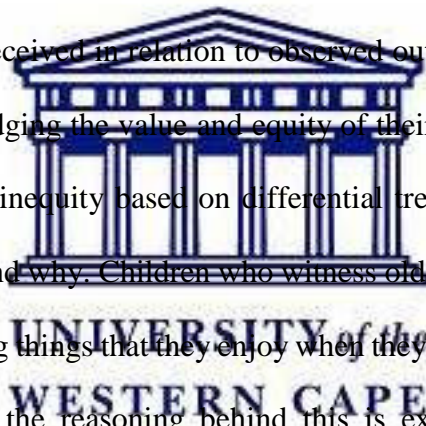


valence of external stimuli, and this is shown in how the same outcomes can be perceived as either rewarding or punishing depending on the nature, magnitude or frequency with which the witnessed behaviour was previously reinforced (Bandura, 1971; Bandura, 1986). When a reward is compared to other more attractive past rewards they can function as punishers and alternatively they can function as rewards when contrasted with previously non-rewards or punishments (Bandura, 1986).

Disparity between observed outcomes and personal experience can alter incentives (Bandura, 1986). The disparity between observed outcomes and consequences of personal experience can affect people in a similar way as the disparity with outcomes they experienced personally in the past, which can lead to a change in motivation (Bandura, 1986). People will compare personal responses received in relation to observed outcomes and based on this they will develop a standard for judging the value and equity of their behaviour. Children develop sensitivity around feelings of inequity based on differential treatment relatively early in life before they can fully understand why. Children who witness older siblings or their peers being allowed more freedom or doing things that they enjoy when they are not allowed the same, will not easily be placated when the reasoning behind this is explained, even when they do understand that the rewards could be age and competence related. This becomes more exasperating when the inequity is solely related to favouritism (Bandura, 1986). Later in life this can be exacerbated by further differential treatment in society.



2.4.1. Vicarious Reward

Witnessing other people's action which produce results that are favourable or good increases the likelihood of modelling behaviour. Simply observing the behaviour of others can also produce modelling behaviour (Bandura, 1986). Those adolescents who are sensitive to

behaviours performed by their peers are more susceptible to model delinquent behaviour of their peers (Bandura, 1977; Lai, Graham, Caldwell, Edward, Smith, Bradley, Vergnani, Mathews & Wagner, 2013). Generally, however, rewarded modelling is more effective in fostering patterns of behaviour which are similar than just modelling alone (Bandura, 1986). When behaviour that ordinarily has punishing consequences are observed, yet there is an absence of consequences, it is likely that the behaviour will be modelled in the same degree as witnessing models that are positively rewarded (Bandura, 1971). The reason for this occurrence is that the fear that was originally placed on the behaviour has been extrinsic and therefore the behaviour is modelled more freely (Bandura, 1971). Variations will occur in the amount of influence the observed consequences hold in relation to the value observers place on the outcomes and the type of behaviour being modelled (Bandura, 1986). For example, if a person observes a neighbour who has completed their degree in accounting and now has a job as an accountant, the observer may not necessarily go to University to study accounting because that profession holds no value to them.

Consequences which are observed in a group setting can affect the behaviour of the rest of the group (Bandura, 1986). For example, if adolescents observe how one of their classmates is rewarded for doing well on an assignment, this can influence them to replicate this behaviour through motivation to work harder on their next assignment, so that they too can be rewarded. The scope of vicarious influence is further amplified by the secondary effects of reinforced modelling. This shows how multiplicative effects of vicarious influence is achieved (Bandura, 1986). The impact of observed rewarded behaviour will be less influential if it goes against the internal standards of the observer because they anticipate reactions which are self-devaluative (Bandura, 1986). For example, when a female is observed being rewarded for being a body builder and winning competitions based on her muscular body, other females may not model this behaviour as it may go against their idea of femininity and how the female body should

look. If there is incongruity between observed rewards and internal standards, repetition of vicarious rewards would be required for conduct to be modelled (Bandura, 1986). Vicarious motivators often have significant impact on the everyday lives of people. People choose which behaviour and social practices to follow based on what they have observed as being successful and rewarding for others (Bandura, 1986). Teachers will use teaching practices which they have previously seen as being effective.

There is a difference between vicarious reinforcement and implicit reinforcement. In vicarious reinforcement, during the period of influence the observer does not perform any responses, which is why there are no immediate personal consequences for the model's outcomes. Whereas in implicit reinforcement people concurrently do similar activities, but only the successfulness of some are recognised and rewarded and others are not (Bandura, 1971). Initially those whose achievements go unrecognised may work harder so that they themselves can be rewarded, but if their efforts continuously go unrecognised they may lose interest and become demoralised (Bandura, 1971). For example, if all children in a Physical Education class are required to dive through a hoola-hoop into the pool, and everyone accomplishes the task but only some children consistently get praised whilst the others despite their efforts do not, they are likely to not put in any further effort. Older children are more likely to have adverse reactions than younger children to inequitable treatment as they place greater importance on social comparisons. Inequitable treatment will not only demoralise those who have not been rewarded but may also adversely influence those who have been rewarded (Bandura, 1986). The distinction between vicarious reinforcement and implicit reinforcement is that in vicarious reinforcement behaviour is being observed without the observer engaging in the activities simultaneously, whereas, in implicit reinforcement similar behaviour are performed concurrently and some are rewarded and recognised where others are not (Bandura, 1986).

2.4.2. Vicarious Punishment

The value that societies place on certain behaviour will cause them to either actively praise and promote behaviour or demoralise it. A society will place sanctions on behaviour which they devalue. Observing how others suffer negative consequences for behaviour will often result in a reduction of modelling the devalued behaviour (Bandura, 1986). There however is difficulty in evaluating the effects of observed punishments because there are two sets of influences which act in opposing directions. The capacity of vicarious punishment to reduce modelled behaviour have been questioned because both observed punishment and the absence of models for imitative behaviour, can have suppressive effects (Bandura, 1971).

There are several ways in which the detrimental effects of observed punishments have been demonstrated (Bandura, 1986). Wilson, Robertson, Herlong and Haynes (1979) studied the effects of vicarious punishment using a reversal design, where the effects of observed punishments and ignored behaviour on aggression in the classroom were measured during successive periods. The results showed that when children observed the subjects getting punished for behaving aggressively, they did not model that behaviour, on the other hand when they saw models of aggressive behaviour being ignored, they aggressed freely. Another study measured behavioural changes simultaneously where one group of subjects were exposed to vicarious punishment and another group was not (Bandura, 1986). An example of this is when a child sees another child being punished for writing on the walls and they then avoid this behaviour, however, if no punishment is witnessed for this behaviour then the child is more likely to model this behaviour. The findings of the studies are an indication of how adaptive knowledge can be expanded exclusively through the observation of experiences (Bandura, 1986). Parro (1968) illustrated how observation of self-produced consequences by a model similarly affects transgressive behaviour. 80% of children who viewed a film of a model who displayed responses which were self-approving of transgressive behaviour handled toys that

were forbidden to touch, subsequently when children viewed a model who responded self-critically toward her own behaviour, only 20% displayed transgressive behaviour.

Witnessing models who engage in activities that are enjoyable and functional but are usually inhibited because of its prohibitions by society go unpunished, cause modelling of similar conduct by observers to increase in much the same way as witnessing models that are rewarded (Bandura, 1986). For example, if a learner in the school fails to comply by the dress code and he/she is not reprimanded or asked to wear the stipulated uniform, other learners are more likely to themselves go against the dress code of the school. The value placed on consequences are measured against other outcomes, which is why there are significant consequences when there is an omission of punishment for behaviour that usually results in negative outcomes. It is for this reason that distinctions between modelled behaviour which is rewarded and non-rewarded may be more rhetorical than real, when activities are valued on a personal level but prohibited by society (Bandura, 1986). Someone who expected being punished for stealing from a shop, but did not get punished for this behaviour, would not react as if they did not experience an outcome for their behaviour because when it is expected that there will be negative consequences for an action. The observation of non-reactions from others are likely to function as an outcome which was favourable in the context of anticipated punishment and conversely as punishment when the expectation was reward (Bandura, 1986). This is clearly indicative of the power which observed consequences has on the modelling behaviour of others, however behaviour is not solely regulated by external rewards and punishments. The internal rewards and punishments people produce for themselves also regulate behaviour because people possess self-directive capabilities enabling them to exercise a level of control over their emotions, thoughts and actions (Bandura, 1986).

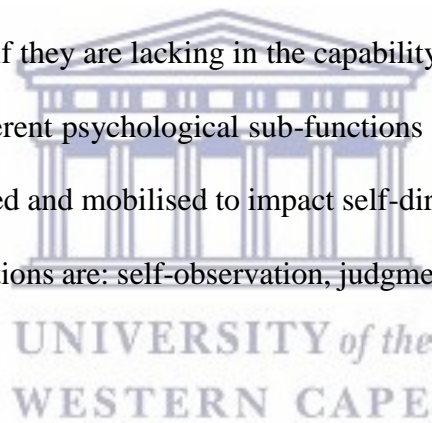
2.5. Self-Regulatory Mechanisms

Self-regulation processes can be defined as how people adapt their action and change their environment to achieve outcomes that match their self-conceptions and personal goals (Conner, Norman, 2005). The interplay between self-generated and external sources of influence regulates psychological functioning. If people were solely influenced by external forces, they would constantly shift direction and conform to whichever social influence happens to be present (Bandura, 1991b). This would mean that whichever behaviour people witness, whether corrupt, honourable or liberal, they would act accordingly in those social situations. People however usually have a measure of self-directiveness which guides their behaviour when faced with competing influences (Bandura, 1986). The self-regulatory mechanisms that people develop enable them to mediate most of the effects of external factors and provide the basis for acting purposefully. Forethought capabilities regulate most of human behaviour. Through exercising forethought, people are able to set goals, form beliefs, anticipate consequences and otherwise plan courses of action that will result in the desired outcomes. They are able to motivate themselves and guide their actions in a manner which is proactive because of what they anticipate the outcomes or consequences will be (Bandura, 1991b). Self-regulation involves goal-setting, cognitive preparations, and continuous monitoring and evaluation of goal directed activities (Conner & Norman, 2005). Thus, the importance of life skills development becomes imperative when wanting to reduce health risk behaviour. Teaching adolescents' forethought through goal setting and to understand the consequences of certain behaviours, better equipped them to predict the possible consequences for their actions and in turn choose behaviours that have more positive rewards.

Possessing the capability to act with intention and purpose is embedded in symbolic activity (Bandura, 1991b). Much behaviour is commonly performed based on the projection of possible future rewards and punishments without the presence of immediate external

consequences. People will behave in a certain way or do things when they anticipate the action to be rewarding and devoid of future trouble (Bandura, 1986). For example, a learner will start early on an assignment so that he/she can ensure that they finish on the stipulated date and that they do well, and thus avoid running the risk of possible late submission of the assignment or possible failure.

According to Bandura (1986) people apply self-directiveness by setting certain standards of behaviour for themselves as well as self-evaluating their actions. People have symbolising and reactive capabilities enabling them to regulate their behaviour using both internal and external prompts; this means that people are not solely reliant on external outcomes to motivate behaviour. The intentions and desires that people have will not hold much influence on regulating their behaviour if they are lacking in the capability to influence their motivation and behaviour. There are different psychological sub-functions through which self-regulation operates that must be developed and mobilised to impact self-directiveness. (Bandura, 1991b). These psychological sub-functions are: self-observation, judgmental process and self-reaction.



2.5.1. Self-observation Sub-function

People are not able to influence their own actions sufficiently if the attention they pay to their own behaviour are inadequate (Bandura, 1986). Important for self-regulation are peoples' attentiveness to the conditions under which the immediate and possible future effects of their performances will occur. People will pay selective attention to certain aspects of their behaviour and ignore aspects that they find irrelevant depending on the significance and values they place on activities (Bandura, 1986). For example, people will monitor their speed in motor racing, the quality and originality of their work when they write a book, the quantity of their

runs in a cricket game and sociability and morality in the way they conduct themselves in social situations.

There are many factors competing for attention that influence how transactions with the environment flow. According to Bandura (1986) people may pay closer attention to their surroundings, what other people are doing, their own actions, or the effects their behaviour have, if they strive to gain control over their own actions. Therefore, the success of self-regulation depends on the reliability of self-monitoring which requires efforts that are both sustainable and focused (Kazdin, 1974; Nelson, 1977; Bandura, 1986). There are fluctuations to the attention people have on their behaviour, which means that people are not always very self-observant. If behaviour is more complex, and many events are happening simultaneously competing for attention, there will be greater levels of inaccuracy in self-observation (Bandura, 1986).

Pre-existing self-conceptions and mood states influences the aspects of behaviour that will be given the most attention, how one's behaviour is perceived, how information on one's performance is organised for memory representation and how one cognitively processes and self-monitors one's performances (Kuiper, MacDonald & Derry, 1983; Bandura, 1991b). This means that the process of self-monitoring is complex and not just an automatic audit of an individual's performance (Bandura, 1986). Feeling miserable leads to negative interpretation of events and the easy recollection of experiences which are unpleasant, whereas a positive mood will have the opposite effect (Bandura, 1986). When an individual, who is feeling despondent, self-monitors behaviour that relates to their feelings of competency and self-esteem, it increases the likelihood that self-perceptions of current behaviour and recollections thereof will be distorted (Bandura, 1991b).

In the process of self-regulation, there are at least two functions that self-observation serves. Namely, to provide information that is needed to set realistic goals and secondly, to

evaluate the progress one makes towards those goals (Bandura, 1991b). There are however additional dynamic ways in which effectively paying attention to one's own actions and thought patterns in various social situations can contribute to self-directed change (Bandura, 1986).

Systematic self-observation is capable of providing vital self-diagnostic information. The observation and circumstances under which behaviour occur can highlight recurrent patterns. Through analysing the regularities between similar types of situations which result in similar thoughts and actions, people are able to identify the features of their environment which are psychologically significant in serving as instigators for them (Bandura, 1991b). Corrective change is possible for those who are able to alter their behaviour through the insights they have gained (Bandura, 1986). Diagnostic self-monitoring need not be solely dependent on the observation of natural occurrences. Through personal experimentation more effective identification of significant determinants are possible. A science of self can in part be based on the systematic study of oneself (Neuringer, 1981). If people systematically vary and record the personal accompanying changes in their everyday lives, people can discover how those factors influence their sense of well-being and psychological functioning. People are able to gain understanding of how their thought patterns affect their emotional states, motivation level and performances by altering their typical thought patterns and through the observation of the accompanying effects (Bandura, 1991b).

When people pay close attention to their performances, they are likely to set goals for themselves so that they will progressively improve on their performances, even in instances when they are not encouraged to do so. By setting goals for themselves people are able to evaluate their performance and work on attaining their goals. Self-observation will either increase, reduce or have no effect on the behaviour which is being noted (Bandura, 1986). There are a number of factors that can affect whether or not self-observation of behaviour will

enlist self-reactive influences, namely: temporal proximity, informativeness of feedback, motivational level, valence, focus on successes or failures and amenability to control (Bandura, 1991b).

Temporal Proximity. There will be greater achievement in self-directed change if consequences of present behaviour are brought to the fore as opposed to its remote effects. This means that immediate self-observation provides information that is continuous and also the best opportunity for self-evaluation to influence behaviour while it is still progressing (Bandura, 1991b). For example, professional dancers are more likely to improve on their skills if they practice regularly than by periodically trying new moves.

Informativeness of feedback. It is difficult for an individual to evaluate their self-reactions if they do not have a clear understanding of how they are doing. When the evidence of progress is clear, self-observation will enhance performance, however it will have little effect if there are not clear signs of progress or the signs of progress are vague (Bandura, 1986). For example, if an individual is busy doing an assignment but has no idea whether or not what they are doing is the right thing, they will have difficulties in evaluating their progress.

Motivational Level. People are more likely to set goals for themselves and self-evaluate their progress if they have a desire to change their behaviour. If a person is not motivated to change their behaviour they are less likely to react to their self-observations (Bandura, 1991b). Improvement in behaviour is more likely to occur in those individuals who are motivated than in those who are unmotivated (Bandura, 1986). For example, if an individual at the school is motivated to get on the soccer team he/she will work hard to ensure that they are selected for the team.

Valence. The value that people place on their behaviour will affect the type and strength of self-evaluation of their reactions that self-observation is likely to produce. People will tend

to attain desired behaviours in domains which they value, this is likely to produce self-satisfaction which in turn will increase aspirations that supplement change. However, behaviour that is devalued has a tendency to be reduced because of anticipatory self-displeasure and neutral behaviours are not likely to go through many alterations as they do not arouse much self-reactions (Bandura, 1986). For example, when you do well on an assignment you are likely to keep working hard so that you can constantly have that sense of accomplishment.

Focus on success or failures. The behaviours and the perceived self-efficacy of people are more effectively altered when they are rewarded for improvements than when they are punished for shortages. People respond more favourably when their successes are highlighted than their failures. There will be improvement of desired behaviour when self-monitoring successes, but desired behaviour will decrease or show little improvement when observing failures (1991b). When people self-monitor their failings, it is accompanied by feelings of anxiety, devaluation of attainments, and diminished self-reward, all of which have a tendency for one to undermine one's performances (Bandura, 1986).

Amenability to voluntary control. There are significant variations in behaviour in its amenability to voluntary control. In activities that are relatively easy to adjust by deliberate effort, it is possible that self-monitoring alone has the ability to produce change that lasts. If the goals individuals set for themselves are too high, vague or improbable, immediate performances may prove too unsatisfactory for people to apply a lot of effort for a long period of time (Bandura, 1986). Therefore, for this reason self-observation on its own, at best only has transient effects on behaviour that is decidedly unaffected by change (Bandura, 1991b).

2.5.2. Judgmental Sub-function

The first step towards behavioural change is observing its effects, but this in and of itself it does not supply sufficient information for self-directed reactions. Though a judgmental

function that consist of several supplementary processes, actions give rise to self-reactions (Bandura, 1991b). Whether performances are viewed as positive or negative depends largely on the personal standards against which it is appraised (Bandura, 1986).

Development of personal standards. There are three principal modes of influence through which information of personal standards are developed. These three models of influence include: direct tuition, the evaluation of social influences on one's behaviour and exposure to the self-evaluation standards others model. In the two latter models of influence standards of behaviour are extracted from significant others in one's social environment (Bandura, 1991b). When standards are based on shared beliefs and mutual support direct tuition is most effective. People are self-satisfied and self-approving when there is fulfilment in personal standards but negatively affected when they do not reach or when they breach their personal standards (Bandura, 1986). Through direct and vicarious influence people construct standards for themselves. They do not passively absorb the standards of others from their social environments (Bandura, 1991b).

Social referential comparisons. The regulation of one's behaviour is easier when it produces independent objective indications of adequacy (Bandura, 1991b). For example, there is little ambiguity about whether one can ride a bike, read a book or swim. There are however some activities which do not have an absolute measure of adequacy. In instances where an individual's performance adequacy is determined relationally, the appraisal of performance requires the comparison to others performance, the information required to make comparisons will include: your own performance, the performances of others and personal standards (Bandura, 1991b). For example, if you want to be the highest goal scorer on your team, the attainment of your goal will depend on how many goals the other members of your team have scored.

The previous behaviours of an individual will provide a reference against which performance is measured or judged. Another reference point against which people judge their behaviour are collective comparisons, in this instance the performance of the group and not just an individual person is judged and publicly acclaimed (Bandura, 1991b). For example, during a relay match it is the performance of the entire group which is assessed and judged to determine which group has won the event. Under the collective arrangement there are still comparison processes operating, but self-appraisal is based primarily on one's contribution to the group and how it measures up against the standards of the group (Bandura, 1991b).

Valuation of activities. In activities which is unimportant to an individual, they will not place much value on their performance in those activities. However, in activities which they value, performance behaviour will have an effect on their welfare and their self-esteem as these performance reactions activate their self-reactions. Therefore, the more relevant individuals find their performances to be in value and personal adequacy, the more likely self-evaluative reaction are elicited in those activities (Bandura, 1986).

Perceived performance determinants. There will be variations in self-reaction depending on how people perceive the determinants of their behaviour (Bandura, 1991b). People will take more pride in their accomplishments when success is ascribed to their own abilities and hard work. When their performance success is attributed to the aids of others and special situational support they are less likely to establish feelings of self-satisfaction (Bandura, 1986). People will take responsibility and respond in a self-critical manner when they believe that they are personally responsible for shortcomings. However, in instances when they believe that their inability to measure up is due to external forces beyond their control, they are less likely to hold themselves personally responsible (Bandura, 1991b).

2.5.3. Self-reactive Influences

The capability for self-reactive influence is accomplished through the establishment of evaluative standards and judgmental skills. The capability for self-reactive influence is achievable through the creation of incentives one sets for actions and responding self-evaluatively to one's behaviour, which depends on how it measures up against personal standards (Bandura, 1986). It is for this reason that people will pursue causes of action which results in positive self-reaction and abstain from behaviour that will produce self-censure. Incentives for self-monitoring may be either tangible outcomes or self-evaluative reactions (Bandura, 1991b).

Tasks that people would rather avoid doing are made do-able through the use of tangible incentives which are dependent upon performances attained (Bandura, 1986). For example, if you have to complete an assignment which you find particularly hard or which you would rather not do, setting tangible incentives such as spoiling yourself with a massage will serve as a motivation to complete the task. There will be more reliance on self-regulation when the external demands for performance is weak (Conner & Norman, 2005). For example, when an individual wants to regulate their weight but no one is motivating them to do so, they will have to rely more on their own self-regulation to attain their goal. However, in those activities which are externally motivated such as completing an assignment for school, the self-regulatory skills of a person to work on that assignment will determine how effectively he/she mobilises their efforts and resources to complete the assignment (Bandura, 1986).

Many people place higher value on their self-respect and the self-satisfaction after completing a task successfully than they do on tangible incentives (Bandura, 1991b). Self-evaluation is a means through which human behaviour is regulated as it provides a personal rubric against which performance is measured. Self-evaluation creates motivation and provides direction for behaviour (Bandura, 1986). According to Bandura (1991b), when self-satisfaction

is conditional to performances that are in accord with their personal value guide, people are more apt to put forth the effort which is required to accomplish the task. Both evaluative and tangible incentives are often required to influence behaviour. A social cognitive theory of self-regulation includes the self-efficacy mechanism which is central to personal agency (Bandura, 1991b).

2.6 Self-Efficacy

The previous section highlighted the process of behavioural regulation through internal standards and the self-evaluative reactions people have to their own behaviour. Expanding on the self-regulatory mechanisms another important aspect of the self-system is self-referent thought – thought which mediates the relationship between knowledge and action – in psychosocial functioning. Among the different facets of self-knowledge, conceptions of self-efficacy are believed to be most instrumental in the daily lives of people (Bandura, 1986). Self-efficacy refers to the beliefs that individuals have about their capabilities in executing specific tasks within certain contexts (Stajkovic & Luthans, 2002). There are often times that, even though people have the knowledge, transformational operations and constituent skills, they still do not behave optimally. The reason for this is that the beliefs people have about their capabilities influences the relationship between what people know and their actions. The way that people judge their capabilities and their perceptions of self-efficacy has an effect on their motivation and behaviour (Bandura, 1986). According to social cognitive theory there are numerous vital factors that have influence on behaviour. The first of which is perceived self-efficacy. Perceived self-efficacy refers to the beliefs that people have in their capabilities to actually perform the tasks required for them to achieve the outcomes which they desire (Stajkovic & Luthans, 2002).

The confidence a person has to apply the skills required for resisting temptation, coping with stress, and to use the resources an individual has to meet varying demands, are

representational of perceived self-efficacy (Luszczynska & Schwarzer, 2005). It is a significant determinant that is only partially dependant on underlying skills of an individual. Both the skills and the beliefs people have of their efficacy to use those skills effectively are requirements for competent functioning. Perceived self-efficacy is not concerned with the skills one possesses but rather their judgments of whether they can use those skills to execute courses of action (Bandura, 1986). There are different sources through which self-efficacy can be enhanced. The first source is through personal accomplishment or mastery, in so far as the success is attributed intrinsically and repetition is possible. Vicarious experience is the second source through which self-efficacy can be enhanced. When a person similar to an individual is observed mastering a difficult task, the process of social comparisons increases self-efficacy beliefs of the observer. Another way through which self-efficacy can be enhanced is through verbal persuasion by others. Emotional arousal is the last source of influence: if an individual does not experience any trepidation in a situation which is threatening they are able to feel capable of accomplishing the task (Luszczynska & Schwarzer, 2005). Perceived self-efficacy plays a vital role in the cause and effect structure of social cognitive theory. The reason for this is that efficacy beliefs influence adaptation and change in its own right and through the impact it has on other determinants. Efficacy beliefs influence the thinking of individuals. Thought patterns can be either positive or negative or it can be self-enhancing or self-hindering (Bandura, 2001).

2.6.1 Sources of Self-efficacy Information

There are four sources of information upon which self-knowledge about personal efficacy is based. It can be either accurate or faulty. The sources of information include: enactive attainment, vicarious experience, verbal persuasion and physiological state. (Bandura, 1986).

Enactive attainment. Enactive attainment is an especially influential source of self-efficacy information because it is based on authentic mastery experiences (Bandura, 1977). Successes will increase mastery judgments, whereas repeated failures decrease them. The power new experiences hold will depend on the nature and strength of existing self-perceptions into which those new experiences must be integrated (Luszczynska & Schwarzer, 2005). A strong sense of self-efficacy can be developed through repeated success and reduce the negative impact of occasional failures (Bandura, 1977). Once self-efficacy trends have been established it can be generalised into other situations, especially those situations which on previous occasions caused self-debilitation on performance because of preoccupations with personal inadequacies. Generalised effects will however be most probable in activities which are similar to those, where self-efficacy was enhanced (Bandura, 1986).

Vicarious experience. If people observe those similar to themselves successfully perform a task, it can enhance their self-precepts of efficacy where they believe that they too have the capability to master an activity which is similar to those they observed (Bandura, 1986). They believe that if others can accomplish the task, then they themselves can at least show some improvement on their performances. Vicarious experience is a less dependable source of information about one's capabilities in relation to enacted attainment, as it relies on the successes and failures of others in their environment. Efficacy expectations generated through modelling behaviour alone is more likely to be weaker and vulnerable to change (Bandura, 1977). Vicarious experiences can still however produce changes that are significant and enduring through the effects it has on performances. A given mode of influence - whether inefficacy or enhanced perceived self-efficacy – has the ability to set in motion processes that strengthen or decrease otherwise powerful influences (Bandura, 1986).

Verbal persuasion. Verbal persuasion is commonly used in attempts to influence human behaviour, by talking people into believing that they have the skills required to perform

the tasks they confront (Bandura, 1986). People are led to believe, through the suggestions of others, that they are able to successfully cope with that which have overwhelmed them in the past (Bandura, 1977). Social persuasions on its own is limited in its power to produce lasting increases in self-efficacy. However, it still has the ability to contribute to successful performances if the verbal persuasions are realistic. Persuasive boosts in self-efficacy has the ability to motivate people to try harder for success by promoting the development of skills and a sense of personal efficacy. If the self-efficacy believe is induced through illusory boosts it is probably more likely that persuasions will have the enduring effects of undermining the recipients perceived efficacy if disconfirmed by reality, than to produce enduring increases in perceived efficacy (Bandura, 1986). Social persuasions on its own may be limited in its ability to create a lasting sense of personal efficacy, it can however be more successful if persuasions are accompanied by aids to execute difficult tasks (Bandura, 1977).

Physiological state. From their physiological state people are able to gain information whereby they will judge their capabilities. High arousal usually leads to performance debilitation, therefore people who are not overcome by aversive arousal are more likely to expect success than when they are feeling tense and viscerally agitated (Luszczynska & Schwarzer, 2005). Apart from the impact of aversive autonomous arousal that affect a person's sense of efficacy, people also interpret fatigue, aches and pains as signs of physical weakness, particularly in activities requiring strength and stamina (Bandura, 1986).

2.7 Social Cognitive Theory and How it Relates to the Study

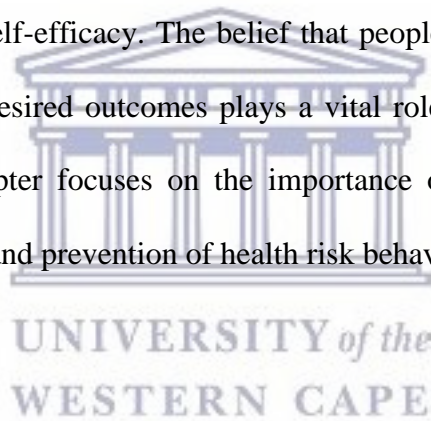
Social Cognitive Theory posits that through cognitively processing information people acquire knowledge. Bandura (1986) states that people learn through observing the behaviours of others and subsequently the rewards and punishments of modelled behaviour. The media plays a significant role in the modelling behaviour of adolescents as the media normalises

drinking and the association made are positive in terms of social inclusion, happiness and fun (Anderson et al., 2009). Adolescents are also more sensitive to social rewards which motivate them to model the behaviours of higher-status peers. The perceptions and value they place on their higher-status peers influence their own behaviour and increases their likelihood to model the risk-taking behaviours of higher-status peers as they relate the behaviours to social inclusion and popularity (Helms et al., 2009). Anticipating rewards for actions influences people to act in a certain way (Bandura, 1986). When in the presence of their peers adolescents are more likely to partake in risky behaviours because the presence of their peers influence the immediate rewards (getting high, the thrill experienced through driving fast and the pleasure of having unprotected sex) more than the possibility of consequences that they may experience in the future (hangover, speeding fines and road accidents, STI's and HIV/AIDs and pregnancy) (O'Brien, Albert, Chein, & Steinberg, 2011).

Developing self-regulatory mechanisms enables adolescents to mediate the effects of external factors providing them with the ability to act purposefully (Bandura, 1991b). Through life skills development and knowledge acquisition of risky behaviours adolescents are better able to set goals for themselves, form beliefs, anticipate consequences and otherwise plan courses of action resulting in desired outcomes and reducing and preventing certain health risk behaviours (Luszczynska & Schwarzer, 2005; WHO, 2014). Perceived self-efficacy which is the belief that people have in their own capabilities to perform a task is central in the daily lives of people (Bandura, 1986). The development of important life skills by adolescents has the ability to enhance their perceived self-efficacy through developing competencies enabling them to adequately deal with the daily challenges and developmental tasks which they encounter (WHO, 1997).

2.8. Conclusion

Social Cognitive Theory, which was developed by Bandura, highlights how knowledge is acquired through the cognitive processing of information. Bandura discusses how people acquire knowledge vicariously through observing the behaviour and consequences of modelled behaviour. However, if people solely gained knowledge through modelling the behaviours of others, they would act like weathervanes constantly changing their behaviours to match whatever they observe in their social environments. This is why they need to develop self-regulatory mechanisms enabling them to mediate the effects of external factors which then provide them with the basis for acting purposefully. People set certain standards of behaviour for themselves and self-evaluate those actions. None is more instrumental in the daily lives of people than their perceived self-efficacy. The belief that people have in their capabilities to perform a task and achieve desired outcomes plays a vital role in whether or not they will perform tasks. The next chapter focuses on the importance of life skills development of adolescents for the reduction and prevention of health risk behaviour engagement.



Chapter Three

Literature Review

3.1 Introduction

This chapter gives an overview of the literature that highlights adolescent development and health risk behaviour; its prevalence, trends and consequences. In addition, this chapter also looks at life skills development and the eight domains of the Life Effectiveness Questionnaire. Finally, this chapter also looks at previous programmes which were developed internationally with the aim at reducing or combating health risk behaviour among youth and adolescents.

3.2 Adolescent Development

Adolescence is a complex process of changes that occur on a biological, emotional, psychological and social level of individuals (Eryilmaz, 2012). This is a time when individuals experiment and discover who they are in terms of their unique social identity. Adolescence is a developmental phase in the life cycle and can be characterised by key life course events, which could include the completion of school, parenting a child and becoming economically productive (Richter, 2006). Drug and alcohol abuse, getting into trouble with the law, non-consensual sex, risky sexual behaviour, self-harm and violent behaviour are common experiences among this age group and these experiences could alter individuals' life trajectories (Richter, 2016). Schooling, the family and the community plays an integral role in the development of adolescents and it has been shown that when adolescents feel a connectedness to those structures that are in place, they partake in less risk-taking behaviour (Tuttle, Campbell-Heider & David, 2006). According to Steinberg (2007) studies have shown that relatively early during adolescence there is an increase in sensation seeking which

corresponds with pubertal maturation as opposed to chronological age. There is speculation that when adolescents and adults are presented with decision making tasks in relation to risk taking behaviour that have the potential for both rewards and costs, it is likely that adolescents are more sensitive to the possibility for the potential rewards and less sensitive to the potential costs involved in risk taking (Steinberg, 2007). Adolescents make decisions about risk behaviour engagement based on their feelings associated with it for example: the excitement the experience when crossing boundaries set by parents and the law and the fear associated with the possibilities of getting caught; all of this contribute to how adolescents make decisions about engaging in health risk behaviours (O'Brien, Albert, Chein, & Steinberg, 2011).

Scott and Steinberg (2008) theorise that adolescents are not fully developed in their future orientated thinking, thus making them more susceptible to engage in risk taking behaviour and becoming involved in criminal behaviour. Aspects such as psychological maturation of adolescents, lag behind those of adults' cognitive development which affects their decision-making and undermine adolescent competence. The imaginary audience and the personal fable are two distinct but related constructs of adolescent egocentrism – which refers to the lack of differentiation in subject-object relations (Alberts, Elkind & Ginsberg, 2006). The imaginary audience is the adolescent's assumption that the preoccupation that they have with their appearance and behaviour is shared by all other individuals. The imaginary audience can be either fault-finding or admiring which accounts for the heightened characteristic of self-consciousness which is present during early adolescents (Alberts, Elkind & Ginsberg, 2006). The personal fable is the product of the imaginary audience. Adolescents tend to think of themselves as the centre of attention, where they are unique and special. Common beliefs among adolescents based on the persona fable are 'other people will not realise their ambitions, but me; other people will grow old and die, but not me; other people will get hooked on drugs

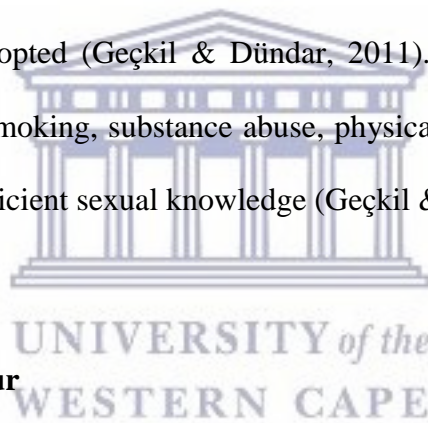
and alcohol, but not me' (Albers, Elkind & Ginsberg, 2006). For this reason, adolescents are more likely than others to engage in risk-taking behaviour.

Adolescents are more likely than adults to be subjected to emotional and psycho-social influences that contribute to them making bad choices due to immature judgment. This distinguishes them from adults in their participation in criminal activity (Scott & Steinberg, 2008). Adolescents are more likely than adults to be influenced by their peers and as a result through peer pressure, they are susceptible to engage in anti-social behaviour. Adolescents are also more likely than children and adults to change their behaviour or decisions based on their response to peer pressure (Scott & Steinberg, 2008). It has been found that just the presence of their peers increases adolescent risk-taking behaviour (O'Brien, Albert, Chein, & Steinberg, 2011). Adults and adolescents view rewards and risks differently with regards to risky behaviours. The distinguishable differences between adolescents and adults are the different values they place rewards for risk taking behaviour (Steinberg, 2007). Evidence suggests that adolescents partake in more risky behaviours when in the presence of their peers because the presence of their peers influences the experience of immediate rewards (getting high, the thrill experienced through driving fast and the pleasure of having unprotected sex), more than the possibility of future consequences (hangover, pregnancy, STI's and HIV/AIDS, speeding fine and road accidents) (O'Brien et al, 2011). Adolescents have less impulse control than adults, thus making adolescents more reckless. During this developmental period individuals are also show indications of mood swings which are rapid and extreme that can be either negative or positive (Scott & Steinberg, 2008).

According to Eryilmaz (2012), suicide has become a major issue during adolescence. During the developmental period of adolescence individuals are more fragile and the psycho-social stress factors that they are faced with, increases their proneness to commit suicide. There are psychological reasons that underlie most adolescent suicides which includes failure to find

suitable solutions to problems, being impulsive, and depression (Kim & Kim, 2008). Other factors that influence adolescent susceptibility to suicide attempts and suicide are academic failure, problems with communication in the family, a person's sex (being female), parental divorce, abuse (emotional and physical), death in the family, low socio-economic status, familial suicidal thoughts and tendencies, break up of a relationship and familial emotional instability (Eryilmaz, 2012). It is apparent that suicide has become a problem among adolescence and means to reduce and prevent attempted and successful suicides need to be addressed.

Adolescence is a time when individuals take risks and experiment. This is a critical period because it is during adolescence that life style patterns and positive and negative health behaviours are tested and adopted (Geçkil & Dündar, 2011). Common among adolescent experimentation is cigarette smoking, substance abuse, physical inactivity, obesity and risky sexual behaviour due to insufficient sexual knowledge (Geçkil & Dündar, 2011).

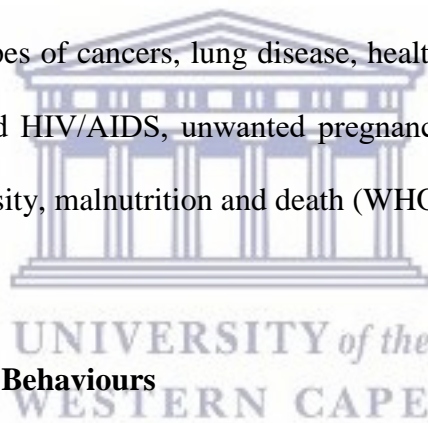


3.3 Health Risk Behaviour

Health risk behaviour can be understood as behaviours, which has the potential to put a person at risk for numerous health complications (Mahalik, Coley, Lombardi, Lynch, Markowits & Jaffee, 2013). Health risk behaviour engagement among adolescents plays a major contributory role in adolescent mortality and morbidity, and these behaviours are modifiable (Murray & Lopez, 1997; Nelson-Mmari, 2004; Conner & Norman, 2005). Increasing recognition has been given to individuals contributing to their own health and well-being through health-enhancing behaviours (e.g. exercise, healthy eating and avoiding behaviours which diminish their health (e.g. smoking, drinking). Research in identifying the underlying health behaviours has become the focus in many health-related disciplines and has been motivated by a desire to design interventions aiming at changing the prevalence of health

risk behaviour engagement. A decrease in the prevalence of health risk behaviours produce improvements in the individuals' and populations' health. Through interventions researchers and other health professionals can gain an understanding of the reasons that individuals engage in health risk behaviours (Conner & Norman, 2005).

Results from an international study conducted in the United States in 2013 revealed that many high school learners engage in health risk behaviours, which are associated with the leading causes of death among the age group of 10-24 years old (Kann et al, 2014). Common health risk behaviours that adolescents engage in include tobacco use, alcohol consumption, risky sexual behaviour, unhealthy eating habits and physical inactivity (Botvin & Griffin, 2004; Magnani et al., 2005 & Kann et al., 2014). The health risks associated with the most common risk behaviours are certain types of cancers, lung disease, health complications due to traffic accidents, violence, STI's and HIV/AIDS, unwanted pregnancy and related pregnancy and child birth complications, obesity, malnutrition and death (WHO, 2016).



3.3.1 Types of Health Risk Behaviours

Physical Inactivity: Engagement in physical activity plays an important role in the mental and physical health of individuals. Physical activity reduces the risk of cardiovascular disease, some types of cancers and type 2 diabetes. Remaining physically active improves the skeletal and muscular health of the body, reduces depressive symptoms and controls body weight (WHO, 2018). Physical inactivity is estimated to cause 30% of ischaemic heart disease, 27% of diabetes and 21-25% breast and colon cancer (WHO, 2018a). The numerous health benefits show the vital role that exercise plays in the health of individuals, whether they remain physically active through leisure time (gym, cycling, walking, home workout videos, etc), transportation (walking to work or buses, trains, taxis etc), domestic duties or work (Mayo

Clinic Staff, 2011). Remaining physically active improves one's mood, increases energy levels and health and can be enjoyable. Exercise can be moderate or vigorous with a combination of different types of aerobic and strength training (Kahlmeier, Wijnhoven, Alpiger, Scheizer, Breda & Martin, 2015).

Cigarette Smoking: cigarette smoking is the most common form of recreational drug use. It has been estimated that there are approximately 1.1 billion smokers worldwide. Of this approximately 900 million are men and 200 million are women. The main health problems associated smoking are cancer, cardiovascular diseases and obstructive pulmonary disease. Studies have found that cigarette smoking kills about 3 billion people worldwide with figures increasing yearly (Saha, Bhalla, Whayne & Gairola, 2007). Tobacco is considered the biggest cause of death among adults in developed countries. This is particularly troublesome as it has been found that health risk behaviours which start in adolescence continue into adult risk behaviour (Grubaun, Kann & Kinchen, 2001). Studies have found that individuals who start smoking during adolescence and continue, approximately half will die during middle age (35-69 years old) (Saha et al, 2007).

Alcohol Use: the consumption of alcohol is in recreational and ceremonial activities around the world and considered acceptable behaviour (Wackernah, Minnick & Clapp, 2014). Alcohol consumption can facilitate socialisation through the reduction of anxiety and diminishing effects on social behaviour if consumed in low to moderate use. Heavy drinking is considered the consumption of more than 4 drinks in a day or seven drinks a week for females (Wackernah, Minnick & Clapp, 2014). According to Rehm (2010) elevated levels of alcohol consumption is considered an important risk factor for many health-related problems and is therefore a major contributor to the global burden of disease. There are many diseases which is directly linked to elevated levels of alcohol consumption or for which it is a contributing factor. These include: cancer, infectious diseases, neuropsychiatric diseases (including alcohol

use disorders), diabetes, cardiovascular disease, unintentional and intentional injury and liver and pancreas disease (Rehm, 2010).

Drug use: The use of marijuana has been linked to increased rate of cognitive difficulties, stealing, cutting class, isolation, and aggressive behaviour. The general engagement in illicit drug use has been found to heighten the likelihood of adolescence engaging in delinquency, engaging in risky sexual behaviour, crime, and drug abuse. Engaging in illicit drug use has also been linked to increased risk of injury and death from motor vehicle accidents (Terzian, Andrews & Moore, 2011). Polydrug use, which is the concurrent use of multiple drugs has become an increasingly common phenomena. Increases in the range of licit and illicit drug use that are available to adolescents has been accompanied by the growing concerns about drug use becoming more socially acceptable, and subsequently the increase in polydrug use. Concurrent or polydrug use in adolescents increases health risks given that this group is considered to be the most vulnerable to the toxic pharmacological effects of substances (Kokkevi, Kanavou, Richardson, Fotiou, Papadopoulou, Monshouwer, Matias & Zewski, 2014).

Risky Sexual Behaviour: Risky sexual behaviour can be understood as behaviours that increase the risk of contracting sexually transmitted infections and unintended pregnancies. Sexual activity that constitute risky behaviour include: early participation in sexual activity, multiple sexual partners, alcohol consumption prior to sexual activity and unprotected sexual behaviour (Centre for Disease Control and Prevention, 2010). Adolescence and early adulthood are considered to be the key developmental period during which there are elevated risks for the acquiring of sexually transmitted infection and HIV. Individuals in these developmental phases are at an increased risk for the above mentioned outcomes and the reasons combine behavioural, biological and cultural reasons. Adolescents and young adults are more likely to engage in risky sexual behaviour such as multiple partners, having unprotected sex and selecting higher

risk partners (Caruthers, Van Ryzin & Dishion, 2014). According to problem behaviour theory multiple health risk behaviours such as risky sexual behaviour, substance use and antisocial behaviour peak during adolescence. These behaviours may form part of a single behavioural syndrome therefore the existence of one or more maladaptive behaviours might predict or lead to other maladaptive behaviours. Multiple problem behaviours appear to be strongly related, they overlap in their developmental cause and share many of the same ecological predictors especially those which are related to parent-child relationships and peer behaviour (Caruthers, Van Ryzin & Dishion, 2014).

Violence/Aggressive behaviour: According to the WHO (2018b), violence is defined as the intentional use power or physical force, actual or threatened against another person, another person, or against a community or group, resulting in or heightening the likelihood of injury, death, maldevelopment, psychological harm, or deprivation. Four modes have been identified in which violence may be inflicted: sexual; physical; and psychological attack; and deprivation. Violence can be further divided into the following subtypes:

- Self-directed violence refers to violence in which one harms oneself (victim and perpetrator being the same person, which includes self-harm/abuse and suicide.
- Interpersonal violence refers to violence between individuals. Interpersonal violence includes: family violence, community violence and intimate partner violence, child maltreatment, elder abuse, assaulted by a stranger, violence related to property crimes, and violence in different institutions.
- Collective violence is violence that is committed by larger groups can includes: political, social and economic violence (WHO, 2018b).

Aggression and delinquency in adolescents have been linked to lower levels of educational attainment and increased levels of mental health issues, economic problems and substance abuse (Terzian, Andrews & Moore, 2011).

Studies have found that demographic variables such as, age, gender, ethnicity and socio-economic status show reliable associations with health-enhancing behaviours (Conner & Norman, 2005). Individuals who have fewer resources and/or experience higher levels of stress are more likely to engage in health risk behaviours such as, drinking and smoking. Social factors (parental modes), peer influences, cultural values, emotional factors, self-esteem and accessibility influences whether individuals partake in health-enhancing or health-compromising behaviours (Conner & Norman, 2005). Personality factors such as traits or a combination of traits are considered fundamental determinants of behaviour. They are associated with either positive or negative health behaviours. It has also been found that cognitive factors can determine the engagement or avoidance of health risk behaviours (Conner & Norman, 2005).

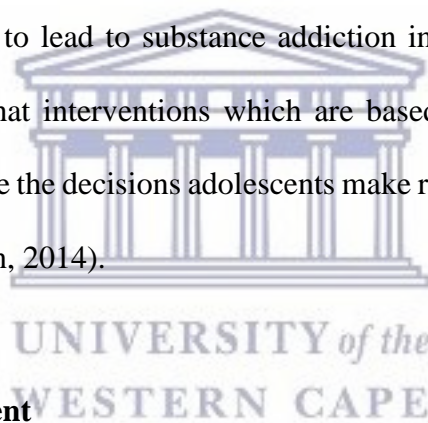
According to WHO (2016) there were an estimated 1.3 million deaths among adolescents in 2015, mostly from treatable or preventable causes. In 2012 the leading cause of death among adolescents was road traffic injuries, with approximately 330 adolescents dying daily (WHO, 2016). Other leading causes of death of adolescents around the world include HIV, interpersonal violence, suicide and respiratory infection (WHO, 2016). 72% of all deaths of people between the ages of 10-24 years old in 2008 were attributed to the following: motor vehicle accidents (26%), other unintentional injuries (17%), homicide (16%) and suicide (13%) (Centre for Disease Control, 2013). In addition, according to the SG Report (2014), of all young people who smoke and continue to smoke tobacco related substances, approximately half will be killed due to tobacco related illnesses. One of the biggest health and social problems South African adolescents engage in is substance abuse (Reddy et al., 2010). Risky sex behaviour is another one of the risk behaviours which adolescents engage in and this is aggravated by the alarming high HIV infection rate among 15-24 years olds, with South Africa accounting for approximately 15% of all HIV infection rates globally for this age group (Magnani et al., 2005).

Studies have shown that adolescent males are more likely than adolescent females to engage in certain health risk behaviours such as tobacco, alcohol and other substance use, risky sexual behaviour, which includes earlier initiation of sexual intercourse and multiple partners (Mahalik et al., 2013). There has, however, been other research that has indicated risk-taking behaviour in male and female adolescents has become more similar (Mahalik et al., 2013). Recent studies have shown that there has been an increase in violent behaviour among females (Mullis, Cornille, Mullis & Huber, 2004), as well as early sexual initiation (Petersen & Hyde, 2010). As the statistics of risk-taking behaviour in adolescents are high and could lead to adult risk behaviour, it is important for life skills development to take place during adolescence in order for individuals to make informed decisions and become competent adults. Studies have shown that reasoning about risk taking behaviour among adolescents and adults are similar, researchers believe that the actual difference in risk taking behaviour among adolescents are more likely due to the information that adolescents and adults use before making decisions whether or not to partake in certain behaviours (Steinberg, 2007).

A study done on Turkish adolescent health risk behaviour found that the most prevalent risk behaviour which adolescents engage in is lack of physical exercise and that females are less likely than their male counterparts to engage in physical activity (Geçkil & Dündar, 2011). Secondly, nutrition also seems to be a major problem where adolescents eat a lot of unhealthy foods and that it is also females who are more likely to engage in unhealthy eating (Geçkil & Dündar, 2011). Another problem which was common among this group was risky psychosocial behaviour, followed by hygiene and substance abuse challenges (Geçkil & Dündar, 2011). However, for this group of health risk behaviour results showed that males are more likely to have problems in these areas.

Adolescents are faced with situations which involve a higher level of risk. During this developmental phase individuals are more likely to be exposed to drugs, peer-pressure and

reckless driving. Each of these contexts pose a possibility for emotionally and physically harmful outcomes (Khan, Peake, Dishion, Stormshak & Pfeifer, 2014). Risk-taking behaviour and novelty-seeking has been shown to increase disproportionately among adolescence (Christakou, Gershman, Niv, Simmons, Brammer & Rubia, 2013). Statistically, in the United States there are approximately 3 million new cases of sexually transmitted infections among adolescence every year, and more than half of the new cases of HIV infection occur in individuals who are under the age of 25 (Reyna & Farley, 2006). It is also during adolescence that individuals typically begin using substances. There are many adverse health complications associated with substance use, such as driving under the influence – which could lead to motor vehicle accident - and risky sexual behaviour (Reyna & Farley, 2006). Substance use during adolescence has the potential to lead to substance addiction in adulthood (Reyna & Farley, 2006). Studies have shown that interventions which are based on or have some life skills component positively influence the decisions adolescents make regarding health risk behaviour participation (Botvin & Griffin, 2014).



3.4 Life Skills Development

The WHO (1997), defined life skills as skills and competencies enabling children and adolescents to adequately deal with the daily challenges and developmental tasks which they encounter. The development of adequate life skills enables individuals to be successful in their environments. According to the WHO (2014), life skills training and development is important for both the reduction and even prevention of certain health risk behaviours that youth engage in. Life skills development combined with the provision of psychosocial support for adolescents can help for the promotion of good health (WHO, 2016). There are different forms which life skills encompass for example physical (e.g. an individual's posture) behavioural (e.g., effective communication) or cognitive (e.g. good decision-making skills). Life skills

development has been implemented in many different environments with varying purposes. For over two decades it has been advocated that life skills education is a key component for educating children and young people about HIV/AIDS. Many literatures have presented life skills development to be the panacea for many of the ills people experience in life (Yankah & Aggelton, 2008).

It is believed that life skills development enables political and economic participation by people (UNICEF/ROSA, 2005), to improve on the gender inequalities experienced (UNICEF, 2007), improving on the quality of parenting and parenting skills (Yankah & Aggelton, 2008), and the ability to reduce anti-social behaviour, including crime (Botvin, Griffin & Nichols, 2006). A life skills-based programme in the United States has shown that life skills training reduces the rate of psychoactive drug use by 50%, it can prevent and reduce cigarette smoking, and reduce the use of alcoholic drinks and/or marijuana (Botvin & Griffin, 2014). According to Botvin and Griffin (2014), life skills training can also reduce risky driving, HIV/AIDS risk behaviours, and violence and delinquency.

In South Africa Life Skills training forms part of the secondary schooling system and is conceptualised as teaching learners the ability to live with others, survive and succeed in a complex society through the development of the necessary skills required (Magnani et al, 2005). The goal of the Life Skills and HIV/AIDS education that is part of the curriculum for many schools from Grades 8 to 12 in South Africa, is increasing learners' knowledge, developing their skills, the promotion of attitudes that are positive and responsible, as well as the provision of motivational support with the aim of reducing risky sexual behaviour among adolescents (Magnani, 2005). However, research has shown that there has only been marginal success with the school-based life skills education in influencing sexual risk-taking behaviour and health seeking behaviours among adolescents in South Africa (Magnani, et al., 2005).

In Germany, a school-based universal programme has been developed to prevent depression through the building up life skills (Wahl, Patak, Pössel & Hautzinger, 2011). The aim of this programme was to prevent the increase of depressive symptoms through the improvement of their life skills, fostering realistic thinking and influencing school behaviour among adolescents (Wahl, Patak, Pössel & Hautzinger, 2011). Studies have shown that depressive disorders among adolescents is widespread and on the rise. There are extensive psycho-social consequences for society with the increasing amounts of depressive symptoms experienced by adolescents, which becomes costly for society. Further research has indicated that experiencing depressive symptoms during adolescence increases the risk of depressive disorders and other psychopathologies later in life (Wahl, Patak, Pössel & Hautzinger, 2011). With the implementation of the school-based prevention programme, there has been a positive influence on the learners social networking, depressive symptoms and aggressive behaviour (Wahl, Patak, Pössel & Hautzinger, 2011).

A study was done in India on the Implementation of National Institute of Mental Health and Neurosciences (NIMHANS). The school mental health programme (SMHP), which is an important and integral part of the educational system, has been recognised initiated in India as a health component in their schools (Srikala & Kishore, 2010). The aim of the study was to assess how the programme impacts life skills through assessing the differences between adolescents who formed part of the programme and the control group. Differences were assessed on coping, self-esteem, adjustment in various areas and psychopathology (Srikala & Kishore, 2010). The life skills education programme is a novel promotional programme that through participatory learning methods such as games, role playing, debates, and group discussions, teaches generic life skills. When the impact of the programme was evaluated it was indicated that there was an improvement in adjustment of adolescents with teachers and

school, and there was also an increase in prosocial behaviour, self-esteem and coping (Srikala & Kishore, 2010).

Sports has been recognised as a medium which has the ability to enhance life skills if used in conjunction with life skills instruction (Goudas & Giannoudis, 2007). Sports has been deemed a suitable method for developing life skills for several reasons. Firstly, Danish, Forneris and Wallace (2005) have found that there is likeness between the mental skills required for successful performance in sports and non-sports domains as well as similarities between individuals' performance excellence in sports and personal excellence in their lives. Secondly, there are many skills that persons develop through sports that can be transferred into other areas of their lives. For example, the ability a person has to perform under pressure, problem solving skills, the ability to meet deadlines and challenges, goal setting, communication skills, the capacity to handle success and failure, team work, the ability to accept critical feedback and implementing changes (Goudas & Giannoudis, 2007). Thirdly, most adolescents are already familiar with sports as it is an activity that is prevalent throughout society (Goudas & Giannoudis, 2007). Fourth, just like in the context of school and work, there is an emphasis placed on training and performance in sports. Fifth, both sports and life skills are learned through demonstration and performance (modelling behaviour) and practice. Sixth, sports play a significant role in the development of self-esteem as well as perceptions of competence among adolescents (Goudas & Giannoudis, 2007). Participating and engaging in sporting activities can improve goal setting and goal accomplishment of adolescents because in sports the goals which needs to be obtained are shorter termed goals and are tangible (Danish, Forneris, Hodge & Heke, 2004).

3.5 Life Skills Domains

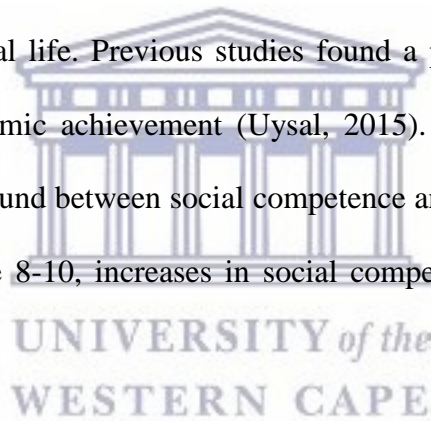
Neill, Marsh and Richards (2003) posits that there are eight domains which can be used to measure the life skills of individuals. The life skills domains form part of the LEQ which is a tool that was developed to measure the extent to which individuals manage their personal life. The 8 domains of the LEQ are as follows: Time Management, Social Competence, Achievement Motivation, Intellectual Flexibility, Task Leadership, Emotional Control, Active Initiative and Self Confidence.

3.5.1 Time Management

Time management is the ability to effectively use one's time is seen as a useful quality in both the personal and professional life of an individual (Neill, Marsh & Richards, 2003). Time management refers to behaviours one utilises to effectively use your time when performing certain activities which are goal directed (Claessens, van Eerde, Rutte & Roe 2007). These behaviours include time assessment behaviours which refers to how you assess whether or not you are capable of completing a task and the time required, planning behaviours such as goal setting, planning, prioritising different activities, and monitoring behaviours which aims at observing how much time one spends on a task (Claessens, et al., 2007). In a study done by Misra and McKean (2000), effective time management by students seemed to lower the academic stress that they experienced. To be able to work effectively it is important to manage one's time properly. Time management is not something that is optional; it is something that everyone practices to some degree (Forsyth, 2010). Pharaoh (2014) found that elevated levels of time management in grade 8-10 learners corresponded with lower levels of smoking, drug use and sexual activity.

3.5.2 Social Competence

The promotion of social competence among adolescents has been acknowledged as a basic objective of both family and school education (Uysal, 2015). Social competence can be understood as the ability to have and maintain good relationships with other people as well as having the ability for goal achievement in social relationships (Uysal, 2015). Social competence is crucial for the social, emotional and cognitive development of individuals. It encompasses skills and behaviours such as kindness, appropriate extroversion, cooperation and communication skills, which are positive outcomes a child with social competence possess (Jackson & Cunningham, 2015). According to Neill, Marsh and Richards (2003), social competence is arguably a core component of the general effectiveness of an individual in both their personal and professional life. Previous studies found a positive relationship between social competence and academic achievement (Uysal, 2015). In another previous study a significant relationship was found between social competence and smoking. It was found that for learners who are in grade 8-10, increases in social competence related to decreases in smoking (Pharaoh, 2014).



3.5.3 Achievement Motivation

According to Neill, Marsh and Richards (2003), research literature has found a strong link between a person's motivation and their achievement. This implies that the more motivated and individual is, the more likely they are to achieve their goals. Achievement motivation can be understood as the tendency to work towards success by means of choosing goal-oriented activities (Kumar, 2016). Achievement motivation includes the following components: social comparisons, reward salience, concepts of ability versus effort and task performance (Mohanty & Nayak, 2016). Motivated people are more dynamic leading to higher levels of self-respect (Kumar, 2016). When a person achieves their goals, it affects the way in which they perform

the task and it also characterised by a desire to display competence (Mohanty & Nayak, 2016). Pharaoh (2014) found that when grade 8-10 learners are more motivated to achieve excellence through the use of the required means they tend to better abstain from participating in risky alcohol use behaviours. Thus higher levels of achievement motivation corresponds to lower alcohol use.

3.5.4 Intellectual Flexibility

Intellectual flexibility refers to a person's ability to adjust their views as a means to accommodate and act accordingly based on the ideas of others (Neill, Marsh & Richards, 2003). Intellectual flexibility is considered to be a component of existential openness: this is where existential difficulties like certainty as opposed to uncertainty, purposefulness contra meaninglessness or freedom versus destiny are being dealt with in a way that incorporates a complex conceptual understanding (Neill, Marsh & Richards, 2003). When a person has the moral and cognitive capacity to act in accordance to what they can clearly, accurately and comprehensively see in their surroundings, then they can be seen as being intellectually flexible (McCloskey, 2014).

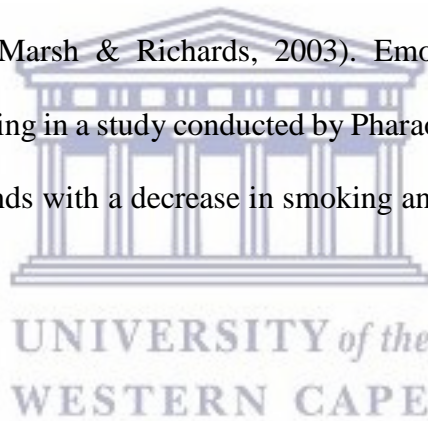
3.5.5 Task Leadership

Task leadership, according to the LEQ, is a person's ability to take on the role of leadership as well as executing the leadership role based on a situational need or opportunity (Neill, Marsh & Richards, 2003). Someone who displays task leadership capabilities will have the ability to take control of different situation that may arise, they are able to motivate and impassion others to strive towards a common goal and they are able to ensure the outcomes are productive and harmonious (Neill, Marsh & Richards, 2003). A person who has these task

leadership capabilities are more likely than those who do not, to be effective in general life (Neill, Marsh & Richards, 2003).

3.5.6 Emotional Control

According to Gross (1999) emotional control refers to an individual's ability to manage the generation, experience, as well as expression of emotion and/or their emotional responses. Evidence suggests that there is an association between emotional control and effective life outcomes (Neill, Marsh & Richards, 2003). Being able to control your emotions whether it is during particularly stressful times or hardships or emotional uplifts during early adolescence has been shown to be associated with lower levels of depression and a greater ability to elicit behavioural restraint (Neill, Marsh & Richards, 2003). Emotional control accounted for variance in smoking and drinking in a study conducted by Pharaoh (2014). Where an increase in emotional control corresponds with a decrease in smoking and drinking behaviour in grade 8-10 learners.

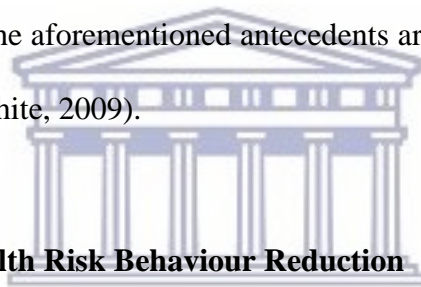


3.5.7 Active Initiative

A person who demonstrates active initiative will both actively and independently use their judgment to make decisions to initiate new actions and thoughts without being told what to do in a variety of different settings whether it is personal, school, community, work, etc. related (Neill, Marsh & Richards, 2003). An example of showing active initiative will be to start a new project and gain all the information needed to do so. Having active initiative will allow an individual to be dynamic and productive in school or the work place; they will also be more likely to take control of and direct their own personal lives (Neill, Marsh & Richards, 2003). Previous research indicated that an increase in active initiative corresponds with a decrease in smoking behaviour and physical inactivity of grade 8-10 learners (Pharaoh, 2014)

3.5.8 Self-confidence

Self-confidence can be understood as the general belief and security one has in one's own abilities (Neill, Marsh & Richards, 2003). Self-confidence is an attribute that can either foster or hinder an individual. Self-confidence can also be influenced by an array of factors (White, 2009). According to White (2009) there are various antecedents necessary for the fostering of self-confidence. These include: to attain knowledge in the required area or field, to gain a support system, gaining experience in the required area or field, to be geared up appropriately – which refers to approach-behaviour which an individual uses to prepare for designated situations, and lastly successes is paramount to the fostering of self-confidence in individuals. In the event that the aforementioned antecedents are not acquired self-confidence is more likely to be stalled (White, 2009).



3.6 Interventions for Health Risk Behaviour Reduction

Previous studies have shown that the Life Skills Training (LST) programme has been an effective tool to reduce health risk behaviour which include: tobacco, alcohol, illicit drug use and other risk behaviours through a school-based programme (Botvin & Griffin, 2014). The programme offers the potential for a reduction in health risk behaviour and the fostering of academic success (Botvin & Griffin, 2014). The LST programme is a school-based intervention which provides knowledge, attitudes and the necessary skills which contributes to the ability to resist social influences through making better decisions about high risk behaviour. The programme was designed to target social and interpersonal factors (Botvin & Griffin, 2014). The LST programme focuses on drug resistant skills and is a multi-component programme and enhances competence based on preventative interventions (Botvin & Griffin, 2004). There are three major components of the LST programme which include: a personal

component, a social component and a drug resistant component (Botvin & Griffin,2014). The learning objectives of LST are to teach learners the skills necessary to resist smoking, drinking and drug use which stem from peer pressure. The programme also strives for learners to develop self-esteem and self-confidence, capacity building of effective coping mechanisms to deal with anxiety, knowledge development (about the consequences of substance use) and to improve the cognitive and behavioural competencies of learners with the aims of reducing and preventing health risk behaviour (Botvin & Griffin, 2014).

Another programme which incorporates life skills to foster better decision-making around high risk behaviour among adolescents, is the Positive Adolescent Life Skills (PALS) intervention. PALS is a cognitive-behavioural and skills building intervention which improves social skills and enhances resiliency of adolescents (Tuttle, Campbell-Heider & David,2006). The variables which were measured for this intervention were problems related to substance use, mental health, health, peer relations, family relations, vocational status, education status, social skills, aggression and leisure and recreation (Campbell-Heider, Tuttle & Knapp, 2009). The instrument used to measure these independent variables was Problem Orientated Screening instrument for Teenagers. PALS showed a reduction in problems related to substance use in both boys and girls (Campbell-Heider, Tuttle & Knapp, 2009). PALS was deemed to be useful and culturally appropriate in a variety on contexts, including with adolescents who are from the inner-city, poor communities and minority groups (Tuttle, Campbel-Heider & David, 2006).

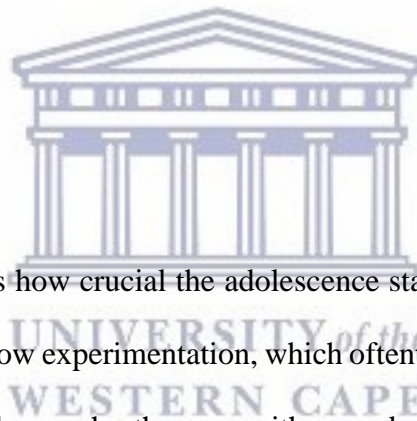
Life skills education which is school based has the capabilities of communicating key information and can also enable adolescents to develop the skills which are relevant to the reduction of HIV risk (Magnani et al., 2005). The South African national programme has not yet been fully implemented, therefore its effectiveness in sustaining behaviour modification relating to a reduction in HIV infection rates remains uncertain (Magnani et al., 2005). HIV

infection rates in South Africa for adolescent and early adulthood are alarmingly high and accounts for 15% of global infection rates for this age group (Magnani et al., 2005) making it imperative that the South African national programme or similar interventions be fully implemented

The Information + Psychosocial Competence = Protection (IPSY) life skills programme was developed for the prevention of substance misuse by adolescents, and whether the programme can positively influence school bonding (Wenzel, Weichold & Silbereisen, 2009). IPSY is a comprehensive intervention programme combining the promotion of intra-and interpersonal life skills – communication, problem solving, anxiety and stress coping mechanisms, aggressiveness etc, with training skills in relation to substance use (Wenzel, Weichold & Silbereisen, 2009). In addition, the programme includes knowledge development in relation to alcohol and tobacco use, as well as strategies that can be implemented to ensure leisure time. IPSY includes lessons about school; the attitudes and experiences that learners have towards school, the positive and negative aspects of learning and school, and learning methods for balancing school and leisure time. Results from the study indicates that there is a relationship between school-relatedness issues and the prevention of substance misuse in early adolescence (Wenzel, Weichold & Silbereisen, 2009). Through the development of life skills among adolescents, these interventions play an important role in reducing health risk behaviour.

A Comprehensive Youth Development Programme – Developing Youth 4 Paarl - was developed and implemented among grade 8 learners at a specific school to address health risk behaviour and equip learners with the means to make health behaviour changes. The four following areas are the focus of this programme: Knowledge development, life skills development, leadership development and relationship development (Pharaoh, 2014). For this programme the participants are not only the learners but they also include the parents, role

models, teachers, health professionals and community health members (Pharaoh, 2014). There is a Roth and Brooks-Gunn (2003) have identified three important characteristics of youth development programmes; programme goals – the programme needs to promote the positive development of adolescents even in the case where the aim is the prevention of problem behaviour, programme atmosphere – when the programme is being implemented the atmosphere must be that which creates a sense of hope by the leaders and programme activities, It is vital that the activities that the participants are required to engage in are challenging and require active participation. There is a wide scope for this youth development programme which consists of life skills, sports, parental education and involvement, school – teachers’ education and involvement, community education and involvement and mixed gender based activities (Pharaoh, 2014).



3.7 Conclusion

The literature identifies how crucial the adolescence stage of development is in terms of the changes that occur and how experimentation, which oftentimes include risky behaviours, is a means for adolescents to learn who they are with regards to their unique social identity. This chapter has also highlighted the dangers of adolescents engaging in health risk behaviours and the consequences of risky behaviour and how it can carry on into adult risk behaviour and lead to disease and death. In this chapter it was also brought to the fore the importance of life skills development and education in reduction and prevention of health risk behaviour. This was shown through the multiple interventions that include life skills in their programmes and previous research that was with regards to life skills and health risk behaviour engagement. The LEQ was the measurement tool used to test life skills and how it relates to health risk behaviour. In chapter four the methodological aspects of the study will be discussed.

Chapter Four

Methodology

4.1 Introduction

The intention of this chapter is to provide an understanding of the methodological process utilised for this study. Methodology is a system of broad principles used to systematically and theoretically analyse the methods which were applied in a specific study in order to interpret or solve an array of problems. The methodology of a study also provides the researcher with a framework in which to collect and analyse the data required for the study undertaken through a process which is both reliable and valid. This chapter will also highlight the aim and objectives of the study and how the researcher meets the aims and objectives through a methodological process which includes sample selection, changes made to the instruments, data collection and data analysis using different research instruments. The reliability and validity of the instruments used for the study are important to ensure that the data collection instruments provide an accurate account for the different variables which are being measured, therefore the psychometric properties of the instruments used for data collection are discussed in this chapter. The chapter concludes with an ethical statement and conclusion of the methodology section of the study. The aim and objectives of the study are as follows:

4.2 Aim and objectives of the study

4.2.1 Aim of the study:

- The aim of the study was to investigate whether Grade 8 learners' life skills can predict engagement in health risk behaviour in a selected high school in Paarl.

4.2.2 The objectives of the study were:

- To determine the prevalence of health risk behaviour among Grade 8 learners in high school in Paarl.
- To determine the extent to which learners manage personal situations using the LEQ eight domains in a selected high school in Paarl.
- To determine whether life skills (using LEQ eight domains) could significantly predict engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl.

4.3 Methodological Approach

This study took on a quantitative methodological framework in order to answer the research question through objectively examining the relationship between variables (Creswell, 2009). These variables, in turn, are measured using different instruments so that the numerical data can be analysed through the use of designated statistical procedures (Creswell, 2009). By using a quantitative research methodology, the researcher is able to objectively measure happenings in the is the social world. The researcher is able to conduct hypothesis testing, as well as predict human behaviour (De Vos, 2005). When a researcher uses a quantitative research method there is an emphasis on the quantification of constructs. Therefore, for the researcher to answer the research question, it is believed that measuring the properties of certain phenomena is best achieved through quantitative measuring achievable by assigning numbers to constructs (Babbie & Mouton, 2008).

For this study, the variables being measured were time management, achievement motivation, emotional control, social competence, active initiative, self-confidence, intellectual flexibility and task leadership as the independent variables against alcohol drinking, smoking,

drug use, sexual activity and physical inactivity as the dependant variables to seek a predictive relationship between variables. The predictive relationship between the variables is tested by the following hypothesis: it is hypothesised that the combination of the LEQ's life skill domains significantly explains the variance in the health risk behaviours. For any research being conducted, objectivity is vital. Objectivity in the researcher can be reached through examining the methods and conclusions of the study for bias, a means whereby to achieve this is to report on the reliability and the validity of the instruments that are being used and to ensure that the instruments used meets the appropriate standards (Creswell, 2013). There are many data sources that which involve some degree of subjectivity and in those cases, it is important that the researcher controls for any known source of error and further report on the reliability and validity on the instruments being used (Kimberlin & Winterstein, 2008).

When conducting a quantitative inquiry, the researcher uses different strategies which include experiments and surveys in order to obtain statistical data for analysis. The data was collected on pre-determined instruments and questionnaires, such as the Youth Risk Behaviour Surveillance Survey (YRBSS) and the Life Effectiveness Questionnaire (LEQ). A quantitative research approach is best suited when social research problems calls for the identification of different factors which could influence an outcome, when the researcher wants to understand what the best predictors of an outcome will be (Creswell, 2013). Therefore, a quantitative methodology is best suited for this study.

4.4 Research Design

The research design is fundamental to the research process as it is a guide for how the research process will flow. It is most closely tied to how the research question and theories will be investigated (Vogt, Gardner & Haeffele, 2012). The research design can be best understood as the blueprint or plan for how the research will be conducted, this entails the overall plan,

which is how the participants for the study is collected, the means of data collection and analysis (Welman, Kruger & Mitchell, 2009 & Babbie & Mouton, 2008). Therefore, the research design can be described as the functional plan wherein the research methods and procedures are merged so that the researcher can acquire data that is both reliable and valid for analyses, conclusion and the formulation of theory. The focus of the research design is what will be carried out by the researcher in order to answer the research question.

4.4.1 Cross-sectional Design

For this study a cross-sectional design employing written surveys will be utilised to obtain baseline information. This allowed the researcher to gain insight into the phenomena which is being studied, and the relationship between variables (Babbie, 2010 and Michie, 2012). This design was deemed appropriate, as surveys are commonly used by researchers in public health planning when they need to determine the prevalence of the outcome of interest for a given population (Levin, 2006). The data can also be collected on individual characteristics, such as risk factors, together with information about the outcome.

Cross-sectional design which makes use of surveys provides a numeric or quantitative description of attitudes, trends or opinions (Creswell, 2009). When doing a cross-sectional study, a sample population are usually only measured once, generally using surveys, questionnaires and interviews. From the data which has been collected, the researcher is able to identify relationships and make generalisations from the sample to the population (Babbie, 2010). When doing a cross-sectional study, observations are made at a single point in time.

When employing written surveys, the research sample can be quite large as a means to ensure that there is a valid estimation of generalised relationships between all variables (Webb & Auriacombe, 2006). When a researcher uses cross-sectional design, they are unable to

manipulate all the variables, or randomly assign participants to groups. Therefore, when the researcher wants to determine the effects of life skills (independent variable) on the health risk behaviour (dependant variable) of Grade 8 learners, the researcher is unable to manipulate the conditions. The advantages of using survey research is that they are relatively inexpensive, it is less time consuming, multiple outcomes can be assessed, it is useful in public health planning, can be used for understanding disease aetiology and for generating hypotheses (Deuskens, Ruyter, Wetzels & Oosteveld, 2004).

The disadvantage of using a cross-sectional design is the difficulty with which to make causal inferences, however making causal inferences is not impossible. A disadvantage with surveys is that it is not always possible to receive adequate response rates (Deuskens, Ruyter, Wetzels, & Oosterveld, 2004). It has been reported that an average response rate of 33% can be expected, responses varying between 20-47% (Nulty, 2008).

When employing written surveys, the researcher will administer the questionnaires to a single group of participants before any type of intervention has taken place (Harris, et al., 2006). There is no control group against which the data is compared (Harris, et al., 2006). The participants are measured on the dependant variable, which happens prior to the implantation of the intervention in order to determine the baseline information (Christensen, Johnson & Turner, 2011). This study was used to search for a predictive relationship between the independent variables of the LEQ (time management, social competence, achievement motivation, intellectual flexibility, task leadership, emotional control, active initiative and self-confidence) and the dependant variables of the YRBSS (safety, violence-related behaviour, bullying, sad feelings and attempted suicide, tobacco use, drinking alcohol, dagga/marijuana use, other drugs, sexual behaviour, body weight, nutrition, physical activity and health related: HIV/AIDS and asthma. The purpose of this study is to determine baseline information on health

risk behaviour youth engage in and how they manage their personal lives. The researcher also wants to determine if life skills predictively influences health risk behaviour.

4.5 Population and Sampling

The study was conducted in selected school in the Paarl area. The reason for the selection of this area is that it is one of the most densely populated areas of the Drakenstein municipality (Lehohla, 2011). Youth aged between 10-14 years of age make up approximately 15.6% of the total population and youth aged between 15-19 years old constitute approximately 17.9% of the current population in the area (Lehohla, 2011). The current study is building on a study conducted by Pharaoh (2010). The previous study was conducted on grade 8 – 10 learners to ascertain whether there is health risk behaviour concerns among the population. For the current study baseline information was sought for only the grade 8 learners in order for the intervention which was developed by Pharaoh (2014) to be implemented at a later stage.

Sampling can be understood as a sub-set of a larger population of persons or things (Scott & Morrison, 2007). The intention of sampling or otherwise known as a sample frame is that it is intended to be a representation of a particular population (Neuman, 2011). There are two types of sampling; probability sampling and non-probability sampling. Probability sampling refers to when a sample is selected in accordance with probability theory (Babbie, 2007). A non-probability sampling method was used as it is the most appropriate sampling method to be used in quasi-experimental studies where the researcher needs to use naturally formed groups such as classrooms and organisations as well as volunteers (Creswell, 2009). Probability sampling typically involves some form of random selection mechanism. More specific types of probability sampling include simple random sampling, systematic sampling, equal probability of selection method sampling (EPSEM) and probability proportional to size (PPS) (Babbie, 2007). Non-probability sampling has various techniques where the sample is selected by means that does not suggest probability theory (Babbie, 2007). The examples of

non-probability sampling include reliance on available subjects, quota, snowball, purposive (judgmental) (Babbie, 2007) and convenience sampling (Creswell, 2009). Simple random sampling was used for this study so that everyone that forms part of the list of the population has an equal opportunity of being selected.

The current study forms part of a larger study titled: “The Development, Implementation and Evaluation of a Youth Development Programme to Address Health Risk Behaviour Among Grade 8 to 10 Learners in Schools in Paarl”. The larger project started in 2010 and the study was conducted in secondary schools in the Paarl area. There were ten schools in the area. The study population for the larger project consisted of Grade 8, 9 and 10 learners enrolled in the schools in 2010. There were 5736 learners enrolled for Grade 8 to 10 in the ten schools, information was provided by the WECD (Western Cape Education Department) offices located in Worcester. All ten of the secondary schools were invited to participate in the study. Of the ten schools that were invited, four accepted the invitation, two declined the invitation and four did not respond. At the time that the larger project was taking place, there were teacher strikes underway, and as a result only two of the ten schools originally invited to participate were able to. This resulted in a total of 1600 learners from Grade 8 to 10. Therefore, the sampling frame was reduced from (n=5730) to (n=1600). Due to the small sampling frame, all Grade 8 to 10 learners with ages ranging from 13 – 17 years old from both schools were invited to participate. The final sample were those who presented with both parental consent and learner assent (Pharaoh, 2014).

For the current study, both schools which gave consent for the larger study was approached with the opportunity to form part of the current project. Out of the two schools, only one school gave permission. The study population consists of Grade 8 learners enrolled during 2017 in the selected school. All Grade 8 learners were invited to participate in the study. All learners whose parents gave written consent (Appendix A) and learners assent (Appendix

B) formed part of the study. The study participants are from a low socio-economic status. Both males and females will form part of the study. Approximately 99% of the participants are coloured as it is a predominantly coloured area. The sampling method that was used for this study is purpose sampling, that involves examining the entire population. This type of sampling method is used when the population has a particular set of characteristics (e.g. grade 8 learners in a specific school in the Paarl area) (Babbie, 2007). The sample will then be all those in the population that consented to participating in the study.

According to the school which was selected to form part of the study, there are currently 250 learners registered for grade 8 in 2017. Each learner received a parent consent form (Appendix 3), learner assent form (Appendix 4) and information letters for themselves and their parents/guardians/caregivers. 178 of the assent and consent forms were returned allowing the learners participation in the study. The data of 152 questionnaires were electronically captured and analysed. The excluded 48 was because the questionnaires were not completed correctly rendering them unable to use, leaving a total of 104 valid. The age of the learners who partook in the study varied between 12 to 17 years old.

4.6 Data Collection Instruments

For the purpose of this study data was collected using validated self-administered questionnaires. The two instruments were selected as they meet the objectives of the study. The questionnaires were given to all learners whose parents/guardians/caregivers gave written consent and learners who gave assent to participate in the study. The two instruments that were used for the study are namely, the Youth Risk Behaviour Surveillance Survey (YRBSS) (Grubaun, Kann, Kinchen, Williams, Ross, Lowry & Kolbe, 2002) and the Life Effectiveness Questionnaire (LEQ) (Neill, Marsh & Richards, 2003).

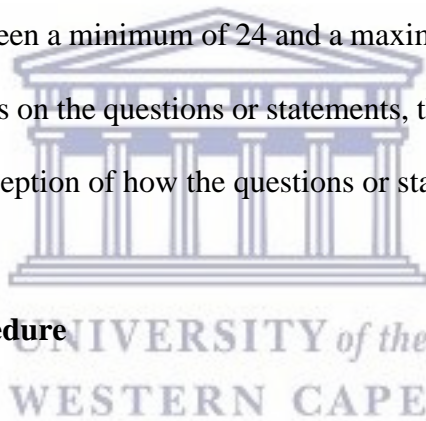
4.6.1 Youth Risk Behaviour Surveillance Survey (YRBSS)

The Youth Risk Behaviour Surveillance Survey is a self-administered questionnaire which examines the health risk behaviours which youth engage in as well as the extent thereof (Grubaun, et al., 2002). The use of the YRBSS has been deemed to be both valid and reliable for use in South Africa, thus suggesting that it is appropriate to use for this sample (Reddy, et al., 2008). The questionnaire contains 86 questions, which makes up the demographic and health risk behaviour that youth engage in. The demographic details in the questionnaire includes the age, sex, living arrangement (do they live with mother, father, both, grandparents, etc), how many people live in the household, religion, race and extracurricular activities that they engage in (Grubaun, et al., 2002). The section in the questionnaire which pertains to the health risk behaviour that youth engage in where divided into thirteen different headings with the number in brackets indicating how many questions are asked under each heading. The headings under the health risk behaviour section were as follows, safety (4), violence-related behaviour (10), bullying (2), sad feelings and attempted suicide (5), tobacco use (11), drinking alcohol (6), dagga / marijuana use (4), other drugs (10), sexual behaviour (7), body weight (5), nutrition (7), physical activity (5) and health related: HIV/AIDS and Asthma (3). (Grubaun, et al., 2002).

The response for the instrument was on a Likert-type scale, the participants would choose a response which best represent them. For the different health risk behaviours included in the instrument, the scores would indicate whether it was first time use, life time use, use during the last 30 days, as well as the prevalence of health risk behaviour engagement (Grubaun, 2002).

4.6.2 Life Effectiveness Questionnaire (LEQ)

The LEQ is an instrument which was developed by Neill, Marsh & Richards (1997). The purpose of the instrument was to measure the extent to which persons succeeded in managing their lives using generic life skills. The LEQ consists of eight different domains namely: Time Management, Social Competence, Achievement Motivation, Intellectual Flexibility, Task Management, Emotional Control, Active Initiative, and Self-confidence (Neill, March & Richards, 2003). Each of the domains consists of three questions that need to be answered. The LEQ uses an eight-point Likert scale anchored by the two-dichotomous end point “false, not like me” (1) and “true, like me” (8). In each of the 8 domains the learner could score between a minimum of 3 and a maximum of 24. When accumulated the total scores for the eight domains ranges between a minimum of 24 and a maximum of 192. Depending on the numeric value the learner places on the questions or statements, the learner would give a scaled answer on their perceived perception of how the questions or statements relate to them.



4.7 Data Collection Procedure

The research for the study was conducted in the school which has been identified following clearance from the Faculty of Community, Health Sciences Higher Degrees Committee and Senate Higher Degrees, The Western Cape Education Department, the principal and the governing body of the school involved. The principal and teachers of the school which has been selected and agreed to be involved in the study were given the information sheets (Appendix 1 and 2), consent forms and assent forms which was given to the parents and eligible learners. Parents, children, the principal(s) and teachers all had the opportunity to ask the research team any questions regarding the project before giving consent and the implementation of the project begins. Teachers and the principals(s) of the selected school were to inform the researchers of the appropriate times for when they can start with the

research project. The teachers who volunteered to participate in the study all attended training session where they became familiar with the different instruments that was used as well as training for the different procedures to be followed. The questionnaires were conducted in the class with those learners who have received parental consent and given learner assent. Questionnaires were handed out by either the researchers which form part of the research team or the teachers who have received training. All the questionnaires where in English, however the LEQ was translated to Afrikaans for the learners.

4.8 Data Analysis

Data analysis is a vital part of the research process. All the variables of data collected by the researcher is to be analysed for the study. The process of data analysis involves inspecting, cleaning, and modelling of data, the goal if therefore to uncover useful information, suggested conclusions and to support decision-making (Creswell, 2013). Once the data was obtained from the participants all the raw data was coded the first entered into Microsoft Excel then exported into the Statistical Package for Social Science (SPSS) V24. This process was repeated after the intervention had taken place and results and analysis compared. For the nature of the study the researcher was required to use both descriptive and inferential statistics.

Descriptive statistics allows the researcher to describe the population, for example, age, whom you live with (mother, father, both, grandparents, etc), how many people live in your household, religion, race, extracurricular activities, health risk behaviour engagement and life skills domains. The different types of descriptive statistics used for this study included: frequency distributions and percentages. The data from the YRBSS was analysed using cross tabulation to determine the frequency distribution along the different levels of the identified variables with gender and age.

Inferential statistical analysis involves using information gained from a sample population in order to make inferences or estimations about the population. Inferential statistics include chi-square analysis to investigate whether the distribution of categorical variables differ from one another and regression analysis to significantly predict the effects of a relationship between variables (Pretorius, 2007). Chi-square analysis was used to assess the group differences based on the gender of the learners before and after the intervention. This type of analysis was deemed appropriate as the questionnaires produced frequency data (Pretorius, 2007 & Kranzler, 2010). Regression analysis was used to ascertain whether life skills, using data from the LEQ, could significantly predict the engagement in health risk behaviours for the sample which used for this study. Regression analysis “is a set of statistical procedures used to explain or predict the values of a dependant variable based on the values of two or more independent or predictor variables (Christensen, Johnson & Turner, 2006: 413). Regression analysis uses the principle of least squares to determine the line of best fit to a scatterplot of data so that the distance between the line of best fit and the furthest points above and below are minimised (Walker & Maddan, 2013). This allows one to predict the performance on one variable based on the knowledge you have of the other variable (Woodwin, 2003). Through the use of regression analysis, the researcher is able to test the effects of a combination of predictor variables on the outcomes variable (Kranzler, 2010). Regression analysis was deemed appropriate for the study as it allowed the researcher to determine the predictive relationship between life skills (the extent to which learners manage their lives) and engagement in health risk behaviour. For the purpose of the regression analysis the eight domains for the LEQ were identified as the predictor variables and alcohol drinking, smoking, drug use, sexual activity and physical inactivity as health risk behaviours were identified as outcome variables. There were five models that were tested and re-tested after the intervention in which the health risk

behaviours as the receptive dependant variables were tested as a function of the eight domains of the LEQ.

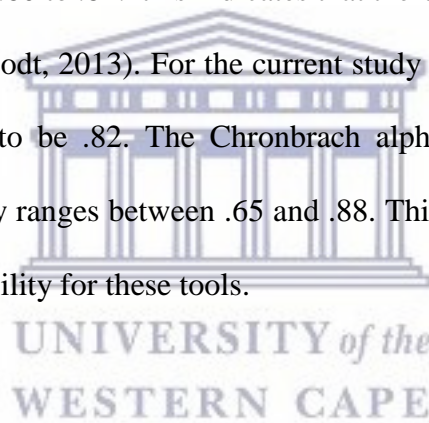
Coding of the data involves a process where the researcher converts the data into a numerical format, for example, female responses were coded as (1) and male responses were coded as (2). The process of coding is necessary when the data needs to be read and manipulated through a computer programme such as SPSS. Coding is carried out so that information is reduced and there is a limited set of variable attributes. For the current study, the coding was first done on the transcript, then it was entered into Microsoft Excel V2016. The data was then checked by multiple researchers to ensure that all data was entered correctly. Finally, the data was exported to SPSS V24 for analysis. The data will be stored in locked cabinets that are only accessible to the researchers, and head of the project. The data will be stored for the duration of the larger project.

4.9 Validity and Reliability

The reliability of the study refers to both the consistency and stability of any given experimental effect, if the same study is replicated on different occasions with different samples and the results are the same, the study is deemed reliable (Davis & Bremner, 2006). What this means is that if the study were to be replicated by other researcher using the same methods that previous researchers used, the results would be the same. Using a pilot study assists in the reliability of a study as the instruments being used will go through a test and retest method prior the main study being conducted. The validity of the study refers to whether or not the experiment being conducted explains what it intends to explain (Davis & Bremner, 2006). What can be understood by this is validity is “correctness or truthfulness of the inferences that are or can be made from the results of the research study” (Christensen, Johnson & Turner, 2011: 362). A similar study was conducted by Pharaoh (2014) who used a pilot study to gather

baseline information from a similar but extended group. Through the pilot used in that study, the instruments were deemed reliable for this type of study.

The YRBSS which is one of the instruments being used for the study is a Likert-type scale where participants have to choose answers which best suit them. The reliability of the YRBSS was deemed acceptable as it has an internal consistency ranging from .61 to 1 (Brener, Kann, McManus, Kinchen, Sundberg & Ross, 2002). This indicates that the instrument is both reliable and appropriate for use in this study. The self-administered LEQ will also be used for the study and it has been deemed to be both reliable and valid. According to Neill, Marsh and Richards (1997) the LEQ has Chronbach alpha levels which ranges from .78 to .93 and test re-test correlations ranging from .60 to .81. this indicates that there is a high internal consistency and reliability (Foxcroft & Roodt, 2013). For the current study the Chronbach alpha level for the LEQ-H has been found to be .82. The Chronbrach alpha levels for the Health Risk behaviour Surveillance Survey ranges between .65 and .88. This indicates that there is a high internal consistency and reliability for these tools.



4.10 Ethical Considerations

The ethical considerations which was stipulated by the University of the Western Cape was adhered to for this project. The Humanities and Social Sciences Research Ethics Committee of the University of the Western Cape approved the methodology and ethics for this project (ethics reference number: HS17/1/48; Appendix 8). Permission to conduct the study was requested and granted by the Western Cape Education Department (Appendix 10) and the principal at the selected school in Paarl.

It is of utmost importance that, when conducting research, the ethical standards are adhered to. The foundation to ensure that the researcher upholds the ethical considerations are (i) beneficence, (ii) competence, (iii) non-maleficence, (iv) integrity and (v) respect for human

rights and dignity (Swartz, de le Rey, Duncan & Townsend, 2008). Beneficence can be understood as the act of the researcher acting out of mercy, charity and kindness. It is important that the researcher does good to those that are included in the study, and that includes the moral obligation the researcher has to doing what is right for the participants (Kinsinger, 2009). The researcher aimed at gathering baseline information on the health risk behaviour engagement and life skills development among this group. Competence would refer to the scope of practice of the researcher, this includes what the researcher is capable of doing through their capacity as a researcher. Non-maleficence refers to one of the major ethical considerations which is imperative for the researcher to adhere to, this states that the researcher should cause no harm through his/her work. No harm is expected to come to this group as the answering of the questionnaires are confidential, however if any learners do experience any negative effects from participating in this study accommodation for counselling will be provided. The integrity of the researcher can be understood as their moral standing and their commitment to the truth. The final ethical foundation is respect for Human Rights and human dignity. This is extremely important especially in the South African context where there is a background of inequality, discrimination and disregard for human rights. When conducting research, it is important to accommodate and consider all individuals regardless of their race, gender, beliefs, creed, language and disabilities. The research being carried out should not be used as a tool to discriminate against any individual or groups of individuals and should always uphold the laws of the country.

As the participants of the study are still minors (under the age of 18) the parents of the eligible participants were given information letters and consent forms which stipulated all the required information regarding the study. Furthermore, the learners who are eligible were given information letters and assent forms where they give their permission to participate in the study. All eligible learners were informed that their participation in the study is voluntary. Those

learners who agreed to participate in the study were ensured that their identities will remain anonymous and that confidentiality upheld. Learners partaking in the study were informed that they are able to withdraw from the study at any time of their choosing with no consequences for in doing so. (Barrett, 2006). After consent and assent were attained convenient dates were set up for pre-data collection. All the surveys which the learners have completed be stored in locked cabinets, and only those researchers who have received permission to conduct the study will have access to the documents. All electronic documents or copies will be password protected. The study was funded by the National Research Foundation, grantholder-linked student support.

4.11 Conclusion

This chapter explored the methodology used for this chapter. It highlighted the overall process of data collection and ensuring that all the ethical procedures were considered and followed by the researcher. It also provided an understanding of the aims and objectives of the study, the population, the methodological approach, research design and the tools used for data collection for the study. This chapter discussed how the pilot study was conducted and the changes made to the tools for the appropriateness of the study population. The next chapter provides the results of the study.

Chapter Five

Results

5.1 Introduction

This chapter will discuss the results of the study. The Statistical Package for Social Sciences (SPSS) V24 was used to analyse the data. The results for this study were analysed by means of descriptive and inferential statistics. The demographic profile of participants, health risk behaviour and the LEQ's 8 domains were analysed. Further, an analysis of the predictive relationship between health risk behaviour and LEQ domains were computed.

Table 5.1 Frequency Distribution for Demographic Information

The table below provides an account of the demographic information breakdown of Grade 8 learners who participated in the study.

Variable		N	%
Age	12 or younger	1	1.0
	13	19	18.3
	14	54	51.9
	15	21	20.0
	16	7	6.7
	17	1	1.0
Gender	Female	64	61.5
	Male	38	36.5
Living arrangements	Mother & father	45	43.3
	Mother	37	35.6
	Father	3	2.9
	Grandparents	17	16.3
	Other guardian	1	1.0

People in house	2	2	1.9
	3	10	9.6
	4	16	15.4
	5	34	32.7
	6 or more	39	37.5
Religion	Christian	95	91.3
	Hinduism	1	1.0
	Other	2	1.9
	No religion	3	2.9
	Missing	3	2.9
Race	White	5	4.8
	Black	8	7.7
	Coloured	85	80.8
Extra mural activities	Youth group	14	14.0
	Scouts	1	1.0
	Sports	41	39.4
	Arts	13	12.5
	None	31	29.8

5.2 Demographic Information

The mean age of the learners was 14.17 (SD= ±0876). The majority of the learners (72.1%) were aged between 14 years (51.9%) and 15 years old (20.2%). There were more female learners 64.5% (N=64) than male learners 36.5% (N=38). The majority of the sample population self-categorised as belonging to the ‘coloured’ racial group 80.8% (N=85) which forms part of the South African racial groups. 91.3% of the sample population identified as Christian (N=95). The demographic details of the learners’ pre-intervention are listed below in table 5.1.

Table 5.2 Frequency Distribution Health Risk Behaviour

The table below provides an account of the Health Risk Behaviour breakdown of grade 8 learners who participated in the study.

Variable	Responses	n	%
Smoking	Yes	42	40.4
	No	62	59.6
Alcohol	Yes	48	46.2
	No	56	53.8
Drug Use: Dagga	Yes	20	19.2
	No	83	79.8
Cocaine	Yes	11	10.6
	No	91	87.5
Physical Activity	Yes	71	68.3
	No	33	31.7
Sexual Behaviour	Yes	24	23.1
	No	80	76.9
Suicide	Yes	15	14.4
	No	88	84.6
Physical fighting	Yes	44	42.3
	No	59	56.7

5.3 Health Risk Behaviour

The majority of the learners that participated in the study were 14 years old. Females were the majority sex. Health risk behaviour engagement amongst the participants showed 40.4% smoked and 46.2% drank alcohol. Of the 104 participants, 20 (19.2%) smoked dagga and 11 (10.6%) used cocaine. Of the learners who participated in the study, 67.3% indicated that they were physically active which resulted in sweating and breathing hard in the last 7 days. 23.1% of participants had sexual intercourse with one or more persons during the past 3

months, 14.4% seriously considered suicide and 42.3% were involved in physical fighting. Table 5.2 gives a summary of the health risk behaviour which the participants of the study engage in.

Table 5.3 Frequencies Smoking

The table below provides an account of the smoking breakdown of Grade 8 learners who participated in the study.

Questions	Choices	n	%
During the past 30 days, on how many days did you smoke cigarettes?	0 days	59	56.7
	1 or 2 days	24	23.1
	3 to 5 days	8	7.7
	6 to 9 days	2	1.9
	10 to 19 days	1	1.0
	20 to 29 days	0	0
	All 30 days	10	9.6

5.3.1 Smoking

9.6% (n=10) of learners who participated in the study indicated that they have smoked cigarettes on all 30 days in the last month. Table 5.3 gives information on smoking during the last 30 days.

Table 5.4 Frequencies Alcohol

The table below provides an account of alcohol use breakdown of Grade 8 learners who participated in the study.

Questions	Choices	n	%
During the past 30 days, on how many	0 days	56	53.8

days did you have at least one drink of alcohol?	1 or 2 days	26	25
	3 to 5 days	10	9.6
	6 to 9 days	2	1.9
	10 to 19 days	4	3.8
	20 to 29 days	1	1.0
	All 30 days	5	4.8
During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?	0 days	68	65.4
	1 day	14	13.5
	2 days	9	8.7
	3 to 5 days	4	3.8
	6 to 9 days	2	1.9
	10 to 19 days	3	2.9
	20 or more days	4	3.8

5.3.2 Alcohol Use

Of the 56 (53.8%) of learners who indicated that they drank alcohol before, 48 (46.2%) drank in the last 30 days and 4.8% drank on all 30 days in the previous month 14 (13.5%) of learners who participated in the study indicated that they have binge drank (5 or more drinks of alcohol in a row within a couple of hours) on 1 day during the last 30 days and 4 (3.8%) engaged in binge drinking on 20 or more days during the last 30 days. Table 5.4 gives detailed information on the alcohol consumption of participants during the past 30 days.

Table 5.5 Frequencies Dagga Use

The table below provides an account of dagga use breakdown of Grade 8 learners who participated in the study.

Questions	Choices	n	%
During the past 30 days, how many times	0 times	83	79.8
	1 or 2 times	12	11.5

did you use marijuana?	3 to 9 times	4	3.8
	10 to 19 times	1	1.0
	20 to 39 times	0	0
	40 or more times	3	2.9

5.3.3 Dagga Use

Of the 104 learners who participated in the study 20 (19.2%) indicated that they have smoked dagga and 11.5% (n=12 indicated that they have smoked dagga 1 or 2 times in the last 30 days.

Table 5.5 highlights dagga use during the last 30 days by participants.

Table 5.6 Frequencies Sexual behaviour (n=104)

The table below provides an account of the sexual behaviour breakdown of Grade 8 learners who participated in the study.

Questions	Choices	n	%
During your life, with how many people have you had sexual intercourse?	Never had sex	82	78.8
	1 person	12	11.5
	2 people	3	2.9
	3 people	0	0
	4 people	0	0
	5 people	0	0
	6 or more people	5	4.8
During the past 3 months, with how many people did you have sexual intercourse?	never had sex	80	76.9
	had but, not during past 3 months	6	5.8
	1 person	7	6.7
	2 people	3	2.9
	3 people	3	2.9
	4 people	3	2.9
	5 people	2	1.0

	6 or more people	0	0
Did you drink alcohol or use drugs before you had sexual intercourse the last time?	Never	69	66.3
	Yes	7	6.7
	No	27	26.0
The last time you had sexual intercourse, did you or your partner use a condom?	Never	72	69.2
	Yes	12	11.5
	No	17	16.3

5.3.4 Sexual Behaviour

12.5% of the participants were sexually active, of which 7.7% had multiple sexual partners. 18 (17.3%) had sex during the last 3 months. In addition, 6.7% responded that they consumed alcohol or used drugs before their last sexual encounter and 11.5% used a condom the last time they had sex.



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5.4 Cross-tabulation between Health Risk Behaviour and Identified Demographic Variables

Cross-tabulations were done with regards to health risk behaviours depicted in Table 5.1. the cross-tabulations looked at the distributions across the intersections of age and sex per the health risk behaviours. The results have been tabulised and are presented in tables 5.7 – 5.22.

Table 5.7: Cross-tabulation Smoking and Age

The table below provides and account of the cross tabulation for smoking and age of Grade 8 learners who participated in the study.

		Smoking by Age						
		Age						
		12	13	14	15	16	17	Total
Smoking	Yes	0	8	21	9	2	1	41
	No	1	11	33	12	5	0	62
Total		1	19	54	21	7	1	103

Total number of persons 104, 1% missing from the table

5.4.1 Smoking and Age

From Table 5.7 smoking prevalence associated with age illustrates that at least 49% of learners have reported smoking across all age groups (12-17). The highest prevalence of smoking was found in learners ages 14 years old, 20.2% (n=21) with 13 and 15 years old 7.7% and 8.7% respectively. 12 year old learners represented the lowest number of smoking prevalence 0%. Table 5.7 captures the distribution for smoking and age (n=104).

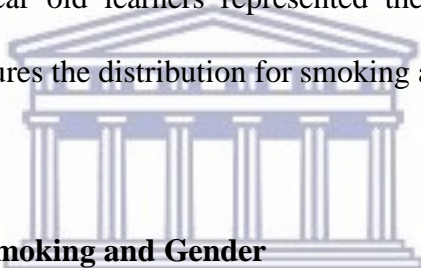


Table 5.8: Crosstabulation Smoking and Gender

The table below provides an account of the cross tabulation for smoking and gender of Grade 8 learners who participated in this study.

		Smoking by Gender		
		Gender		
		Female	Male	Total
Smoking	Yes	25	15	40
	No	39	23	62
Total		64	38	102

Total number of persons 104, 1.9% missing from the table

5.4.2 Smoking and Gender

From the Table 5.8 above the prevalence for smoking was 38.5%. The sex distribution for smoking reveals that more female learners (n=25) reported smoking than their male counterparts (n=15). Of the smoking sub-group 24% were female and 14.4% were male.

Table 5.9 Alcohol Use and Age Cross-tabulation

The table below provides an account of the cross-tabulation for alcohol use and age of Grade 8 learners who participated in the study.

		Alcohol Use by Age					Total	
		Age						
		12	13	14	15	16	17	
Alcohol Use	Yes	1	7	26	10	3	1	48
	No	0	12	28	11	4	0	55
Total		1	19	54	21	7	1	103

Total number of persons 104, 1% missing from table

5.4.3 Alcohol Use and Age

Table 5.9 captures the distribution of learners who drank alcohol during the last 30 days. Drinking prevalence associated with age indicates 13-15 years represent the highest engagement. The age group with the highest engagements was 14-year olds 25% (n=26) followed by 13 and 15-year olds with 15 year olds representing 9.6% and 13 year olds 6.7%.

Table 5.10 Alcohol Use and Gender Cross-tabulation

The table below provides an account of cross-tabulation for alcohol use and Gender of grade 8 learners who participated in this study.

		Alcohol Use by Gender		Total
		Gender		
		Female	Male	
Alcohol Use	Yes	29	19	48
	No	35	19	54
Total		64	38	102

Total number of persons 104, 1.9% missing from the table

5.4.4 Alcohol Use and Gender

Table 5.10 depicts a gendered pattern in alcohol consumption. 29 female learners (27.9%) and 19 male learners (18.3%) have indicated that they drank alcohol in the last 30 days. Indicating a higher prevalence of alcohol consumption among female learners compared to male learners.

Table 5.11 Sexual Behaviour and Age Cross-tabulation

The table below provides an account of cross-tabulation for sexual behaviour and age of Grade 8 learners who have participated in the study.

Sexual Behaviour by Age								
		Age					Total	
		12	13	14	15	16		17
Sexual Behaviour	Yes	0	3	12	6	2	0	23
	No	1	16	42	15	5	1	80
Total		1	19	54	21	7	1	103

Total number of persons 104, 1.0% missing from the table

5.4.5 Sexual Behaviour and Age

Table 5.11 captures the distribution of learners' sexual behaviour by age group. From the table below, it becomes evident that 2.9% of 13 year olds; 11.5% of 14 year olds; 5.8% of 15 year olds and 1.9% of 16 year old Grade 8 learners were sexually active. The majority of learners who were sexually active were 14 year olds (n=12) and 15-year olds (n=6).

Table 5.12 Sexual Behaviour and Sex Cross-tabulation

The table below provides an account of crosstabulation for sexual behaviour and sex of Grade 8 learners who participated in the study.

Sexual Behaviour by Gender				
		Gender		Total
		Female	Male	
Sexual Behaviour	Yes	5	17	22
	No	59	21	80
Total		64	38	102

Total number of persons 104, 1.9% missing from the table

5.4.6 Sexual Behaviour and Gender

From Table 5.12 below it becomes evident that more male learners (n=17) reported that they were sexually active than female learners (n=5) and (n=2) 1.9% learners did not answer the question. Females constituted 4.8% of the sexually active group where their male counterparts constituted 16.3%.

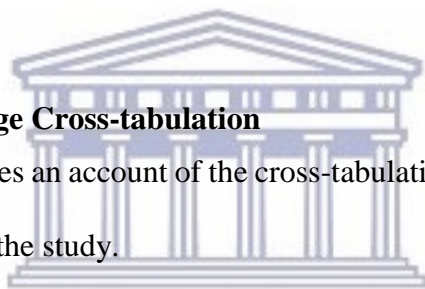


Table 5.13 Dagga Use and Age Cross-tabulation

The table below provides an account of the cross-tabulation for dagga and age of Grade 8 learners who participated in the study.

Dagga Use by Age								
		Age					Total	
		12	13	14	15	16		17
Dagga Use	Yes	0	4	9	3	2	1	19
	No	1	15	44	18	5	0	83
Total		1	19	53	21	7	1	102

Total number of persons 104, 1.9% missing from the table

5.4.7 Dagga Use and Age

Table 5.13 shows the distribution for dagga use across the age groups of Grade 8 learners in this sample. 14 year olds showed the highest number of dagga use n=9 (8.7%), followed by 13 year olds, n=4 (3.8%) and then 15 year olds, n=3 (2.9%). The total of dagga use for this sample is n=19 (19/104, 18.3%).

Table 5.14 Dagga Use and Gender Cross-tabulation

The table below provides an account of cross-tabulation for dagga and gender of Grade 8 learners who participated in the study.

Dagga Use by Gender				
		Gender		Total
		Female	Male	
Dagga Use	Yes	12	7	19
	No	52	30	82
Total		64	37	101

Total number of persons 104, 2.9% missing from the table

5.4.8 Dagga Use and Gender

Table 5.14 shows that more female learners (n=12, 11.5%) than male learners (n=7, 6.7%) have used dagga. There was 18.3% of learners across the sex's that have used dagga before.

Table 5.15 Cocaine Use and Age Cross-tabulation

The table below provides an account of cross-tabulation for cocaine use and age of Grade 8 learners who participated in the study.

Cocaine Use by Age								
		Age					Total	
		12	13	14	15	16		17
Cocaine Use	Yes	1	0	5	4	1	0	11
	No	0	19	48	16	6	1	90
Total		1	19	53	20	7	1	101

Total number of persons 104, 2.9% missing from the table

5.4.9 Cocaine Use and Age

Cocaine use among this age group is relatively low with only 11/104 (10.6%) learners having used cocaine in the last 30 days. Out of the sample population, 5 (4.8%) 14 year olds, 4 (3.8) 15 year olds, 1 (1.0%) 12 and 16 year olds having used cocaine in the last 30 days.

Table 5.16 Cocaine Use and Gender Cross-tabulation

The table below provides an account of crosstabulation for cocaine use and gender of Grade 8 learners who participated in the study.

Cocaine Use by Gender				
		Gender		Total
		Female	Male	
Cocaine Use	Yes	4	7	11
	No	59	30	89
Total		63	37	100

Total number of persons 104, 3.8% missing from the table

5.4.10 Cocaine Use and Gender

Table 5.16 shows the distribution for cocaine use across the different genders. There were 4 (3.8%) females and 7 (6.7%) males who have used cocaine in the last 30 days. The total of cocaine use across the sexes were 10.6%. 3.8% of the sample population did not answer the question.

Table 5.17 Physical Activity and Age Cross-tabulation

The table below provides an account of crosstabulation for physical activity and age of Grade 8 learners who participated in the study.

Physical Activity by Age								
		Age					Total	
		12	13	14	15	16		17
Physical Activity	Yes	1	11	38	15	4	1	70
	No	0	8	16	6	3	0	33
Total		1	19	54	21	7	1	103

Total number of persons 104, 1.0% missing from the table

5.4.11 Physical Activity and Age

Table 5.17 indicates the distribution of physical activity across the age groups for this sample. There were 70/104 (67.3%) of learners who partook in exercise over the last 7 days which resulted in sweating and heavy breathing. The majority of learners who partook in this type of exercise in the last 7 days were 14 year olds (n=38, 36.5%), followed by 15 year olds (n=15, 14.4%), 13 year olds (n=11, 10.6%), 16 year olds (n=4, 3.8%) and 12 and 17 year olds (n=1, 1.0%) respectively.

Table 5.18 Physical Activity and Gender Cross-tabulation

The table below provides an account of cross-tabulation for physical activity and gender of grade learners who participated in the study.

Physical Activity by Gender				
		Gender		Total
		Female	Male	
Physical Activity	Yes	44	26	70
	No	20	12	32
Total		64	38	102

Total number of persons 104, 1.9% missing from the table

5.4.12 Physical Activity and Sex

From Table 5.18 it became evident that the majority of the learners (n=70; 67.3%) were physically active in the last 7 days preceding the questionnaire. More females (n=44; 42.3%) than males (n=26; 25%) were physically active in the last 7 days.

Table 5.19 Attempted Suicide and Age Cross-tabulation

The table below provides an account of cross-tabulation for attempted suicide and age of Grade 8 learners who participated in the study.

Attempted Suicide by Age								
		Age					Total	
		12	13	14	15	16		17
Attempted Suicide	Yes	0	5	5	3	2	0	15
	No	1	14	49	17	5	1	87
Total		1	19	54	20	7	1	102

Total number of persons 104, 1.9% missing from the table

5.4.13 Attempted Suicide and Age

Table 5.19 shows the distribution for seriously considered suicide and age across the groups. During the past 12 months before the questionnaire a total of 15 (14.2%) of the learners in the sample population has seriously considered suicide. Ages 13 and 14 had the highest considered suicide rates (n=5; 4.8%). Followed by 15-year olds (n=3, 2.9%) and 16-year olds (n=2, 1.9%) respectively.

Table 5.20 Attempted Suicide and Sex Cross-tabulation

The table below provides an account of crosstabulation for attempted suicide and sex of grade learners who participated in the study.

Attempted Suicide by Gender				
		Gender		Total
		Female	Male	
Attempted suicide	Yes	9	6	15
	No	55	31	86
Total		64	37	101

Total number of persons 104, 2.9% missing from the table

5.4.14 Attempted Suicide and Sex

During the past 12 months more, more females (n=9; 8.7%) than males (n=6; 5.8%) seriously considered attempting suicide. A total of 15 (14.2%) considered suicide in the last 12 months and 3 (2.9%) did not answer the question.

Table 5.21 Physical Fighting and Age Cross-tabulation (n=104)

The table below provides an account of cross-tabulation for physical fighting and age of Grade 8 learners who participated in the study.

Physical Fighting by Age								
		Age					Total	
		12	13	14	15	16		17
Physical Fighting	Yes	1	5	24	8	4	1	43
	No	0	14	29	13	3	0	59
Total		1	19	53	21	7	1	102

Total number of persons 104, 1.9% missing from the table

5.4.15 Physical Fighting and Age

Table 5.21 shows the cross-tabulation for physical fighting across the age groups for Grade 8 learners in this sample population. The age group 14 years old showed the highest number of learners who were in physical fights in the last 12 months (n=24, 24.0%). This was followed by 15 year olds (n=8, 7.7%), 13 year olds (n=5, 4.8%), 16 year olds (n=4, 3.8%), and 12 and 17 year olds (n=1, 1.0%) respectively.

Table 5.22 Physical Fighting and Gender Cross-tabulation

The table below provides an account of cross-tabulation for physical fighting and gender of Grade 8 learners who participated in the study.

Physical fighting by Gender				
		Gender		Total
		Female	Male	
Physical Fighting	Yes	21	21	42
	No	42	17	59
Total		63	38	101

Total number of persons 104, 2.9% missing from the table

5.4.16 Physical Fighting and Sex

Male and female learners represented the same number of physical fighting engagement in the last 12 months, both representing (n=21, 20.2%). The total number of Grade 8 learners in this sample who participated in physical fighting in the last 12 months were 42 (40.4%).

5.5 Pearson's Chi Square Analysis

Chi square tests were computed for sex and selected health risk behaviours. Significant differences were found between male and female learners in sexual behaviour. The $p=.000$ concludes that the correlation between sex and sexual behaviour is significant. $\Phi = .434$ indicating that there is a moderate correlation; substantial relationship between the variables. Significant differences were also found between male and female learners in physical fighting. The results suggest that more males engage in sexual behaviour than females. The $p=.030$ concludes that the correlation between sex and physical fighting is significant. $\Phi = .216$ indicating that there is a low correlation; definite but small relationship. The results suggest that more males than females engage in physical fighting than females.

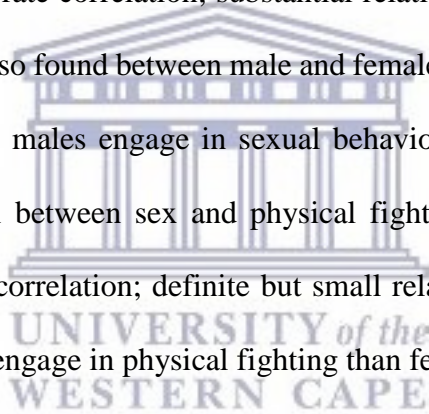


Table 5.6.1 Individual Domain Scores

The table below provides an account of the individual domain scores on the LEQ of Grade 8 learners who participated in the study.

	N	Minimum	Maximum	Mean	SD
Time Management	100	3.00	7.67	5.4500	1.03840
Social Competence	98	2.67	8.00	5.8095	1.18505
Achievement	99	3.33	8.00	6.3367	1.11727
Motivation					

Intellectual Flexibility	96	1.00	7.67	5.6424	1.23330
Task Leadership	102	2.00	8.00	5.9248	1.21406
Emotional Control	97	2.33	8.00	5.5704	1.18923
Active Initiative	97	2.00	8.00	5.9313	1.16859
Self Confidence	95	3.33	8.00	6.8561	.97565
Valid N (listwise)	77				

5.6 Life Effectiveness Questionnaire (LEQ)

LEQ scores from each of the eight domains could range from a minimum of 3 points to a maximum of 24 points. As the LEQ is based on a Likert type scale scores range between 1-8, mean scores obtained on the LEQ, which is the measure of perceived competence in each of the 8 domains is displayed in table 5.6.1. The highest mean scores were obtained on Self-confidence (mean=6.86; SD±.98), Achievement Motivation (mean=6.34; SD±1.11), Active initiative (mean =5.93; SD±1.17), Task Leadership (mean=5.92; SD±1.21), Social Competence (mean=5.80; SD±1.19) and Intellectual Flexibility (mean=5.64; SD±1.23). The lowest mean scores were obtained for Time Management (mean=5.45; SD±1.03) and Emotional Control (mean=5.57; SD±1.19).

Table 5.7 Regression Analysis

The table below provides an account of the regression analysis

	<i>B</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Cocaine Use	0.74	0.31		2.41	0.02
Achievement Motivation	0.12	0.04	0.38*	2.64	0.01
Sexual Behaviour	1.06	0.40		2.68	0.01
Intellectual Flexibility	0.12	0.06	0.30*	2.05	0.04
Physical Activity	1.22	0.43		2.81	0.01

Social Competence	-0.19	0.06	-0.49*	-3.44	0.00
Intellectual Flexibility	0.13	0.06	0.29*	2.03	0.05
Physical Fighting	0.98	0.50		1.94	0.06
Active Initiative	-0.17	0.06	-0.36*	-2.65	0.01

Cocaine: $\Delta R^2 = 0.17$; Sexual Behaviour: $\Delta R^2 = 0.07$; Physical Activity: $\Delta R^2 = 0.07$; Physical Fighting: $\Delta R^2 = 0.06$ * $p < 0.05$

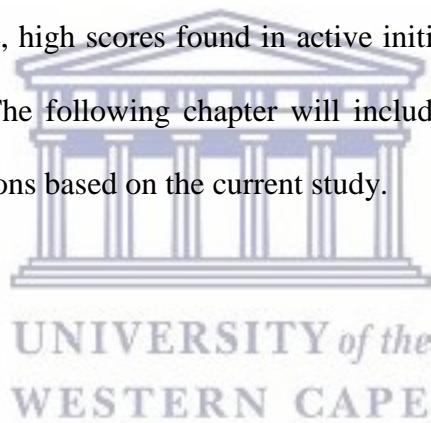
5.7 Regression Analysis

Table 5.7 presents the predictors for youth risk behaviour based on testing different regression models for the various outcome variables. The outcome variables included: time management, achievement motivation, intellectual flexibility, task leadership, emotional control, active initiative and self-confidence. The results show that intellectual flexibility significantly and positively predicted sexual behavior ($\beta = 0.30, p = 0.04$) and physical activity ($\beta = 0.29, p = 0.05$), social competence negatively predicted physical activity ($\beta = -0.49, p = 0.00$), active initiative negatively predicted physical fighting ($\beta = -0.30, p = 0.01$) and achievement motivation positively predicted cocaine use ($\beta = 0.38, p = 0.01$). These models accounted for 7%, 7%, 6% and 17% respectively.

5.8 Conclusion

The information presented in this chapter provides an understanding of the results based on the data collected from the questionnaires which were completed. The frequency distribution and percentages were looked at for the various health risk behaviours. This was done through the use of cross-tabulation. Chi-square analysis was implemented to assess the group differences of health risk behaviours based on gender and age of the learners. The mean and standard deviation scores were looked at for the LEQ. Regression analysis was undertaken to predict whether life skills could significantly predict engagement on health risk behaviour.

The results of the study indicated that the highest mean scores were found for self-confidence and achievement motivation and alternatively the lowest mean scores were identified for time management and emotional control. Gendered patterns of significant differences between male and female engagement in sexual behavior was found, where significantly more males than females were found to participate in sexual activity. Further, results indicated that gendered patterns emerged for physical fighting, where significantly more males than females engaged in physical fighting. Intellectual flexibility positively influenced sexual behavior and physical activity. Findings further indicated that higher scores on achievement motivation is followed by a decrease in cocaine use. An increase in social competence was followed by an increase in physical activity. A negative relationship was found between intellectual flexibility and physical activity. Furthermore, high scores found in active initiative corresponded with high scores in physical fighting. The following chapter will include the discussion, conclusion, limitations and recommendations based on the current study.



Chapter Six

Discussion, Conclusion and Recommendations

6.1. Introduction

This study aimed to investigate the effects of the LEQ's life skills domains as it relates to the variance in health risk behaviour among Grade 8 learners in a selected school. In this chapter the results of Chapter Five of the study is discussed according to the aims and objectives which were highlighted in chapter one and how it relates to the theoretical framework underpinning the study. This chapter will also include the limitations of the study as well as recommendations for future research.

6.2. Health Risk Behaviour

The first objective of the study was to determine the prevalence of health risk behaviour among Grade 8 learners in a selected school in Paarl. Learners who participated in the study reported engagement in the following health risk behaviours: tobacco, alcohol and other substances use, risky sexual activity, poor dietary habits, behaviours that contribute to unintentional injuries and violence and physical inactivity. The results indicated high levels of tobacco and alcohol use. The results further indicated that the largest age group of Grade 8 learners who smoked were 14 year olds, and that more females than males in Grade 8 smoked. The distribution of Grade 8 learners who drank within the last 30 days shows that the highest prevalence of drinking was among 14 year olds and that more females than males consumed alcohol within the last 30 days. There was an increase in dagga use compared to the results from the South African Risk Behaviour Survey conducted in 2008 (Reddy at al., 2010). The results pertaining to current use (last 30 days) showed that high levels of learners actively consuming alcohol. Increases compared to results from the 2008 South African Youth Risk

Behaviour Survey can be seen in alcohol consumption and smoking dagga in last 30 days (Reddy, et al., 2010). Despite the efforts being made to educate youth on the harmful effects of continued alcohol use as a means for prevention and reduction of health risk behaviour, there are still increases in this area. Of the learners who participated in the study, 34.6% engaged in binge drinking behaviour during the last 30 days which shows an increase in binge drinking activity compared to Reddy, et al. (2010). These results indicates the importance for interventions to reduce the engagement in health risk behaviours as it appears that there are still problem areas.

There was a decrease in sexual activity from the 2008 results - in 2008, this could also be related to the fact that the 2008 study was conducted on Grade 8-10 learners and the current study on only Grade 8 learners. The results from the current study shows that more males than females were sexually active. The results also indicated that 7.7% had multiple sexual partners, 6.7% reported that they consumed alcohol or drugs before their last sexual encounter and 16.3% indicated that they did not use a condom during their last sexual encounter. The results show a decrease in alcohol or drug use before their last sexual encounter compared to the 2008 study, the population should be taken into account when comparisons are made between the two groups. The finding does not imply that there is a causal relationship between sexual activity and substance use; it does, however, indicate that adolescents are partaking in risky sexual behaviour, especially since alcohol and drug use does cause impairment of judgment. Studies show that substance use is associated with adverse health complications which include driving under the influence and risky sexual behaviour. Risky sexual behaviour engagement among adolescents are aggravated by the alarming high HIV infection rate, which is currently 15% among 15 to 24 year olds in South Africa (Magnani, et al., 2005). This becomes a serious concern when drugs and alcohol is used before sexual activity as it impairs judgment, such as learner's decision to consent to sex, and condom use for risk reduction (Pharaoh, 2014).

During adolescence, individuals are faced with situations which involve a higher level of risk with the possibility of emotionally and physically harmful outcomes (Khan, et al., 2014). With novelty-seeking increasing during adolescence, it is not surprising that risk-taking behaviour during this phase of development is high (Christakou, et al., 2013), which coincides with what the statistics of the current study represent. Adolescents tend to model the behaviours of those in their environment, and it has been found that those who live in home environments where their parents or guardians engage in health risk behaviours show lower signs of resiliency and are more likely to themselves engage in health risk behaviour (Heider & Davids, 2006; Bandura, 1986).

Evidence suggests that several health risk behaviours tend to appear together in sequence or simultaneously (Botvin & Griffin, 2014), and the present study further supports the hypothesis. Thus, it becomes imperative that integrative intervention programmes are developed to address these multiple behaviours (Prochaska, 2008). The results from the present study coincides with the recommendations made by Ten Dam (2002) that integrative programmes that address multiple health risk behaviours are vital for health risk behaviour reduction and to reduce the burden and strains on schools and teachers.

The results further supported gendered patterns of engagement in sexual behaviour and physical fighting. This is evidenced by the significant findings on the results from the chi square tests. Important awareness can be harnessed from these results where it becomes evident that health risk behaviours among adolescents are still significant and that a gendered pattern exists for certain health risk behaviours. These should be considered when developing and implementing initiatives to reduce health risk behaviours.

6.3 Life Skills

The second objective of the study was to determine the extent to which learners manage personal situations using the LEQ eight domains in a selected high school in Paarl. The eight domains were: time management, achievement motivation, intellectual flexibility, task leadership, emotional control, active initiative and self-confidence. The results indicate that learners have a greater sense of self-confidence and achievement motivation and are less able to manage their emotional control and time management. Active initiative, task leadership, social-competence and intellectual flexibility all fall in the middle range of how they manage their personal situations.

The training and development of life skills in adolescents has been deemed to be important for both the prevention and reduction of health risk behaviour engagement. A combination of psycho-social support and life skills development in adolescents promotes good health in adolescents (WHO, 2016). Neil, Marsh and Richards (2003) asserts that there are eight domains which can be used to measure life skills of individuals. According to findings from the current study learners have a greater sense of self-confidence, which is consistent with the study carried out by Pharaoh (2014), where a mean score of 6.75 and standard deviation of ± 1.4 was found. This indicates that adolescents in this group have the necessary means with which to foster self-confidence which includes knowledge attainment in the required field or area, a support system, experience gained in the required field or area and success (White 2009). A sense of self-confidence is key during this stage of development as it can either hinder or foster their development. The schooling system, the family and the community play an integral part of their development and promotes the development of self-confidence in adolescents (Tuttle, Campbell-Heider & David, 2006). This view is consistent with the findings

of the study as learners form part of these structures which enables the development of self-confidents.

This study found that learners have a great sense of achievement motivation, which ranked second highest in extent to which they manage personal situations. This is consistent with the findings from Pharaoh (2014) where results indicated a mean of 6.48 and a standard deviation of ± 1.5 . According to Bandura (1971), if initially achievements go unrecognised, they will try harder for them to be noticed, only if their achievements continue to go unrecognised will they stop trying. The more adolescents are motivated the greater the likelihood of them achieving their goals. (Kumar, 2016). It positively influences the ways in which they perform the task and is also characterised by a desire to display competence (Mohanty & Nayak, 2016). Competence is crucial in the development of life skills in adolescents (Ebersöh & Eloff, 2006).

Learners in this study scored the lowest on emotional control and time management. The results are consistent with those found by Pharaoh (2014) with mean scores of 5.20 and 5.18 and standard deviation scores of ± 1.67 and ± 1.4 respectively. The inability to control one's emotions increase in depression and emotional outbursts (Niell, Marsh and Richards, 2003). The lowest score was found for time management in adolescents. Low time management skills lead to higher levels of academic stress experienced by learners (Misra & McKean, 2000). The lack of time management skills effectively means that adolescents have difficulties with assessment behaviours which refers to their ability to assess whether or not they have the capabilities required to complete the take, and planning behaviours which include, goal setting, planning, prioritising activities, and monitoring behaviours (Claessens, et al., 2007).

The results from the second objective gives an indication of life skills development in adolescents in this group. With higher levels found for self-confidence and achievement motivation and lower levels for emotional control and time management.

6.4 The Predictive Relationship Between Life Skills and Health Risk Behaviours

Regression analysis indicated that life skills are important in the reduction and prevention of health risk behaviour among Grade 8 learners. In particular, achievement motivation, intellectual flexibility, social competence and active initiative explained variance in cocaine use, sexual activity, physical activity and physical fighting.

A positive significant relationship was found between achievement motivation and cocaine use. For every one unit increase in achievement motivation there was a corresponding change in cocaine use ($\beta = 0.38$). Cocaine use was coded with a lower value indicating low risk or no cocaine use, the positive signage on the beta value actually indicates an inverse response, meaning that with an increase in achievement motivation there is a corresponding decrease in cocaine use. Therefore, cocaine use was significantly predicted by the extent to which learners are motivated to reach their goals.

The findings were consistent with the theory of forethought capabilities presented by Bandura (1986) where adolescents have the capability through anticipating the possible consequences for their actions, they set goals for themselves and plan future causes of action. This relates to the finding in that if adolescents are motivated to achieving their goals and have forethought capabilities they are able foresee the possible consequences of actions that will prevent them from reaching their goals thus making them less likely to partake in that behavior. Thus, through the development of achievement motivation as a domain of life skills and knowledge about the risks involved with cocaine use adolescents are better able to set goals for themselves, anticipate the outcomes and plan courses of action resulting in goal attainment and the reduction of health risk behavior engagement (WHO, 2014).

A positive significant relationship was found between intellectual flexibility and sexual behaviour. For every one unit increase in intellectual flexibility there was a corresponding change in sexual behaviour ($\beta = 0.30$). Sexual behaviour was coded, where lower values indicated no sexual behaviour or low risk sexual behaviour, the results actually indicate an inverse. This means that for every one unit increase in intellectual flexibility there was a corresponding decrease in sexual behaviour.

Persons with intellectual flexibility has the ability to change their ideas based on what they see in their surroundings. They have the ability to accurately and comprehensively take in their surroundings acting in accordance to their surroundings in a moral and cognitive capacity (McCloskey, 2014). Therefore, individuals who are intellectually flexible are able to make better decisions surrounding the engagement in risky sexual behaviour based on their surroundings. Intellectual flexibility can be linked to informed decision-making capabilities and according to Steinberg (2007) risk behaviour engagement is based on the information individuals receive before making a decision on whether or not to partake in the behaviour. This supports the results that were found in relation to intellectual flexibility and sexual behaviour in so far as having more intellectual flexibility allows adolescents to better take in their surroundings and on a moral and cognitive level make better decisions surrounding risky sexual behaviour (McCloskey, 2014 & Steinberg, 2006).

A negative significant relationship was found between social competence and physical activity. The negative beta value indicates an inverse relationship social competence and physical activity. That means an increase in social competence corresponds with a decrease in physical activity. However, in the coding of physical activity low scoring indicated no to low physical activity and higher scores indicated greater involvement in physical activity.

The results thus indicated that with an increase in social competence there is a corresponding increase in physical activity. Physical activity and sports have been deemed

crucial in the life skills development of adolescents (Goudas & Giannoudis, 2007). The results of the study support literature by Goudas & Giannoudis, (2007) that involvement in sports is associated with the ability to work in a team and that it increases self-esteem and social competence. This is made evident with the results supporting that the more socially competent an individual the more physical activity and sports they participate in. A socially competent individual encompasses the skills and behaviours for kindness, appropriate extroversion, cooperation and communication skills (Jackson & Cunningham, 2015). These skills are vital for physical activity and engagement in sports.

There is a positive significant relationship between intellectual flexibility and physical activity. The positive beta value indicates that with an increase in intellectual flexibility there is an increase in physical activity. However, because physical activity is coded with low scores indicating no physical activity this indicates that an inverse is happening. Where an increase in intellectual flexibility corresponds with a decrease in physical activity. Further research is required to understand why this is happening.

A negative significant relationship was found between active initiative and physical fighting. For every one unit increase active initiative there is a corresponding change in physical fighting. Physical fighting is coded with low scores for no physical fighting thus, the results indicate that as active initiative increases so does physical fighting.

The health risk behaviours which did not seem to be influenced by the different life skills domains were smoking, drinking, dagga use and attempted suicide. For the risk behaviours of smoking, drinking and dagga use the lack of any influence from life skills could be related to the normalisation of the use of these substances in society. These risk behaviours all corresponded with relatively high prevalence of engagement among this group of learners. Further research is required to see what other types of interventions are needed to help with the reduction and prevention of the aforementioned health risk behaviours.

The results indicated that life skills were important for reduction and prevention of health risk behaviours among Grade 8 learners. In particular, time management, intellectual flexibility, social competence and active initiative significantly explained the variance in cocaine use, sexual behaviour, physical activity and physical fighting. These findings are consistent with studies which have been reported on in the literature that indicated that life skills development could reduce health risk behaviour engagement (Botvin & Griffin, 2014; WHO, 2016). Cocaine use was significantly predicted by the extent to which learners are motivated to achieve excellence and put in the effort required to achieve their goals. That is, an increase in a motivation to achieve one's goals significantly predicts abstinence from cocaine use. Sexual behaviour was significantly predicted by the extent to which learners are able to morally and cognitively change their behavioural reactions based on observations they have made in their environment (Intellectual flexibility). Physical activity was significantly predicted by 1) the extent by which learners are able to regulate their emotions under stressful situations and 2) the extent by which they can change their behaviours according to their surroundings. Physical fighting was significantly predicted by the extent by which learners are able to initiate action in new surroundings.

The combined results from the different objectives highlight the importance that life skills play in the prevention and reduction of health risk behaviours in adolescents. Not all the domains which were tested against the health risk behaviours showed to have significantly impacted on the health risk behaviours. Results from this study with regards to the regression analysis show differences in the domains which significantly predict health risk behaviour when compared to that of Pharaoh (2014) which this study is an extension of.

In the study by Pharaoh (2014), time management seemed to play an important role in the variance of several health risk behaviours such as smoking, drug use and sexual activity. In

the current study, smoking was not significantly predicted by any of the life skills domains however, in the study carried out by Pharaoh (2014) variance in smoking was predicted by time management, emotional control and social competence. Self-confidence is another life skills domain that did not yield significant variance in any of the health risk behaviours against which it was measured. This result seems to correspond with that conducted by Pharaoh (2014) where similar results were found with self-confidence not significantly predicting variance in any of the health risk behaviours. Task leadership was another life skills domain which corresponds with the results found by Pharaoh (2014) as in that study similar results were found where task leadership did not account for significant variance in any of the health risk behaviours. Emotional control did not predict any significance for any of the health risk behaviours measured in this study. This is contrary to results found by Pharaoh (2014) where emotional control significantly predicted variance in drinking and smoking.

None of the results from this study for the regression analysis corresponded with the findings of Pharaoh (2014). In that study smoking was predicted by emotional control, time management, active initiative and social competence. In the current study there were no significant predictors found for smoking. According to Pharaoh (2014) achievement motivation and emotional control were predictors for drinking and in the current study there were no significant predictions found for drinking. Results from Pharaoh (2014) showed that there was a significant variance between drug use and time management. Time management was a significant predictor for sexual behaviour as shown by the results found by Pharaoh (2014). In the study conducted by Pharaoh (2014) active initiative was a predictor for physical activity.

The results, compared to the study conducted by Pharaoh (2014), shows mixed results for the regressions analysis though commonalities can be found in the extent to which they manage personal situations which is objective two in the current study. The differences that

were found could be related to the age group differences between the studies where the current study only focused on grade 8 learners and the study conducted by Pharaoh (2014) was conducted by Grade 8-10 learners. However further research is required to verify/explore what accounts for the differences.

6.5 Limitations

No research is without its limitations. For this study the limitations have been identified as:

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- This study made use of a small group of adolescents (n=104). If this study was done on a larger group of Grade 8 learners, different results could have been yielded. Using a larger sample group in future research could be used to address this limitation.
- The study was only conducted in one school in a low socio-economic community. As a result, it is difficult to generalise these findings to other groups of the same economic status and even more so to groups that fall outside of this socioeconomic community. To address this, result the same study can be done on multiple schools from the same and different socio-economic communities to represent findings that can be generalised to larger population.
- For the purpose of this study learners were required to complete to self-report questionnaires. In these reports people are tempted to either present themselves in a many which is more socially desirable or to be over critical about themselves. As a means to address these limitations reports can be collected from family members, teachers and peers. Adding a qualitative approach to the study can also be used as a means to address this limitation.

- This study was only done to find baseline information at one point in time on the health risk behaviour and life skills development of adolescents so we are unable to measure if any differences occur overtime.

6.6 Recommendations

6.6.1 Recommendations for Future Research

Future research that can be conducted could look at using a mixed methods approach where the researcher makes use of both quantitative and qualitative methodologies. The quantitative section could focus on the same objectives of the current study but then also add a qualitative section for focus group and one-on-one interviews with learners, teachers and their parents/guardian. The qualitative section could focus on why they engage in certain health risk behaviours, questions relating to family life, schooling relations with peers, etc. and perhaps also questions surrounding life skills. Questions for the parents could include the behaviours expressed by the child, the home environment and so forth. Questions for teachers could explore the difficulties they experience in their interactions with this age group and common trends they are able to identify. The qualitative section could add a depth to the study that cannot solely be reached through the use of quantitative research alone. Future studies could look at the impact of interventions, comparing outcomes following and intervention. A longitudinal study may be useful to see if there are any changes in the health risk behaviours overtime.

Future research studies are recommended in the area of health risk behaviour in pre-adolescents aged 10 to 12 years old. During this study, it has become clear that by the time that individuals reach adolescence, they are already engaging in a multitude of health risk behaviours. It is thus recommended that for future research, researchers

should seek to identify whether health risk behaviour engagement is present in pre-adolescence, and if so, to what extent it is prevalent. If we want to prevent the engagement of health risk behaviours in adolescents, it would be important to identify the age at which engagement in health risk behaviours start, so that appropriate preventative measures can be put in place, targeting youth early on, before the age where engagement in health risk behaviours typically commence, so as to prevent it before it starts. If we want to prevent the engagement of health risk behaviours, it is important to identify when it is most that youth start engaging in these behaviours so that preventative measures can be put in place.

It then also becomes important for life skills education training to form a vital part of preadolescent development. As it is during this phase where they develop a sense of autonomy, competence and relatedness (Louw, Louw & Ferns, 2007). The research could focus on how and where risk behaviour engagement starts and how gaining a sense of autonomy, developing their sense of competence in their own capabilities and how they relate to others or their sense of belonging influences present or future risk behaviour. It is during this phase of development that changes occur in the preadolescent and also influences the family, as family members must adjust to the behavioural, emotional and physical changes that the preadolescent undergoes. There are changes in their mood, peer relationships, bodies, boundary testing, rebellious behaviour, identity confusion and increased independence that is known to occur in this phase of development (Louw, Louw & Ferns, 2007).

For future research it could also be important to look comparisons between different types of communities and especially those in resource-constrained communities across the country.

6.6.2 Recommendations for Interventions

Interventions with a wider scope that includes sports, life skills and parental involvement are recommended for the prevention and reduction of health risk behaviour. Adding sports to form part of the intervention makes the programme more successful at reducing health risk behaviours as it fosters positive, more realistic attitudes and perspectives that learners have regarding themselves and others. For an intervention to be successful, parental involvement is important as it reinforces the positive effects of the intervention and improves the longevity of the results. Life skills education has been proven to be effective at helping learners who come from poorer communities to better cope with the stressors they face in their community. It is recommended that trained facilitators be used for the implementation of interventions. This is crucial as they will understand how the programme should be run and how to handle any problems that may arise.

It is further recommended that interventions take place during pre- and early adolescence with regular booster programmes throughout their schooling career to maintain the results, because as learners continue through high school they face more pressure from peers, their surroundings and stressors to engage in health risk behaviours. It is also recommended that included in the intervention should be a section on positive health promotion with factors including physical activity/fitness, nutrition and self-confidence. Team sports and practical life skills should also be incorporated into the intervention to foster team work and self-reliance among youth. Parental involvement can take place through homework activities encouraging parent-child communication. The long and inconsistent working hours of many parents from lower-socioeconomic environments should be taken into consideration, therefore, homework activities should foster communication and parental involvement, but should not be too

time consuming. The aims of the intervention should be communicated to the parents or guardians so that they can take an active role in the programme.

Interventions for preadolescents should be aimed at building resilient families, knowledge development and on how to deal with family conflict. This is important for pre-adolescents as socialisation, values and norms which are established during youth are reliant on the familial environment. Therefore, the probability of dysfunctional thoughts on how to interact, survive and exist in the world increases if the family is dysfunctional. For those youth that come from homes which are burdened with conflict, it is important that teachers and principals are trained to better supports the child. Training is required for teachers to better manage aggression and externalising behaviours, thus spending less time on disciplining and more on teaching. This will allow for competence to develop in the child. Alongside the aforementioned, adolescents also require interventions that incorporate all the life skills training and knowledge surrounding the dangers of health risk behaviours. Opportunities for youth development in the community is vital for youth to feel a sense of relatedness, through belonging to a healthy and effective group.

6.7 Conclusion

This study focused on the effects of the LEQ's life skill domains as it relates to the engagement in health risk behaviour among Grade 8 learners in a selected school in Paarl. Adolescence, also known as the stormy phase, is an important stage in human development. often it is considered a period of rapid change and maturation in which individuals develop their identity. Changes during this phase of development is physical, cognitive, personality, emotional and social. Physically their bodies become matured and is accompanied by puberty and a growth spurt. Adolescents thus need to become comfortable in their new bodies and the

accompanying changes. During this phase, adolescents exhibit behaviours that may be characterised by conflictual relationships with parents and authority figures, as well as an increase in risk-taking behaviour. It is important to focus on adolescent health risk behaviour engagement, as it leads to adult risk behaviours, which could in turn lead to morbidity and mortality.

The results from this study verified/confirmed that engagement in health risk behaviour is still on the rise despite the multitude of intervention programmes available, and knowledge development which they receive from school, family and society about the harmful effects of health risk behaviours. The number and combination of health risk behaviours that learners engage in highlight the necessity for the development of integrative programming. Further, the results of this study provided empirical support for gendered patterns in sexual behaviour and physical fighting, this required that programming consider the gendered patterns for health risk behaviour engagement.

The results found that engagement in cocaine use, sexual behaviour, physical activity and physical fighting was a function of the life skills domains as measured by the LEQ. Therefore, the extent to which learners acquire life skills can significantly predict their involvement in health risk behaviours. The hypothesis has been met, however, not all the domains can significantly predict engagement in health risk behaviour. The results indicated that achievement motivation, intellectual flexibility, social competence and active initiative can predict engagement in certain health risk behaviours. However, the results found that time management, task leadership, self-confidence and emotional control does not predict engagement in health risk behaviour. The results highlight the importance of life skills development in the inclusion of interventions and integrative programmes which aims at reducing or preventing health risk behaviour engagement by adolescents.

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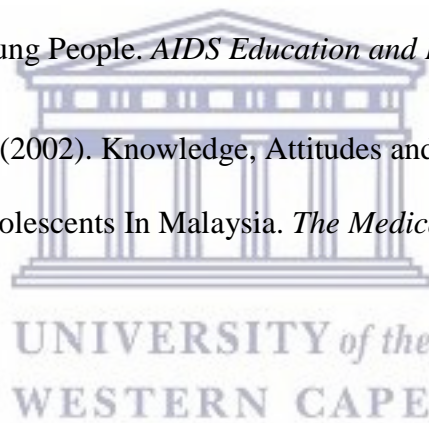
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Appendix 1

INFORMATION SHEET FOR PARTICIPANTS

Project Title: The effects of the LEQ's life skills domains as it relates to the engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl.

What is this study about?

This is a research project being conducted by Janene Elizabeth Marais at the University of the Western Cape. We are inviting you to participate in this research project because you are grade 8 learner in this selected high school in the Paarl area. The purpose of this research project is to investigate the effects of a of the LEQ's life skills domains as it relates to the engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl.

What will I be asked to do if I agree to participate?

The study will be done at your school. You will be asked to complete questionnaires pertaining to health risk behaviour [Youth Risk Behaviour Surveillance Survey (YRBSS) and the Life Effectiveness Questionnaire (LEQ)] and when selected, to participate in focus group discussions. The questionnaires will take approximately 30-45 minutes to complete and the focus group discussions will include participants of the same age with equal male and female representation.

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, your name will not be used on any of the surveys. The data collected will be coloured coded according to gender and age for identification purposes. This study will also involve the making of audiotapes during the focus group discussions to ensure trustworthiness. To ensure your confidentiality all information gathered will be stored in a locket filling cabinet. Only the researcher will have access to the data. The school (principle and teachers) at the school or any unauthorised party will not be able to access the information. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Participants in the focus group discussion will sign a disclosure statement for confidentiality purposes to make them conscious of ethical procedures in advance. In agreement with legal requirements and/or professional standards, in the event that information is obtained about any type of abuse or neglect we will have to break confidentiality and disclose to the appropriate individuals and/or authorities. Data collected will be distributed in the form of publications and conference presentations.



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What are the risks of this research?

There are no known risks to this study. Participants who do need any assistance following the study will be referred to the appropriate health care professionals. We will act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

Your school was chosen to partake in the study which gives you the opportunity to participate in the designed youth development programme whereby life skills training will form part of the programme. With specific recommendations to contribute to the success of intervention aimed at the youth this current proposal is written to determine the impact of the designed youth development programme not only in the immediate but over a longitudinal time period. This implemented youth development programme is designed to impact or benefit its participants. Therefore, when consenting to form part of the study you might receive the benefits as envisaged through the implementation of the youth development programme. The results of the study may also help the investigator learn more about the effects of the youth development programme as well as the health risk behaviour learners in grade 8 partake and which barriers might exist that prevent health risk behaviour change to take place.

We hope that, in the future, other people might benefit from this study through improved understanding of the health risk behaviours the youth partake in. This study provides a window of opportunity for ongoing and comprehensive research to expand their knowledge on the prevention and reduction of risky behaviour. This study aims to add new knowledge to the already existing programmes that attempt to combat engagement in health risk behaviour among the youth.



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Do I have to be in this research and may I stop participating at any time?

Participation in the research is not a course requirement. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. In the instance where you might fall ill or be hospitalised your participation in the study will be terminated by the investigator without any consequences. If you decide to partake in the study and feel uncomfortable halfway throughout the study with regards to the process or questionnaires, you can decide to not participate further without any consequences.

What if I have questions?

This research is being conducted by Janene Elizabeth Marais a registered Master student in the Faculty of Community and Health Science, Department of Child and Family Studies at the University of the Western Cape. If you have any questions about the research study itself, please contact Janene Elizabeth Marais at: email: 3070033@myuwc.ac.za or contact the research study supervisor: Dr. Hamilton Grant Pharaoh at: +27 21 959 2542 or email: hpharaoh21@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

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INFORMATION SHEET FOR PARENTS

Appendix 2

Project Title: The effects of the LEQ's life skills domains as it relates to the engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl.

What is this study about?

This is a research project being conducted by Janene Elizabeth Marais at the University of the Western Cape. We are inviting your child to participate in this research project because he/she is a grade 8 learner in a selected high school in the Paarl area. The purpose of this project is to investigate the effects of the LEQ's life skills domains as it relates to the engagement in health risk behaviour of grade 8 learners in a selected high school in Paarl.

What will your child be asked to do if you agree that he/she may participate?

Your child will be asked to complete questionnaires pertaining to health risk behaviour [Youth Risk Behaviour Surveillance Survey (YRBSS) and the Life Effectiveness Questionnaire (LEQ)] and when selected, to participate in focus group discussions. The questionnaires will take approximately 30-45 minutes to complete and the focus group discussions will include participants of the same age with equal male and female representation.



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Would your child's participation in this study be kept confidential?

We will do our best to keep your child's personal information confidential. To ensure their anonymity, no names will be used on any of the surveys. The data collected will be colour coded according to their gender and age for identification purposes. This study will also involve the making of audiotapes during the focus group discussions to ensure trustworthiness. To help protect your child's confidentiality all information gathered will be stored in a locket filling cabinet. Only the researcher will have access to. The school (principle and teachers) at the school or any unauthorised party will not be able to access the information. If we write a report or article about this research project, your child's identity will be protected to the maximum extent possible. Participants in the focus group discussion will sign a disclosure statement for confidentiality purposes to make them conscious of ethical procedures in advance. In agreement with legal requirements and/or professional standards, in the event that information is obtained about any type of abuse or neglect we will have to break confidentiality and disclose to the appropriate individuals and/or authorities. Data collected will be distributed in the form of publications and conference presentations.

What are the risks of this research?

There may be some risks from participating in this research study. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist your child if he/she experience any discomfort, psychological or otherwise during the process of their participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.



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What are the benefits of this research?

This research is designed to help your child personally because your child and his/her school are chosen to participate in the youth development programme whereby life skills training will form part of the programme. With specific recommendations to contribute to the success of intervention aimed at the youth this current proposal is written to determine the impact of the designed youth development programme not only in the immediate but over a longitudinal time period. The results may also help the investigator to learn more about the effects of the youth development programme as well as the health risk behaviour learners in grade 8 partake in as well as the barriers that prevent health risk behaviour change to take place. We hope that, in the future, other people might benefit from this study through improved understanding of the health risk behaviours the youth partake in. This study provides a window of opportunity for ongoing and comprehensive research to expand their knowledge on the prevention and reduction of risky behaviour. This study aims to add new knowledge to the already existing programmes that attempt to combat engagement in health risk behaviour among the youth.

Does your child have to be in this research and may he/she stop participating at any time?

Your child's participation in this research is completely voluntary. He/she may choose not to take part at all. If he/she decides to participate in this research, he/she may stop participating at any time. If he/she decides not to participate in the study or he/she stops participating at any time, he/she will not be penalized or lose any benefits to which he/she otherwise qualify. In the instance where your child might fall ill or be hospitalised his/her participation in the study will be terminated by the investigator without any consequences. If he/she decide to partake in the study and feel uncomfortable halfway throughout the study with regards to the process or questionnaires, he/she can decide to not participate further without any consequences.



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Is any assistance available if your child is negatively affected by participating in this study?

There are no direct risks associated with participating in the study. However, your child will be

referred to an appropriate health professional, should, he/she feel emotional or overwhelmed as

a result of questioning or inability to perform task.

What if I have questions?

This research is being conducted by Janene Elizabeth Marais at the University of the Western Cape. If

you have any questions about the research study itself, please contact please contact my supervisor Dr Hamilton Pharaoh at: work number 021-9592542 or cell 0735994733, email: hpharaoh21@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

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Appendix 3

CONSENT FORM

Title of Research Project: The effects of the of the LEQ's life skills domains as it relates to the engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl.

The study has been described to me in a language that I understand and I freely and voluntarily agree that my child may participate. My questions about the study have been answered. I understand that my child's identity will not be disclosed and that he/she may withdraw from the study without giving a reason at any time and this will not negatively affect him/her in any way. The research includes making audio tapes of your child. To help protect your child's confidentiality all audio tapes will be stored in a locked filing cabinet, only the researcher will have access to it.

I **agree** that my child may be audio taped during his/her participation in this study.

I **do not agree** that my child may be audio taped during his/her participation in this study.

Participant's name.....

Witness.....

Parent's signature.....

Date.....



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Appendix 4

ASSENT FORM

Title of Research Project: The effects of the LEQ's life skills domains as it relates to the engagement in health risk behaviour among grade 8 learners in a selected high school in Paarl

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

I **agree** to be audio taped during my participation in this study.

I **do not agree** to be audio taped during my participation in this study.

Participant's name.....

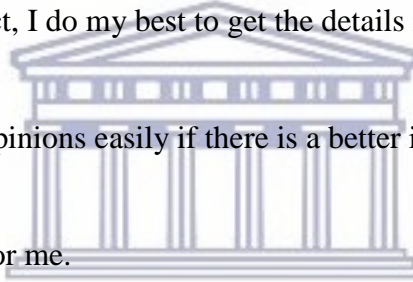
Participant's signature.....

Date.....

Appendix 5

L.E.Q. - H[©]

NAME: _____ AGE: _____(years)
 DATE: ____/____/____
 MALE / FEMALE (circle one) COURSE CODE: _____
 GROUP: _____

STATEMENT like me	FALSE	TRUE	not like me
<hr style="border-top: 1px dashed black;"/>			
01. I plan and use my time efficiently.			1 2 3 4 5
6 7 8			
02. I am successful in social situations.			1 2 3 4 5
6 7 8			
03. When working on a project, I do my best to get the details right.			1 2 3 4 5
6 7 8			
04. I change my thinking or opinions easily if there is a better idea.			1 2 3 4 5
6 7 8			
05. I can get people to work for me.			1 2 3 4 5
6 7 8			
 UNIVERSITY of the WESTERN CAPE			
<hr style="border-top: 1px dashed black;"/>			
06. I can stay calm in stressful situations.			1 2 3 4 5
6 7 8			
07. I like to be busy and actively involved in things.			1 2 3 4 5
6 7 8			
08. I know I have the ability to do anything I want to do.			1 2 3 4 5
6 7 8			
09. I do not waste time.			1 2 3 4 5
6 7 8			
10. I am competent in social situations.			1 2 3 4 5
6 7 8			
<hr style="border-top: 1px dashed black;"/>			
11. I try to get the best results when I do things.			1 2 3 4 5
6 7 8			

12. I am open to new ideas. 1 2 3 4 5
6 7 8

13. I am a good leader when a task needs to be done. 1 2 3 4 5
6 7 8

14. I stay calm and overcome anxiety in new or changing situations. 1 2 3 4 5
6 7 8

15. I like to be active and energetic. 1 2 3 4 5
6 7 8

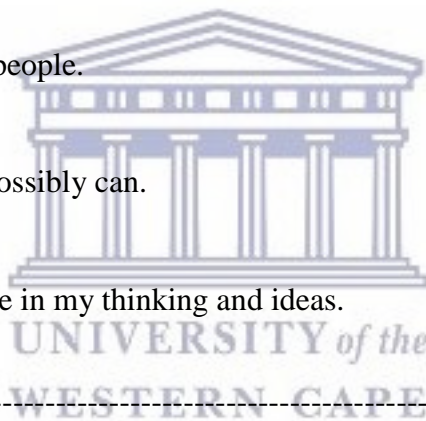
16. When I apply myself to something I am confident I will succeed. 1 2 3 4 5
6 7 8

17. I manage the way I use my time well. 1 2 3 4 5
6 7 8

18. I communicate well with people. 1 2 3 4 5
6 7 8

19. I try to do the best that I possibly can. 1 2 3 4 5
6 7 8

20. I am adaptable and flexible in my thinking and ideas. 1 2 3 4 5
6 7 8



21. As a leader I motivate other people well when tasks need to be done. 1 2 3 4 5
6 7 8

22. I stay calm when things go wrong. 1 2 3 4 5
6 7 8

23. I like to be an active, 'get into it' person. 1 2 3 4 5
6 7 8

24. I believe I can do it. 1 2 3 4 5
6 7 8

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L.E.Q. - H[©]

PLEASE DO NOT TURN OVER YET
READ THESE INSTRUCTIONS

This is a chance for you to consider how you think and feel about yourself in some ways. **This is not a test** - there are no right or wrong answers, and everyone will have different responses. It is important that you give your own views and that you be honest in your answers and do not talk to others while you think about your answers. They will be used only for research purposes and will in no way be used to refer to you as an individual at any time.

Over the page are a number of statements that are more or less true (that is like you) or more or less false (that is unlike you). Please use the eight point scale to indicate how true (like you) or how false (unlike you), each statement is as a description of you. **Answer the statements as you feel now**, even if you have felt differently at some other time in your life. Please do not leave any statements blank.

FALSE NOT LIKE ME	1	2	3	4	5	6	7	8	TRUE LIKE ME
This statement doesn't describe me at all; it isn't like me at all			More false than true			More true than false			This statement describes me very well; it is very much like me.

SOME EXAMPLES

A. I am a fast thinker. 1 2 3 4 5 6 7 8
(The 6 has been circled because the person answering believes the statement "I am a fast thinker" is sometimes true. That is, the statement is sometimes like him/her.)

B. I am a good storyteller. 1 2 3 4 5 6 7 8
(The 2 has been circled because the person answering believes that the statement is mostly false as far as he/she is concerned. That is, he/she feels he/she does not tell good stories.)

C I enjoy working on puzzles. 1 2 3 4 5 6 7 8
(The 8 has been circled because the person really enjoys working on puzzles a great deal, therefore the statement is definitely true about him/her.)

**** ARE YOU SURE WHAT TO DO? ****

If yes, then please turn the page over, write your name, today's date, and circle your answers for all the statements.

**If still unsure about what to do, ASK FOR HELP.
PLEASE GIVE HONEST, PRIVATE ANSWERS**

Appendix 6

L.E.Q. - H[©]

STELLING	ONWAAR (nie soos ek)	WAAR (soos ek)
01. Ek beplan en gebruik my tyd doeltreffend.	1	2 3 4 5 6 7 8
02. Ek kan sosiale situasies suksesvol hanteer.	1	2 3 4 5 6 7 8
03. Wanneer ek aan 'n taak werk wil ek elke besonderheid korrek kry.	1	2 3 4 5 6 7 8
04. Ek verander maklik van sienswyse as 'n beter idee.	1	2 3 4 5 6 7 8
05. Ek kan mense oorreed om met my saam te werk.	1	2 3 4 5 6 7 8

06. Ek kan kalm bly in spannings volle situasies.	1	2 3 4 5 6 7 8
07. Ek hou daarvan om besig te bly en betrokke te raak.	1	2 3 4 5 6 7 8
08. Ek weet ek het die vermoë om enige iets wat ek wil doen, te doen.	1	2 3 4 5 6 7 8
09. Ek verkwis nie my tyd nie.	1	2 3 4 5 6 7 8
10. Ek voel opgewasse in sosiale situasie.	1	2 3 4 5 6 7 8

11. Wanneer ek dinge doen, strek ek na die beste resultate.	1	2 3 4 5 6 7 8
12. Ek is toeganklik vir nuwe idees.	1	2 3 4 5 6 7 8
13. Ek is 'n goeie leier wanneer 'n taak aangepak moet word.	1	2 3 4 5 6 7 8
14. Ek bly kalm en oorwin angis in nuwe of veranderende situasies.	1	2 3 4 5 6 7 8
15. Ek hou daarvan om aktief en energiek te wees.	1	2 3 4 5 6 7 8

16. Wanneer ek my tot iets verbind, is die vertroue daar dat ek sal slaag.	1	2 3 4 5 6 7 8
17. Ek is volkome in beheer van hoe ek my tyd aanwend.	1	2 3 4 5 6 7 8
18. Ek kommunikeer goed met mense.	1	2 3 4 5 6 7 8
19. Ek probeer dinge doen tot die beste van my vermoë.	1	2 3 4 5 6 7 8
20. Ek is aanpasbaar en buigsaam wat my denkwysse en idees betref.	1	2 3 4 5 6 7 8

21. Wanneer take gedoen moet word, kan ek as leier ander mense motiveer.	1	2 3 4 5 6 7 8
22. Ek kan kalm bly wanneer dinge skeef loop.	1	2 3 4 5 6 7 8
23. Ek wil aktief en daardie "Wil betrokke wees" persoon wees.	1	2 3 4 5 6 7 8
24. Ek glo dat ek dit kan doen.	1	2 3 4 5 6 7 8

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L.E.Q-H

Hierdie is 'n geleentheid om te bepaal hoe jy in sekere opsigte oor jouself dink en voel. Dit is nie 'n toets nie – daar is nie regte of verkeerde antwoorde nie en elkeen sal verskillend reageer. Dit is belangrik dat jy jou eie siening weergee, dat jy die vrae eerlik sal beantwoord en dat jy niemand mag raadpleeg terwyl jy aan jou antwoorde dink nie. Jou antwoorde sal slegs vir die doel van navorsing aangewend word en sal geensins gebruik word om op enige tydstip na jou as 'n individu te verwys nie.

Onder op die bladsy is verskeie stellings wat min of meer waar is (wat soos jy is); of wat min of meer nie waar is (wat nie soos jy is nie). gebruik asseblief die agt punt skaal om aan te dui hoe waar (soos jy) of hoe onwaar (nie soos jy) elke stelling jou sal beskryf. Beantwoord die stellings soos jy nou daarvoor voel, selfs al het jy anders daarvoor gevoel gedurende 'n ander stadium in jou lewe. Voorsien asseblief 'n antwoord op elke stelling en moet niks oop los nie.

ONWAAR WAAR

NIE SOOS EK NIE SOOS EK

1

2

3

4

5

6

7

8

Hierdie stelling beskryf my glad nie; dit is nie soos ek is nie

Meer onwaar as waar

Meer waar as onwaar

Hierdie stelling is 'n ware beskrywing van my; dit is soos ek



Appendix 7

Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

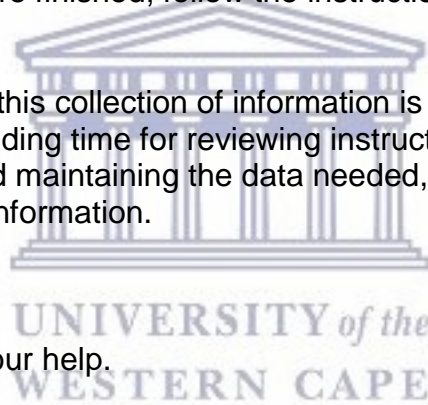
DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Circle your answer that you have chosen for each question. When you are finished, follow the instructions of the person giving you the survey.

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.



Thank you very much for your help.

DIRECTIONS

* Use a #2 pencil or pen.

* Make dark marks.

* Fill in a response like this: A B C D

* If you change your answer, erase your old answer completely.

1. How old are you?
 - A. 12 years old or younger
 - B. 13 years old
 - C. 14 years old
 - D. 15 years old
 - E. 16 years old
 - F. 17 years old
 - G. 18 years old or older

2. What is your sex?
 - A. Female
 - B. Male

3. Who do you live with?
 - A. Mother and father
 - B. Mother
 - C. Father
 - D. Grandparents
 - E. Other guardian

4. How many people are in your house?
 - A. 2
 - B. 3
 - C. 4
 - D. 5
 - E. 6 and more

5. What is your religion?
 - A. Christian
 - B. Muslim
 - C. Hinduism
 - D. Judaism
 - E. Other
 - F. Do not belong to a religion

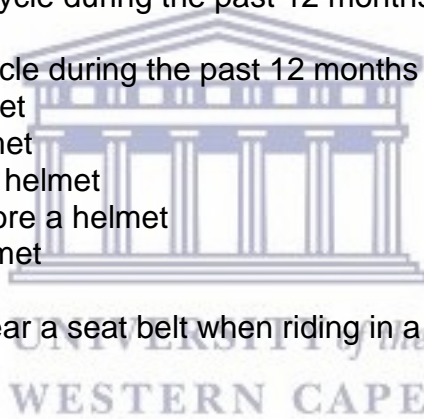
6. What is your race? (Select one or more responses.)
 - A. White
 - B. Black
 - C. Coloured
 - D. Indian



7. Do you partake in any extra mural activities?
- A. Youth group
 - B. Scouts
 - C. Sports (eg. Hiking, soccer, netball etc)
 - D. Arts (eg. Dancing, singing, painting etc)
 - E. None

The next 5 questions ask about safety.

8. When you rode a motorcycle during the past 12 months, how often did you wear a helmet?
- A. I did not ride a motorcycle during the past 12 months
 - B. Never wore a helmet
 - C. Rarely wore a helmet
 - D. Sometimes wore a helmet
 - E. Most of the time wore a helmet
 - F. Always wore a helmet
9. When you rode a bicycle during the past 12 months, how often did you wear a helmet?
- A. I did not ride a bicycle during the past 12 months
 - B. Never wore a helmet
 - C. Rarely wore a helmet
 - D. Sometimes wore a helmet
 - E. Most of the time wore a helmet
 - F. Always wore a helmet
10. How often do you wear a seat belt when riding in a car driven by someone else?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
11. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times
12. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times



- D. 4 or 5 times
- E. 6 or more times

The next 10 questions ask about violence-related behaviors.

13. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?

- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days

14. During the past 30 days, on how many days did you carry a gun?

- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days

15. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club on school property?

- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days



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16. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days

17. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?

- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times

18. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
19. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times
20. During the past 12 months, how many times were you in a physical fight on school property?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
21. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
- A. Yes
 - B. No
22. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
 - B. No

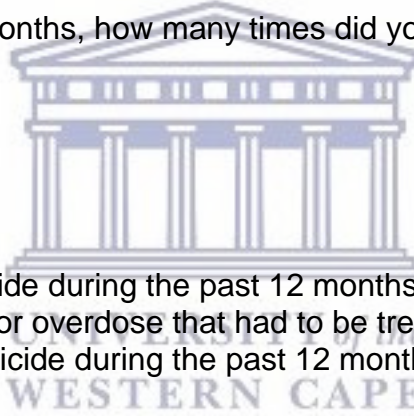


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The next question asks about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.

23. During the past 12 months, have you ever been bullied on school property?
- A. Yes
 - B. No

The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

24. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
- A. Yes
B. No
25. During the past 12 months, did you ever seriously consider attempting suicide?
- A. Yes
B. No
26. During the past 12 months, did you make a plan about how you would attempt suicide?
- A. Yes
B. No
27. During the past 12 months, how many times did you actually attempt suicide?
- A. 0 times
B. 1 time
C. 2 or 3 times
D. 4 or 5 times
E. 6 or more times
28. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
- A. I did not attempt suicide during the past 12 months
B. Yes
C. No
- 

The next 11 questions ask about tobacco use.

29. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
B. No
30. How old were you when you smoked a whole cigarette for the first time?
- A. I have never smoked a whole cigarette
B. 8 years old or younger
C. 9 or 10 years old
D. 11 or 12 years old
E. 13 or 14 years old
F. 15 or 16 years old
G. 17 years old or older

31. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
32. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?
- A. I did not smoke cigarettes during the past 30 days
 - B. Less than 1 cigarette per day
 - C. 1 cigarette per day
 - D. 2 to 5 cigarettes per day
 - E. 6 to 10 cigarettes per day
 - F. 11 to 20 cigarettes per day
 - G. More than 20 cigarettes per day
33. During the past 30 days, how did you usually get your own cigarettes?
(Select only one response.)
- A. I did not smoke cigarettes during the past 30 days
 - B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station
 - C. I bought them from a vending machine
 - D. I gave someone else money to buy them for me
 - E. I borrowed (or bummed) them from someone else
 - F. A person 18 years old or older gave them to me
 - G. I took them from a store or family member
 - H. I got them some other way
34. During the past 30 days, on how many days did you smoke cigarettes on school property?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
35. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
- A. Yes
 - B. No
36. During the past 12 months, did you ever try to quit smoking cigarettes?
- A. I did not smoke during the past 12 months
 - B. Yes

C. No

37. During the past 30 days, on how many days did you use chewing tobacco

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

38. During the past 30 days, on how many days did you use chewing on school property?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

39. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days



The next 6 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

40. During your life, on how many days have you had at least one drink of alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 9 days
- D. 10 to 19 days
- E. 20 to 39 days
- F. 40 to 99 days
- G. 100 or more days

41. How old were you when you had your first drink of alcohol other than a few sips?

- A. I have never had a drink of alcohol other than a few sips

- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old
- F. 15 or 16 years old
- G. 17 years old or older

42. During the past 30 days, on how many days did you have at least one drink of alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

43. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 to 5 days
- E. 6 to 9 days
- F. 10 to 19 days
- G. 20 or more days



44. During the past 30 days, how did you usually get the alcohol you drank?

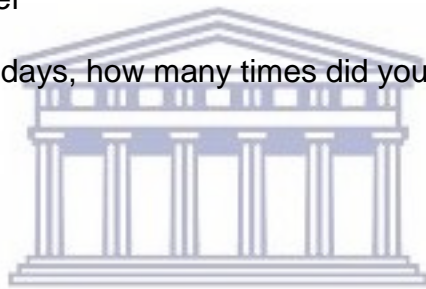
- A. I did not drink alcohol during the past 30 days
- B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station
- C. I bought it at a restaurant, bar, or club
- D. I bought it at a public event such as a concert or sporting event
- E. I gave someone else money to buy it for me
- F. Someone gave it to me
- G. I took it from a store or family member
- H. I got it some other way

45. During the past 30 days, on how many days did you have at least one drink of alcohol on school property?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

The next 4 questions ask about Marijuana (Commonly known as Dagga) use.

46. During your life, how many times have you used marijuana?
A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 to 39 times
F. 40 to 99 times
G. 100 or more times
47. How old were you when you tried marijuana for the first time?
A. I have never tried marijuana
B. 8 years old or younger
C. 9 or 10 years old
D. 11 or 12 years old
E. 13 or 14 years old
F. 15 or 16 years old
G. 17 years old or older
48. During the past 30 days, how many times did you use marijuana?
A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 to 39 times
F. 40 or more times
49. During the past 30 days, how many times did you use marijuana on school property?
A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 to 39 times
F. 40 or more times

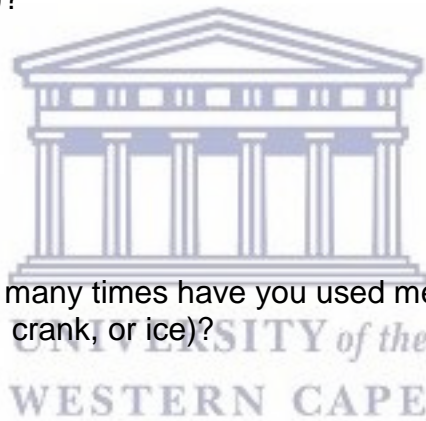


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The next 11 questions ask about other drugs.

50. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?
A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 to 39 times
F. 40 or more times

51. During the past 30 days, how many times did you use any form of cocaine, including powder, crack, or freebase?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
52. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
53. During your life, how many times have you used heroin (also called smack, junk, or China White)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
54. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
55. During your life, how many times have you used ecstasy (also called MDMA)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
56. During your life, how many times have you used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times



- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

57. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

58. During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax) without a doctor's prescription?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

59. During your life, how many times have you used a needle to inject any illegal drug into your body?

- A. 0 times
- B. 1 time
- C. 2 or more times

60. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?

- A. Yes
- B. No



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The next 7 questions ask about sexual behavior.

61. Have you ever had sexual intercourse?

- A. Yes
- B. No

62. How old were you when you had sexual intercourse for the first time?

- A. I have never had sexual intercourse
- B. 11 years old or younger
- C. 12 years old
- D. 13 years old
- E. 14 years old
- F. 15 years old
- G. 16 years old
- H. 17 years old or older

63. During your life, with how many people have you had sexual intercourse?
- A. I have never had sexual intercourse
 - B. 1 person
 - C. 2 people
 - D. 3 people
 - E. 4 people
 - F. 5 people
 - G. 6 or more people
64. During the past 3 months, with how many people did you have sexual intercourse?
- A. I have never had sexual intercourse
 - B. I have had sexual intercourse, but not during the past 3 months
 - C. 1 person
 - D. 2 people
 - E. 3 people
 - F. 4 people
 - G. 5 people
 - H. 6 or more people
65. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
- A. I have never had sexual intercourse
 - B. Yes
 - C. No
66. The last time you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
 - B. Yes
 - C. No
67. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? (Select only one response.)
- A. I have never had sexual intercourse
 - B. No method was used to prevent pregnancy
 - C. Birth control pills
 - D. Condoms
 - E. Depo-Provera (injectable birth control)
 - F. Withdrawal
 - G. Some other method
 - H. Not sure

The next 7 questions ask about body weight.

68. How do you describe your weight?
- A. Very underweight
 - B. Slightly underweight

- C. About the right weight
D. Slightly overweight
E. Very overweight
69. Which of the following are you trying to do about your weight?
A. Lose weight
B. Gain weight
C. Stay the same weight
D. I am not trying to do anything about my weight
70. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?
A. Yes
B. No
71. During the past 30 days, did you eat less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight?
A. Yes
B. No
72. During the past 30 days, did you go without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight?
A. Yes
B. No
73. During the past 30 days, did you take any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)
A. Yes
B. No
74. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?
A. Yes
B. No

The next 8 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

75. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
A. I did not drink 100% fruit juice during the past 7 days
B. 1 to 3 times during the past 7 days
C. 4 to 6 times during the past 7 days
D. 1 time per day
E. 2 times per day

- F. 3 times per day
- G. 4 or more times per day

76. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)

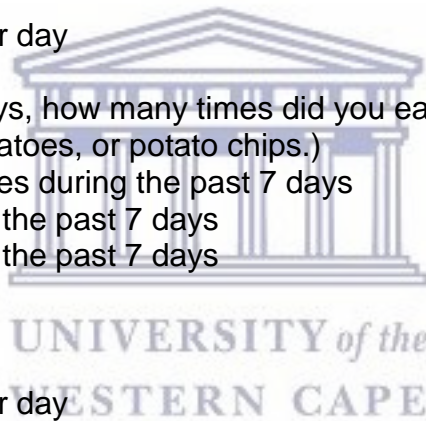
- A. I did not eat fruit during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

77. During the past 7 days, how many times did you eat green salad?

- A. I did not eat green salad during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

78. During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)

- A. I did not eat potatoes during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day



79. During the past 7 days, how many times did you eat carrots?

- A. I did not eat carrots during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

80. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)

- A. I did not eat other vegetables during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day

- G. 4 or more times per day
81. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not include diet soda or diet pop.)
- A. I did not drink soda or pop during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
82. During the past 7 days, how many glasses of milk did you drink? (Include the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)
- A. I did not drink milk during the past 7 days
 - B. 1 to 3 glasses during the past 7 days
 - C. 4 to 6 glasses during the past 7 days
 - D. 1 glass per day
 - E. 2 glasses per day
 - F. 3 glasses per day
 - G. 4 or more glasses per day

The next 8 questions ask about physical activity.

83. On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?
- A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days
84. On how many of the past 7 days did you participate in physical activity for at least 30 minutes that did not make you sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?
- A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days

H. 7 days

85. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

86. On an average school day, how many hours do you watch TV?

- A. I do not watch TV on an average school day
- B. Less than 1 hour per day
- C. 1 hour per day
- D. 2 hours per day
- E. 3 hours per day
- F. 4 hours per day
- G. 5 or more hours per day

87. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Nintendo, Game Boy, PlayStation, Xbox, computer games, and the Internet.)

- A. I do not play video or computer games or use a computer for something that is not school work
- B. Less than 1 hour per day
- C. 1 hour per day
- D. 2 hours per day
- E. 3 hours per day
- F. 4 hours per day
- G. 5 or more hours per day

88. In an average week when you are in school, on how many days do you go to physical education (PE) classes?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days

89. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?

- A. I do not take PE

- B. Less than 10 minutes
- C. 10 to 20 minutes
- D. 21 to 30 minutes
- E. 31 to 40 minutes
- F. 41 to 50 minutes
- G. 51 to 60 minutes
- H. More than 60 minutes

90. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

- A. 0 teams
- B. 1 team
- C. 2 teams
- D. 3 or more teams

The next 8 questions ask about other health-related topics.

91. Have you ever been taught about AIDS or HIV infection in school?

- A. Yes
- B. No
- C. Not sure

92. Have you ever been tested for HIV, the virus that causes AIDS? (Do not count tests done if you donated blood.)

- A. Yes
- B. No
- C. Not sure

93. When you are outside for more than one hour on a sunny day, how often do you wear sunscreen with an SPF of 15 or higher?

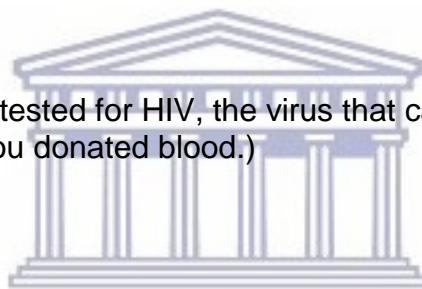
- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

94. During the past 12 months, how many times did you use an indoor tanning device such as a sunlamp, sunbed, or tanning booth? (Do not include getting a spray-on tan.)

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

95. Has a doctor or nurse ever told you that you have asthma?

- A. Yes
- B. No



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- C. Not sure
96. Do you still have asthma?
- A. I have never had asthma
 - B. Yes
 - C. No
 - D. Not sure
97. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
 - B. 5 hours
 - C. 6 hours
 - D. 7 hours
 - E. 8 hours
 - F. 9 hours
 - G. 10 or more hours
98. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
 - B. Mostly B's
 - C. Mostly C's
 - D. Mostly D's
 - E. Mostly F's
 - F. None of these grades
 - G. Not sure



This is the end of the survey. Thank you very much for your help.

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Appendix 8



OFFICE OF THE DIRECTOR: RESEARCH RESEARCH AND INNOVATION DIVISION

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29 May 2017

Ms J Marais
Social Work
Faculty of Community and Health Sciences

Ethics Reference Number: HS17/148

Project Title: The effects of a comprehensive youth development programme on the LEQs life skills domains as it relates to the variance in the health risk behaviour engagement among grade 8 learners in a selected high school in Paarl.

Approval Period: 26 May 2017 – 26 May 2018

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval. Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

A handwritten signature in black ink that reads 'Josias'.

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

PROVISIONAL REC NUMBER - 130416-049

Appendix 9



LIENEKE BOESAK DEVELOPMENT PROJECTS

Trading as: Integrated Learning Systems
E-MAIL: lienekeboesak@webmail.co.za
Reg No: 2012/172787/07

05 November 2018

This serves to confirm that the Master's Degree thesis of **JANENE ELIZABETH MARAIS** entitled: *"The Effects Of The Leq's Life Skills Domains As It Relates To The Engagement In Health Risk Behaviour Among Grade 8 Learners In A Selected High School In Paarl"* has been proof-read and edited for submission to the University of the Western Cape.



LIENEKE BOESAK
Proof Reader



Western Cape
Government

Education

Appendix 10

Audrey.wyngaard@westerncape.gov.za

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Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

REFERENCE: 20160224-8112

ENQUIRIES: Dr A T Wyngaard

Dr Hamilton Pharaoh
18 Murray Street
Charleston Hill
Paarl
7646

Dear Dr Hamilton Pharaoh

RESEARCH PROPOSAL: THE IMPLEMENTATION OF A DESIGNED YOUTH DEVELOPMENT PROGRAMME TO ADDRESS HEALTH RISK BEHAVIOUR AMONG GRADE 8 LEARNERS IN SELECTED HIGH SCHOOLS IN THE PAARL AREA

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **01 March 2016 till 30 March 2021**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 24 February 2016

Appendix 11

CHARLESTON HILL

SEKONDêR



SECONDARY

Van der Stelstraat/Street
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Faks: 021862 7523
E-pos: charlestonhill.sec@wcgschools.gov.za

Prinsipaal/Principal
EP Claasen

27 February 2019

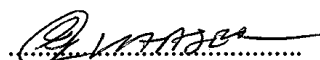
To whom it may concern

On behalf of Charleston Hill Senior Secondary School situated in Paarl I would like to confirm that Dr Hamilton Pharaoh has been conducting research at our school. The research included phases that was part of his PHD studies. Since 2016 up to the current date the programme designed during the PHD has been implemented in our school among grade 8 learners.

I can confirm that this has been in accordance with the permission given by the Western Cape Education Department which is granted from 2016-2021. The school in accordance to the WCED permission has therefore also given permission and will continue to do so as it is of great benefit to the school, learners, teachers and the broader community.

That permission has included masters and undergraduate student research as we believe that the benefit given to us as a school community should extend to the building of students at the University. We thus welcome and thank all students from the University of the Western Cape and University of KwaZulu-Natal who all play and will continue to play a meaningful role in the upliftment of our school and community.

Yours truly



EP CLAASEN
SCHOOL PRINCIPAL

WES-KAAPSE ONDERWYS DEPARTEMENT
CHARLESTON HILL SEK/SEC
VAN DER STEL STR./ST.
KLEIN NEDERBURG
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WESTERN CAPE DEPARTMENT OF EDUCATION