  |  | \% within page (Binned) | 33.3\% | 48.5\% | 18.2\% | 100.0\% |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 11 | 8 | 10 | 29 |
|  |  |  | \% within page (Binned) | 37.9\% | 27.6\% | 34.5\% | 100.0\% |


|  |  |  | \% within q5.2 | 100.0\% | 88.9\% | 100.0\% | 96.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 18 | Count | 0 | 1 | 0 | 1 |
|  |  |  | \% within page (Binned) | .0\% | 100.0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.2 | .0\% | 11.1\% | .0\% | 3.3\% |
|  | Total |  | Count <br> \% within page (Binned) | $\begin{gathered} 11 \\ 36.7 \% \end{gathered}$ | 9 $30.0 \%$ | 10 $33.3 \%$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count \% within page (Binned) | 13 $40.6 \%$ | 12 $37.5 \%$ | 7 $21.9 \%$ | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 13 | 12 | 7 | 32 |
|  |  |  | \% within page (Binned) | 40.6\% | 37.5\% | 21.9\% | 100.0\% |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 8 | 5 | 11 | 24 |
|  |  |  | \% within page (Binned) | 33.3\% | 20.8\% | 45.8\% | 100.0\% |
|  |  |  | \% within q5.2 | 72.7\% | 71.4\% | 91.7\% | 80.0\% |
|  |  | Under 18 | Count | $2$ | $2$ | $\begin{gathered} 1 \\ 0 \end{gathered}$ | 5 |
|  |  |  | \% within page (Binned) | 40.0\% | 40.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within q5.2 | 18.2\% | 28.6\% | 8.3\% | 16.7\% |
|  |  | Under 20 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.2 | 9.1\% | .0\% | .0\% | 3.3\% |
|  |  | Total | Count | 11 | 7 | 12 | 30 |
|  |  |  | \% within page (Binned) | 36.7\% | 23.3\% | 40.0\% | 100.0\% |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 12 | 1 | 6 | 19 |
|  |  |  | \% within page (Binned) | 63.2\% | 5.3\% | 31.6\% | 100.0\% |
|  |  |  | \% within q5.2 | 75.0\% | 100.0\% | 100.0\% | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 | 0 | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q5.2 | 25.0\% | .0\% | .0\% | 17.4\% |
|  |  | Total | Count | 16 | 1 | 6 | 23 |
|  |  |  | \% within page (Binned) | 69.6\% | 4.3\% | 26.1\% | 100.0\% |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page (Binned) | Under 16 | Count | 6 | 1 | 5 | 12 |
|  |  |  | \% within page (Binned) | 50.0\% | 8.3\% | 41.7\% | 100.0\% |
|  |  |  | \% within q5.2 | 75.0\% | 100.0\% | 71.4\% | 75.0\% |
|  |  | Under 18 | Count | 2 | 0 | 2 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% | .0\% | 50.0\% | 100.0\% |
|  |  |  | \% within q5.2 | 25.0\% | .0\% | 28.6\% | 25.0\% |
|  |  | Total | Count | 8 | 1 | 7 | 16 |
|  |  |  | \% within page (Binned) | 50.0\% | 6.3\% | 43.8\% | 100.0\% |
|  |  |  | \% within q5.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 5.2 - Post-test

## Crosstab




## Question 6.1 - Pre-test

Crosstab

| school |  |  |  | q6.1 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 6 | 1 |  | 7 |
|  |  |  | \% within page (Binned) | 85.7\% | 14.3\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 20.7\% | 25.0\% |  | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 |  | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 27.6\% | .0\% |  | 24.2\% |
|  |  | Under 20 | Count | 11 | 2 |  | 13 |
|  |  |  | \% within page (Binned) | 84.6\% | 15.4\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 37.9\% | 50.0\% |  | 39.4\% |
|  |  | Older than 20 | Count | 4 | 1 |  | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 13.8\% | 25.0\% |  | 15.2\% |
|  |  | Total | Count | 29 | 4 |  | 33 |
|  |  |  | \% within page (Binned) | 87.9\% | 12.1\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% |  | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 21 | 3 | 5 | 29 |
|  |  |  | \% within page (Binned) | 72.4\% | 10.3\% | 17.2\% | 100.0\% |
|  |  |  | \% within q6.1 | 95.5\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q6.1 | 4.5\% | .0\% | .0\% | 3.3\% |
|  |  | otal | Count \% within page (Binned) | $\begin{gathered} 22 \\ 73.3 \% \end{gathered}$ | $\begin{gathered} 3 \\ 10.0 \% \end{gathered}$ | $\begin{gathered} 5 \\ 16.7 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 29 | 2 | 1 | 32 |
|  |  |  | \% within page (Binned) | 90.6\% | 6.3\% | 3.1\% | 100.0\% |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | Total | Count | 29 | 2 | 1 | 32 |
|  |  |  | \% within page (Binned) | 90.6\% | 6.3\% | 3.1\% | 100.0\% |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 | 0 |  | 24 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 85.7\% | .0\% |  | 80.0\% |
|  |  | Under 18 | Count <br> \% within page (Binned) | $\begin{gathered} 3 \\ 60.0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 40.0 \% \end{gathered}$ |  | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within page (Binned) \% within 96.1 | $\begin{aligned} & \text { 60.0\% } \\ & \text { 10.7\% } \end{aligned}$ | $\begin{gathered} \text { 40.0\% } \\ \text { 100.0\% } \end{gathered}$ |  | $\begin{gathered} 100.0 \% \\ 16.7 \% \end{gathered}$ |
|  |  | Under 20 | Count | 10.7 1 | $100.0 \%$ 0 |  | $16.7 \%$ 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 3.6\% | .0\% |  | 3.3\% |
|  |  | Total | Count | 28 | 2 |  | 30 |
|  |  |  | \% within page (Binned) | 93.3\% | 6.7\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% |  | 100.0\% |
| School 5 | page (Binned) | Under 16 | Count | 12 | 7 |  | 19 |
|  |  |  | \% within page (Binned) | 63.2\% | 36.8\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 75.0\% | 100.0\% |  | 82.6\% |
|  |  | Under 18 | Count | 4 | 0 |  | 4 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within q6.1 | 25.0\% | .0\% |  | 17.4\% |


| School 6 | Total |  | Count | 16 | 7 |  | 23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% within page (Binned) | 69.6\% | 30.4\% |  | 100.0\% |
|  | page (Binned) | Under 16 | \% within q6.1 | 100.0\% | 100.0\% |  | 100.0\% |
|  |  |  | Count | 9 | 2 | 1 | 12 |
|  |  |  | \% within page (Binned) | 75.0\% | 16.7\% | 8.3\% | 100.0\% |
|  |  |  | \% within q6.1 | 90.0\% | 40.0\% | 100.0\% | 75.0\% |
|  |  | Under 18 | Count | 1 | 3 | 0 | ${ }^{4}$ |
|  |  |  | \% within page (Binned) | 25.0\% | 75.0\% | .0\% | 100.0\% |
|  |  |  | \% within q6.1 | 10.0\% | 60.0\% | .0\% | 25.0\% |
|  |  | Total | Count | 10 | 5 | 1 | 16 |
|  |  |  | \% within page (Binned) | 62.5\% | 31.3\% | 6.3\% | 100.0\% |
|  |  |  | \% within q6.1 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 6.1 - Post-test

Crosstab



## Question 6.2 - Pre-test

## Crosstab



|  |  |  | \% within q6.2 | .0\% | .0\% | 12.5\% | 3.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count <br> \% within page (Binned) | $\begin{gathered} 19 \\ 63.3 \% \end{gathered}$ | $\begin{gathered} 3 \\ 10.0 \% \end{gathered}$ | $\begin{gathered} 8 \\ 26.7 \% \end{gathered}$ | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count <br> \% within page (Binned) | 26 $81.3 \%$ | 3 $9.4 \%$ | 3 $9.4 \%$ | $\begin{gathered} 32 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  |  | Count | 26 | 3 | 3 | 32 |
|  |  |  | \% within page (Binned) | 81.3\% | 9.4\% | 9.4\% | 100.0\% |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 17 | 4 | 3 | 24 |
|  | (Binned) |  | \% within page (Binned) | 70.8\% | 16.7\% | 12.5\% | 100.0\% |
|  |  |  | \% within q6.2 | 81.0\% | 66.7\% | 100.0\% | 80.0\% |
|  |  | Under 18 | Count \% within page (Binned) | $\begin{gathered} 3 \\ 60.0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 40.0 \% \end{gathered}$ | $\begin{gathered} 0 \\ .0 \% \end{gathered}$ | $\begin{gathered} 5 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within q6.2 | 14.3\% | 33.3\% | .0\% | 16.7\% |
|  |  | Under 20 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within q6.2 | 4.8\% | .0\% | .0\% | 3.3\% |
|  |  |  | Count | 21 | 6 | 3 | 30 |
|  |  |  | \% within page (Binned) | 70.0\% | 20.0\% | 10.0\% | 100.0\% |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 12 | 5 | 2 | 19 |
|  | ) |  | \% within page (Binned) | 63.2\% | 26.3\% | 10.5\% | 100.0\% |
|  |  |  | \% within q6.2 | 80.0\% | 83.3\% | 100.0\% | 82.6\% |
|  |  | Under 18 | Count | 3 | 1 | 0 | 4 |
|  |  |  | \% within page (Binned) | 75.0\% | 25.0\% | .0\% | 100.0\% |
|  |  |  | \% within q6.2 | 20.0\% | 16.7\% | .0\% | 17.4\% |
|  |  |  | Count | 15 | 6 | 2 | 23 |
|  |  |  | \% within page (Binned) | 65.2\% | 26.1\% | 8.7\% | 100.0\% |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 6 | page | Under 16 | Count | 8 | 3 | 1 | 12 |
|  | (Binned) |  | \% within page (Binned) | 66.7\% | 25.0\% | 8.3\% | 100.0\% |
|  |  |  | \% within q6.2 | 88.9\% | 50.0\% | 100.0\% | 75.0\% |
|  |  | Under 18 | Count | 1 | 3 | 0 | 4 |
|  |  |  | \% within page (Binned) | 25.0\% | 75.0\% | .0\% | 100.0\% |
|  |  |  | \% within q6.2 | 11.1\% | 50.0\% | .0\% | 25.0\% |
|  |  |  | Count | 9 | 6 | 1 | 16 |
|  |  |  | \% within page (Binned) | 56.3\% | 37.5\% | 6.3\% | 100.0\% |
|  |  |  | \% within q6.2 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 6.2 - Post-test

## Crosstab

| school |  |  |  | pq6.2 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 4 | 3 | 0 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 42.9\% | .0\% | 100.0\% |
|  |  |  | \% within pq6.2 | 16.7\% | 42.9\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq6.2 | 25.0\% | 14.3\% | 50.0\% | 24.2\% |
|  |  | Under 20 | Count | 11 | 2 | 0 | 13 |
|  |  |  | \% within page (Binned) | 84.6\% | 15.4\% | .0\% | 100.0\% |




| (Binned) | \% within page (Binned) | $100.0 \%$ | $.0 \%$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within q6.3 | $80.0 \%$ | $.0 \%$ | $75.0 \%$ |
|  | Under 18 | Count | 3 | 1 | 4 |
|  |  | \% within page (Binned) | $75.0 \%$ | $25.0 \%$ | $100.0 \%$ |
|  | Total | \% within q6.3 | $20.0 \%$ | $100.0 \%$ | $25.0 \%$ |
|  |  | Count | 15 | 1 | 16 |
|  |  | \% within page (Binned) | $93.8 \%$ | $6.3 \%$ | $100.0 \%$ |
|  | \% within q6.3 | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |  |

Question 6.3 - Post-test

## Crosstab




Crosstab

| school |  |  |  | q6.4 |  |  | $\begin{aligned} & \hline \text { Total } \\ & \hline \text { Yes } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain |  |
| School 1 | page (Binned) | Under 16 | Count <br> \% within page (Binned) $\%$ within q6.4 | $\begin{gathered} 0 \\ .0 \% \\ .0 \% \end{gathered}$ | $\begin{gathered} 7 \\ 100.0 \% \end{gathered}$ | 0 <br> 0\% | $\begin{gathered} 7 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\begin{gathered} 100.0 \% \\ 58.3 \% \end{gathered}$ | .0\% | 21.9\% |
|  |  | Under 18 | Count <br> $\%$ within page (Binned) \% within q6.4 | 4 |  |  |  |
|  |  |  |  | 57.1\% | 28.6\% | 14.3\% | 100.0\% |
|  |  |  |  | 25.0\% | 16.7\% | 25.0\% | 21.9\% |
|  |  | Under 20 | Count <br> $\%$ within page (Binned) \% within q6.4 | 9 |  | $\begin{gathered} 2 \\ 15.4 \% \end{gathered}$ | $\begin{gathered} 13 \\ 100.0 \% \end{gathered}$ |
|  |  |  |  | $\begin{aligned} & 69.2 \% \\ & 56.3 \% \end{aligned}$ | 15.4\% |  |  |
|  |  |  |  |  | 16.7\% | 15.4\% | 40.6\% |
|  |  | Older than 20 | Count <br> $\%$ within page (Binned) $\%$ within q6.4 | 3 | 1 | 1 | 5 |
|  |  |  |  | 60.0\% | 20.0\% | 20.0\% | 100.0\% |
|  |  |  |  | 18.8\% | 8.3\% | 25.0\% | 15.6\% |
|  |  | otal | Count <br> \% within page (Binned) \% within q6.4 | 16 | 12 | 4 | 32 |
|  |  |  |  | 50.0\% | 37.5\% | 12.5\% | 100.0\% |
|  |  |  |  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count <br> \% within page (Binned) \% within q6.4 | 5 | 18 | 6 | 29 |
|  |  |  |  | 17.2\% | 62.1\% | 20.7\% | 100.0\% |
|  |  |  |  | 100.0\% | 100.0\% | 85.7\% | 96.7\% |
|  |  | Under 18 | Count <br> \% within page (Binned) \% within q6.4 | 0 | 0 | 1 | 1 |
|  |  |  |  | .0\% | .0\% | 100.0\% | 100.0\% |
|  |  |  |  | .0\% | .0\% | 14.3\% | 3.3\% |
|  | page | Under 16 | Count \% within page (Binned) $\%$ within q6.4 | $\begin{gathered} 5 \\ 16.7 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 18 \\ 60.0 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 7 \\ 23.3 \% \\ 100.0 \% \end{gathered}$ | 30$100.0 \%$ |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $\begin{gathered} 100.0 \% \\ 32 \\ 100.0 \% \\ 100.0 \% \end{gathered}$ |
| School 3 |  |  | Count <br> $\%$ within page (Binned) $\%$ within $q 6.4$ | $\begin{gathered} 26 \\ 81.3 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 100.0 \% \\ 2 \\ 6.3 \% \\ 100.0 \% \end{gathered}$ | $\begin{gathered} 100.0 \% \\ 4 \\ 12.5 \% \\ 100.0 \% \end{gathered}$ |  |
|  | (Binned) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |



## Question 6.4 - Post-test

## Crosstab

| school |  |  |  | pq6.4 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page (Binned) | Under 16 | Count | 4 | 3 | 0 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 42.9\% | .0\% | 100.0\% |
|  |  |  | \% within pq6.4 | 20.0\% | 30.0\% | .0\% | 21.2\% |
|  |  | Under 18 | Count | 5 | 1 | 2 | 8 |
|  |  |  | \% within page (Binned) | 62.5\% | 12.5\% | 25.0\% | 100.0\% |
|  |  |  | \% within pq6.4 | 25.0\% | 10.0\% | 66.7\% | 24.2\% |
|  |  | Under 20 | Count | 7 | 5 | 1 | 13 |
|  |  |  | \% within page (Binned) | 53.8\% | 38.5\% | 7.7\% | 100.0\% |
|  |  |  | \% within pq6.4 | 35.0\% | 50.0\% | 33.3\% | 39.4\% |
|  |  | Older than 20 | Count | 4 | 1 | 0 | 5 |
|  |  |  | \% within page (Binned) | 80.0\% | 20.0\% | .0\% | 100.0\% |
|  |  |  | \% within pq6.4 | 20.0\% | 10.0\% | .0\% | 15.2\% |
|  |  | Total | Count | 20 | 10 | 3 | 33 |



## Question 6.5 - Pre-test

## Crosstab





## Question 6.5 - Post-test

## Crosstab

| school |  |  |  | pq6.5 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Yes | No | Uncertain | Yes |
| School 1 | page <br> (Binned) | Under 16 | Count | 7 | 0 |  | 7 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq6.5 | 21.9\% | .0\% |  | 21.2\% |
|  |  | Under 18 | Count | 8 | 0 |  | 8 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq6.5 | 25.0\% | .0\% |  | 24.2\% |
|  |  | Under 20 | Count | 12 | 1 |  | 13 |
|  |  |  | \% within page (Binned) | 92.3\% | 7.7\% |  | 100.0\% |
|  |  |  | \% within pq6.5 | 37.5\% | 100.0\% |  | 39.4\% |
|  |  | Older than 20 | Count | 5 | 0 |  | 5 |
|  |  |  | \% within page (Binned) | 100.0\% | .0\% |  | 100.0\% |
|  |  |  | \% within pq6.5 | 15.6\% | .0\% |  | 15.2\% |
|  |  | Total | Count | 32 | 1 |  | 33 |
|  |  |  | \% within page (Binned) | 97.0\% | 3.0\% |  | 100.0\% |
|  |  |  | \% within pq6.5 | 100.0\% | 100.0\% |  | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 29 |  |  | 29 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 96.7\% |  |  | 96.7\% |
|  |  | Under 18 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 3.3\% |  |  | 3.3\% |
|  |  | otal | Count \% within page (Binned) | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |  |  | $\begin{gathered} 30 \\ 100.0 \% \end{gathered}$ |
|  |  |  | \% within pq6.5 | 100.0\% |  |  | 100.0\% |
| School 3 | page (Binned) | Under 16 | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 100.0\% |  |  | 100.0\% |
|  |  | Total | Count | 32 |  |  | 32 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 100.0\% |  |  | 100.0\% |
| School 4 | page (Binned) | Under 16 | Count | 24 |  |  | 24 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 80.0\% |  |  | 80.0\% |
|  |  | Under 18 |  | 5 |  |  |  |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 16.7\% |  |  | 16.7\% |
|  |  | Under 20 | Count | 1 |  |  | 1 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 3.3\% |  |  | 3.3\% |
|  |  | Total | Count | 30 |  |  | 30 |
|  |  |  | \% within page (Binned) | 100.0\% |  |  | 100.0\% |
|  |  |  | \% within pq6.5 | 100.0\% |  |  | 100.0\% |



## Question 7 - Pre-test

## Crosstab



|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Count | 25 | 1 | 6 | 32 |
|  |  |  | \% within page (Binned) | 78.1\% | 3.1\% | 18.8\% | 100.0\% |
|  |  |  | \% within q7 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 4 | page | Under 16 | Count | 13 | 2 | 9 | 24 |
|  | (Binned) |  | \% within page (Binned) | 54.2\% | 8.3\% | 37.5\% | 100.0\% |
|  |  |  | \% within q7 | 86.7\% | 66.7\% | 75.0\% | 80.0\% |
|  |  | Under 18 | Count | 1 | 1 | 3 | 5 |
|  |  |  | \% within page (Binned) | 20.0\% | 20.0\% | 60.0\% | 100.0\% |
|  |  |  | \% within q7 | 6.7\% | 33.3\% | 25.0\% | 16.7\% |
|  |  | Under 20 | Count | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | 100.0\% | . $0 \%$ | . $0 \%$ | 100.0\% |
|  |  |  | \% within q7 | 6.7\% | .0\% | .0\% | 3.3\% |
|  |  |  | Count | 15 | 3 | 12 | 30 |
|  |  |  | \% within page (Binned) | 50.0\% | 10.0\% | 40.0\% | 100.0\% |
|  |  |  | \% within q7 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 5 | page | Under 16 | Count | 8 |  | 11 | 19 |
|  | (Binned) |  | \% within page (Binned) | 42.1\% |  | 57.9\% | 100.0\% |
|  |  |  | \% within q7 | 80.0\% |  | 84.6\% | 82.6\% |
|  |  | Under 18 | Count | 2 |  | 2 | 4 |
|  |  |  | \% within page (Binned) | 50.0\% |  | 50.0\% | 100.0\% |
|  |  |  | \% within q7 | 20.0\% |  | 15.4\% | 17.4\% |
|  |  |  | Count | 10 |  | 13 | 23 |
|  |  |  | \% within page (Binned) | 43.5\% |  | 56.5\% | 100.0\% |
|  |  |  | \% within q7 | 100.0\% |  | 100.0\% | 100.0\% |
| School 6 | page | Under 16 | Count | 7 | 3 | 2 | 12 |
|  | (Binned) |  | \% within page (Binned) | 58.3\% | 25.0\% | 16.7\% | 100.0\% |
|  |  |  | \% within q7 | 100.0\% | 50.0\% | 66.7\% | 75.0\% |
|  |  | Under 18 | Count | 0 | 3 | 1 | 4 |
|  |  |  | \% within page (Binned) | .0\% | 75.0\% | 25.0\% | 100.0\% |
|  |  |  | \% within q7 | .0\% | 50.0\% | 33.3\% | 25.0\% |
|  |  |  | Count | 7 | 6 | 3 | 16 |
|  |  |  | \% within page (Binned) | 43.8\% | 37.5\% | 18.8\% | 100.0\% |
|  |  |  | \% within q7 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Question 7 - Post-test

## Crosstab

| school |  |  |  | pq7 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 | Most | 9 | 0 |
| School 1 | page (Binned) | Under 16 | Count | 4 | 1 | 2 | 7 |
|  |  |  | \% within page (Binned) | 57.1\% | 14.3\% | 28.6\% | 100.0\% |
|  |  |  | \% within pq7 | 28.6\% | 33.3\% | 12.5\% | 21.2\% |
|  |  | Under 18 | Count | 6 | 1 | 1 | 8 |
|  |  |  | \% within page (Binned) | 75.0\% | 12.5\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq7 | 42.9\% | 33.3\% | 6.3\% | 24.2\% |
|  |  | Under 20 | Count | 4 | 0 | 9 | 13 |
|  |  |  | \% within page (Binned) | 30.8\% | .0\% | 69.2\% | 100.0\% |
|  |  |  | \% within pq7 | 28.6\% | .0\% | 56.3\% | 39.4\% |
|  |  | Older than 20 | Count | 0 | 1 | 4 | 5 |
|  |  |  | \% within page (Binned) | .0\% | 20.0\% | 80.0\% | 100.0\% |
|  |  |  | \% within pq7 | .0\% | 33.3\% | 25.0\% | 15.2\% |
|  |  | Total | Count | 14 | 3 | 16 | 33 |



## Question 8 - Pre-test

## Crosstab





## Question 8 - Post-test

Crosstab

| school |  |  |  | pq8 |  |  |  |  | Total$0$$\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 | Bad / <br> Wrong <br> Answer | Fair Answer | Good Answer | Very Good Answer |  |
| School 1 | page (Binned) | Under 16 | Count | 3 | 1 | 2 | 0 | 1 | 7 |
|  |  |  | \% within page (Binned) | 42.9\% | 14.3\% | 28.6\% | .0\% | 14.3\% | 100.0\% |
|  |  |  | \% within pq8 | 60.0\% | 12.5\% | 18.2\% | .0\% | 25.0\% | 21.2\% |
|  |  | Under 18 | Count | 1 | 1 | 3 | 2 | 1 | 8 |
|  |  |  | \% within page (Binned) | 12.5\% | 12.5\% | 37.5\% | 25.0\% | 12.5\% | 100.0\% |
|  |  |  | \% within pq8 | 20.0\% | 12.5\% | 27.3\% | 40.0\% | 25.0\% | 24.2\% |
|  |  | Under 20 | Count | 1 | 6 | 3 | 2 | 1 | 13 |
|  |  |  | \% within page (Binned) | 7.7\% | 46.2\% | 23.1\% | 15.4\% | 7.7\% | 100.0\% |
|  |  |  | \% within pq8 | 20.0\% | 75.0\% | 27.3\% | 40.0\% | 25.0\% | 39.4\% |
|  |  | Older than 20 | Count | 0 | 0 | 3 | 1 | 1 | 5 |
|  |  |  | \% within page (Binned) | .0\% | .0\% | 60.0\% | 20.0\% | 20.0\% | 100.0\% |
|  |  |  | \% within pq8 | .0\% | .0\% | 27.3\% | 20.0\% | 25.0\% | 15.2\% |
|  | Total |  | Count | 5 | 8 | 11 | 5 | 4 | 33 |
|  |  |  | \% within page (Binned) | 15.2\% | 24.2\% | 33.3\% | 15.2\% | 12.1\% | 100.0\% |
|  |  |  | \% within pq8 | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| School 2 | page (Binned) | Under 16 | Count | 2 | 6 | 9 | 11 | 1 | 29 |
|  |  |  | \% within page (Binned) | 6.9\% | 20.7\% | 31.0\% | 37.9\% | 3.4\% | 100.0\% |
|  |  |  | \% within pq8 | 100.0\% | 100.0\% | 90.0\% | 100.0\% | 100.0\% | 96.7\% |
|  |  | Under 18 | Count | 0 | 0 | 1 | 0 | 0 | 1 |
|  |  |  | \% within page (Binned) | $.0 \%$ | .0\% | 100.0\% | .0\% | .0\% | 100.0\% |
|  |  |  | \% within pq8 | .0\% | .0\% | 10.0\% | . $0 \%$ | .0\% | 3.3\% |
|  |  | Total | Count | 2 | 6 | 10 | 11 | 1 | 30 |
|  |  |  | \% within page (Binned) | 6.7\% | 20.0\% | 33.3\% | 36.7\% | 3.3\% | 100.0\% |
|  |  |  | \% within pq8 | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |



## Question 9 - Pre-test

Crosstab

| school |  |  |  | q9 |  |  |  |  | Total$0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 0 |  | Fair Answer | Good Answer | Very Good Answer |  |
| School 1 | page | Under 16 | Count | 0 | 1 | 3 | 1 | 2 | 7 |
|  | (Binned) |  | \% within page (Binned) | .0\% | 14.3\% | 42.9\% | 14.3\% | 28.6\% | 100.0\% |
|  |  |  | \% within q9 | .0\% | 33.3\% | 30.0\% | 12.5\% | 40.0\% | 21.2\% |




## Question 9 - Post-test

## Crosstab




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[^0]:    ${ }^{1} \mathrm{~N}=164$ in the pre-test for survey item 3.4 , while the post-test had an $\mathrm{N}=160$. Percentage change between pre-and post tests were calculated based on the average ( $\mathrm{N}=162$ )

[^1]:    ${ }^{2}$ Problematic items are items that were generally misunderstood and subsequently and that was filled out incorrectly by learners, and these items are indicated in bold
    ${ }^{3}$ Percentage difference between total pre-test and total post-test (thus, whole group difference and not calculated for each school)
    ${ }^{4} \mathrm{P}$-Value Significance

[^2]:    ${ }^{5}$ Whole group analysis is indicative of analysis conducted on all data available, i.e. data collected across all six schools.

[^3]:    ${ }^{1}$ This option was added in of some facilitator's own accord and was not part of the original programme

[^4]:    ${ }_{3}^{2}$ Percentage difference between total pre-test and total post-test (thus, whole group difference and not calculated for each school)
    ${ }^{3}$ Problematic survey items indicated in bold
    ${ }_{5}^{4} \mathrm{P}$-value significance
    ${ }^{5}$ Percentages indicative of count within question, for example in item 2.1, six learners reported that they had used over the counter pain relief substances in the last 30 days, which accounts for $6 \%$ of the total group response in that particular response category (yes).

