Bachelor thesis
Bachelor of Psychology in the field of Health and Safety

The adaptive and maladaptive pathway of risky sexual behaviour of the population on Barbados

Christine Bellmann
Faculty of Behavioural Science
University of Twente
The Netherlands

1st supervisor: Dr. H. Boer
2nd supervisor: Dr. E. Taal

TABLE OF CONTENT

Abstract

Research: The resort island Barbados is a popular island in the Caribbean but it also counts among the developing countries with all its problems especially in relation to the health problem HIV/AIDS. Because of that, this research examines the indications of risky sexual behavior on Barbados and investigates the contribution of the maldaptive and adaptive pathway of sexual behavior of the Barbadian population. The research clarifies which pathway is most common on Barbados. Furthermore the predictors of the risky sexual behavior of the Barbadian population are specified to get a closer insight into the HIV/AIDS problem on Barbados. **Method:** A survey was conducted during the 1st of May and the 30th of July 2007 on Barbados. A multi-item and self-administered questionnaire was used for this research. Totally, 135 Barbadians participated in this research in the age of 15-49. **Results**: An outcome of this investigation is that more than one third of all participants acted out an inconsistent condom use while having sexual intercourse and nearly one fourth never used a condom while having sex. Furthermore, nearly one third of all participants had sex with at least two different sexpartners within the last 3 months before this research was done. With regard to an experience with a commercial sexpartner and an episode of a sexual transmitted disease most of the participants never got in contact with those indicators of risky sexual behavior, even though nearly 14% stated having had a sexually transmitted disease and were in contact with a commercial sexpartner sometime. In terms of the risky sexual behavior, the denial of the risk of HIV/AIDS while having sexual intercourse and risk minimalisation, thus the attitude that informations about HIV/AIDS are exaggregated, were the most powerfull predictors. In this study it was not possible to define the predictor for the total number of sexpartners on Barbados. Within the maladaptive reactions of the Barbadian participants stigmatization, maladaptive (coping) reactions and erroneous beliefs about the casual contagion of HIV/AIDS were significantly existing on Barbados but on a lower level than it was expected before. Hierarchical regression analysis among all participants indicated that the constructs based on the Theory of Planned Behavior and Protection Motivation Theory were the most powerfull predictors for the condom use intention of the Barbadian participants. The attitude towards condoms, the subjective norms and the level of self-efficacy were the most significant predictors for building up a condom use intention. According to the prediction of the actual condom use of the participants it becomes obvious that the condom use intention was the strongest predictor for the actual condom use. Participants with a high intention to use a condom significantly used condoms more consistent than people without a condom use intention. **Conclusion:** This study indicates that riksy sexual behavior is significantly existing on Barbados and therefore can play a role in the HIV/AIDS problem on this island. Furthermore, this research clarifies that the adaptive pathway of risky sexual behavior, based on the Theory of Planned behavior and Protection Motivation Theory, is more important and influential on the risky sexual behavior and HIV/AIDS problem on Barbados than the maladaptive pathway, like Stigmatization, erroneous beliefs and maladaptive reactions. The considered reserach model, based on the Theory of Planned Behavior and Protection Motivation Theory, was usefull to predict the intention to use a condom and the actual condom use. Nevertheless, it was not possible to predict the total number of sexpartners within this research.

1.Introduction

1.1 The HIV/AIDS problem and the sexual behavior of the population on Barbados

Barbados is a popular and beautiful island in the Caribbean. It is a destination for countless tourists every year, mainly because of its wonderful nature, beaches and nightlife. Nevertheless this country is counted among the developing countries with all its problems especially in relation to health problems like HIV. The problem of HIV/AIDS on Barbados becomes apparent by viewing the statistics from the CIA World Fact book in 2008. The total number of people living with HIV/AIDS in 2003 was about 2500. Between 1984 and 2005 there were 2999 people who were HIV positive, 1876 reported cases of AIDS and 1254 deaths related to AIDS (UNGASS 2006). According to the Barbados Country Progress Report 2008 the population group between the ages 15-49 is the most affected segment, even if the Barbadian epidemic is generalized. About 89% of al reported HIV cases on Barbados occurred within the population at the age 15-49 and only in 2006 were over 75% of reported cases of HIV within this age group. (Barbados Country Progress Report, 2008) Within this age group men and women are affected within HIV/AIDS almost equally, whereas men account for 60% of HIV/AIDS infections. With regard to researches on Barbados nearly all transmissions of HIV occur through heterosexual contact. Even though there are high-risk groups such as homosexual men and prostitutes existing on Barbados, this cannot account for the HIV/AIDS problematic on this island (Barbados Country Progress Report, 2008). Data on the sexual behavior of the Barbadian population clarifies the problems with regard to risky sexual behaviour within people in the age 15 to 29. According to the report on the National KABP Survey on HIV/AIDS in 2001, 48,9% of men and 43,7% of the women stated to have sexual intercourse with multiple sexual partners. Beyond this, only 17,1% of this age group use condoms consistently while having sexual intercourse (Barbados Country Progress Report, 2008). As a result of these facts it becomes obvious that risky sexual behaviour seems to be an important factor of the HIV/AIDS problem on Barbados. It can be expected that non-consistent condom use has an impact on the infection with HIV/AIDS on Barbados. Furthermore it seems meaningful to get a closer look on the psychosocial determinants which could have an impact on risky sexual behaviour of the 15-49 years old population on Barbados.

1.2 Psychosocial determinants with impact on risky sexual behaviour of the population on Barbados

To get an insight into the variables which underlie the risky sexual behaviour of the Barbadian population, some psychosocial determinants will be analyzed within this research. In this bachelor thesis, psychosocial determinants are defined as a group of social factors and inner states which are expected to have an impact on unhealthy behaviour of an individual (Martikainen et al., 2002). Within this study unhealthy behaviour is defined as risky sexual behaviour through not using condoms while having sexual intercourse, experiences with commercial sexpartners and experiences with a sexual transmitted disease which can be seen as an indicator of risky sexual behaviour. Multiple sexpartners alone cannot be seen as a risky sexual behaviour but in combination with inconsistent condom use it is expected to increase the chance of getting infected with sexual transmitted diseases. According to Pinkerton et al. consistent condom use, especially in terms of multiple sexpartners, is an important variable in reducing the risk of a transmission of sexual transmitted diseases like HIV/AIDS (Pinkerton, Layde, DiFranceisco, & Chesson, 2003). The psychosocial determinants investigated in this

research are stigmatization, erroneous beliefs/myths, maladaptive reactions and social cognitions in terms of the intention to use a condom and actual condom use among the Barbadian respondents. Indications of risky sexual behaviour of the participants which means an experience with a commercial sexpartners, an episode of a sexual transmitted disease and multiple sex partners, is also part of this research and is expected to be influenced by maladaptive reactions, erroneous beliefs and stigmatization (Liu et al., 2005).

1.3 The adaptive and maladaptive pathway of sexual behaviour

Within this research two different pathways in terms of (risky) sexual behaviour are differentiated: the adaptive and maladaptive pathways of condom use. Confronted with an health threat, like the risk of getting infected with HIV/AIDS, individuals can respond in an adaptive or maladaptive fashion. First of all, people can react in an adaptive way in terms of the risk of an HIV/AIDS infection. This pathway presents itself as an active examination with an health threat. Through active valuation of the threat and the possibilities to minimize the risk of getting infected with HIV/AIDS, the intention to carry out an healthy behaviour, in this case thus consistent condom use while having sexual intercourse, can arise. Besides, the maladaptive pathway exists. Instead of dealing with the risk of getting HIV/AIDS actively, an behaviour is acted out which lead to negative consequences and the absence of healthy behaviors. This sort of behaviour for instance can consist of denial of the risk, supernatural beliefs and a dissociation from people infected with HIV/AIDS. Even thus both pathways seem different at first view, a strong context exist. It is expected that individuals who are not able to form an adaptive way to cope with the risk of getting infected with HIV/AIDS are more willing to handle the confrontation with the risk of HIV/AIDS by using a maladaptive pathway. In the same way it can be expected that people who use the maladaptive pathway of sexual behaviour act out unhealthy sexual behaviour more often and do not build up an intention to carry out an healthy behaviour like adaptive individuals. The differentiation of both pathways is useful within this research to get an insight into the pathway of sexual behaviour which is performed more often within the Barbadian participants.

1.4 Adaptive pathway of condom use of the Barbadian population

The first pathway used within this research is the adaptive pathway of condom use within the Barbadian population. The adaptive pathway consists of the social cognitions based on the theory of planned behaviour and Protection Motivation Theory. Within this research the attitude towards condoms, subjective norms, perceived behavioral control/self-efficacy in terms of condoms and the vulnerability in context of the condom use intention and the actual condom use as well as the response efficacy are analyzed. Those constructs are expected to influence the condom use intention positively and therefore also have a positive influence on the condom use of the Barbadian respondents. Within this research the severity construct is not used because other researches clarify that it is not able to significantly predict condom use (Boer & Mashamba, 2005).

1.4.1 Social cognitions and their impact on sexual behaviour

The next factor which is important to analyze (risky) sexual behaviour are the social cognitions of the Barbadian population between the age 15 and 49. According to Sternberg, 1994 social cognitions analyze how people make sense of their social world. Social cognitions reflect the way an individual perceives, represent and interpret information's about themselves but also about other groups and individuals. Studies of social cognitions in terms of condom use and other sexual transmitted diseases measure perceptions, attitudes and beliefs which are held by individuals (Marks et al., 2004). A research of Boer and Mashamba, 2005 clarifies that social cognitions are able to predict intended condom use and therefore are

a important component of this research too. It is expected that social cognitions have an impact on the intention to use condoms and actual condom use within the Barbadian population. Within this research two social cognition models which have been widely applied to understand a variety of behaviors are used. First of all the Theory of Planned Behaviour (TPB), which denotes the factors that are able to determine a person's decision to follow a particular behaviour (Conner & Norman, 2005, p.10). Secondly the Protection Motivation Theory (PMT) describing adaptive as well as maladaptive responses to a health threat resulting from two different appraisal processes: threat and coping appraisal (Conner & Norman, 2005, p.10).

Theory of Planned Behaviour

The first theory described within this research is the Theory of Planned Behaviour, which is an extension of the theory of reasoned action by Fishbein and Ajzen. (Conner & Norman, 2005, p.10) According to Ajzen the theory of planned behaviour is based on three different considerations that influence human action: behavioral beliefs, normative beliefs and control beliefs. In their respective aggregates all three considerations produce another social cognition. Behavioral beliefs deal with the individual belief about the outcomes of a particular behaviour and the evaluation of these outcomes. Furthermore behavioral beliefs produce an attitude towards a specific behaviour, which can either be favorable or unfavorable (Ajzen, 1991). Normative beliefs deal with the expectation of others. They are beliefs about the normative expectation of people in the close environment in terms of a particular behaviour and the motivation to comply with these external expectations. According to Ajzen normative beliefs result in perceived social pressure or subjective norm. The last consideration within the theory of planned behaviour deals with the individual beliefs about the presence of factors which facilitate or impede behaviour performance and the perceived power of these factors (control beliefs). Control beliefs result in perceived behavioral control. In combination attitudes towards belief, subjective norms and perceived behavioral control give rise to the formation of the intention of a particular behaviour (Ajzen, 1991). The theory of planned behaviour further declares that the intention to engage a particular behaviour is a strong and proximal determinant of behaviour. Behavioral intention can be defined as the motivation of an individual in the sense of a person's decision to exert effort to perform a particular behaviour (Conner & Norman, 2005, p.10).

In this research the first concept which determines the condom use intention of an individual is the attitude towards condoms. If an individual thinks that condoms are able to protect him/her against sexual transmitted diseases, thus a positive outcome expectation towards the use of condoms, a favorable and positive attitude towards condoms is held. In contrast, the belief that condoms are unfavorable and condom use will result in negative outcomes rise up a negative attitude towards condoms (Conner & Norman, 2005, p.10). The second concept determining condom use intention is the subjective norm. In this research the significant others are the parents (mother and father), friends and the whole community of the Barbadian respondents. If significant others belief that using condoms is positive and that the individual should use condoms and the person cares about the opinion of the significant others, this will rise up his/her intention to use a condom (Conner & Norman, 2005). The last construct is the perceived behavioral control toward using condoms. A person who considers condom use within his/her own control is more likely to develop an intention to use condoms. To sum up, the more positive the attitude towards condoms and subjective norms, and the greater the perceived control about using condoms, the stronger the individual's intention to use condoms while sexual intercourse is expected (Ajzen, 1991).

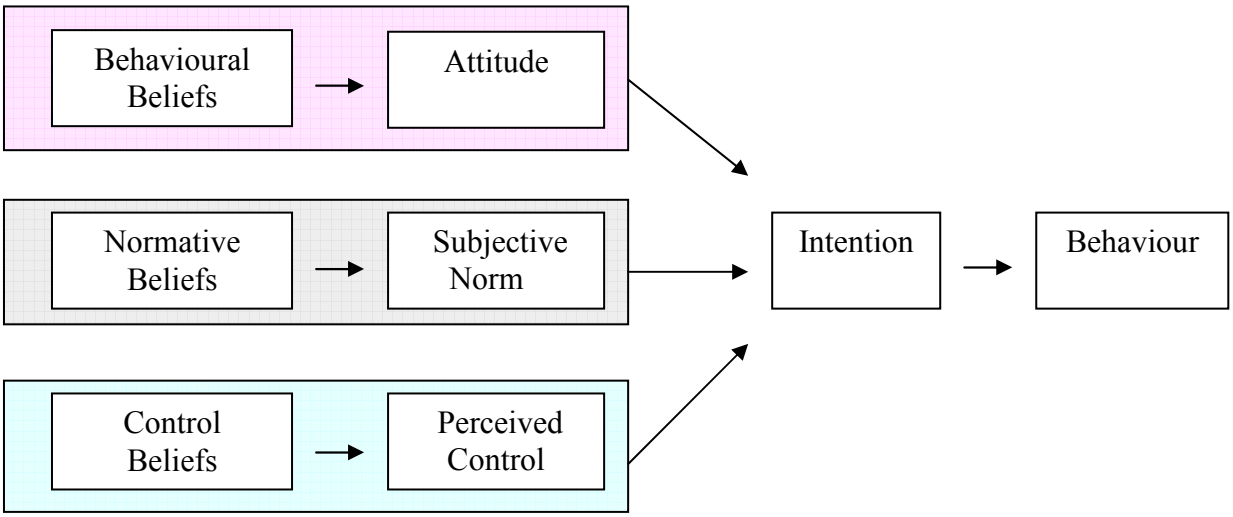

Figure 1.) ***A schematic representation of the Theory of Planned Behaviour.***

Protection Motivation Theory

The last social cognition model described within this research is the Protection Motivation Theory by Rogers (1975), originally proposed to provide conceptual clarity to the understanding in terms of fear appeals (Conner & Norman, 2005). The theory states that adaptive and maladaptive coping with a health threat, for example getting infected with an STD like HIV/AIDS, is a result of two different appraisal processes: a process of threat appraisal as well as a process of coping appraisal. Within these two processes the behavioral options of minimizing a particular health threat are evaluated by the individual (Boer & Seydel, 1996). Together, the appraisal of the health threat and coping responses result either in the intention to perform adaptive responses (protection motivation) or in maladaptive responses. Maladaptive response is defined as a response which places an individual at health risk. Behaviors, leading to negative consequences and the absence of healthful behaviors, like having sexual intercourse without using condoms, are included in maladaptive responses (Conner & Norman, 2005). According to the Protection Motivation Theory the intention to protect one self against health threats depends upon four different factors.

1. The perceived severity of a health threat. (Perceiving the severity of HIV as high/low)
2. The perceived vulnerability/probability of occurrence of a threatened event. (Perceived vulnerability to get infected with a STD by not using a condom during sexual intercourse.)
3. The perceived response efficacy (perceiving that using a condom can or cannot effectively reduce the chance of getting infected with HIV/AIDS.
4. The perceived self-efficacy (the level of confidence in one's ability to act out particular health behaviour, like always using condoms while having sexual intercourse.)

As mentioned above Protection Motivation can be seen as a result of threat and coping appraisal. In terms of risky sexual behaviour and condom use threat appraisal consists of an estimation of the chance of getting infected with HIV/AIDS (vulnerability) and the seriousness of HIV/AIDS (severity). Coping appraisal consists of the belief in ones ability to always use a condom while having sexual intercourse (self efficacy) and the belief that using condoms will effectively reduce the chance of getting infected with an STD (response efficacy). If those four factors are high, the motivation to engage in protective behaviour, in this case using condoms consistently, will increase. The chance of maladaptive responses, like avoidance and wishful thinking, in terms of HIV/AIDS will decrease. If an individual

experiences that sexual intercourse without using a condom will reduces his/her sexual pleasure (intrinsic reward) and that using a condom will make a bad impression on his/her sexual partner (extrinsic reward), this is expected to decrease the chance of acting out protective behaviour, and therefore increases the chance of maladaptive responses, like sexual intercourse without protection. The perceived costs or barriers also decrease the chance of risk reduction behaviour. If perceived costs such as having no fun while sexual intercourse are too high it will also result in maladaptive responses. According to Boer and Seydel protection motivation is acting as a mediating variable with the function to sustain and direct protective health behaviour (Boer & Seydel, 1996). It is important to mention that this research does not use the severity construct within its analysis, because other researches clarify that it is not able to significantly predict condom use (Boer & Mashamba, 2005).

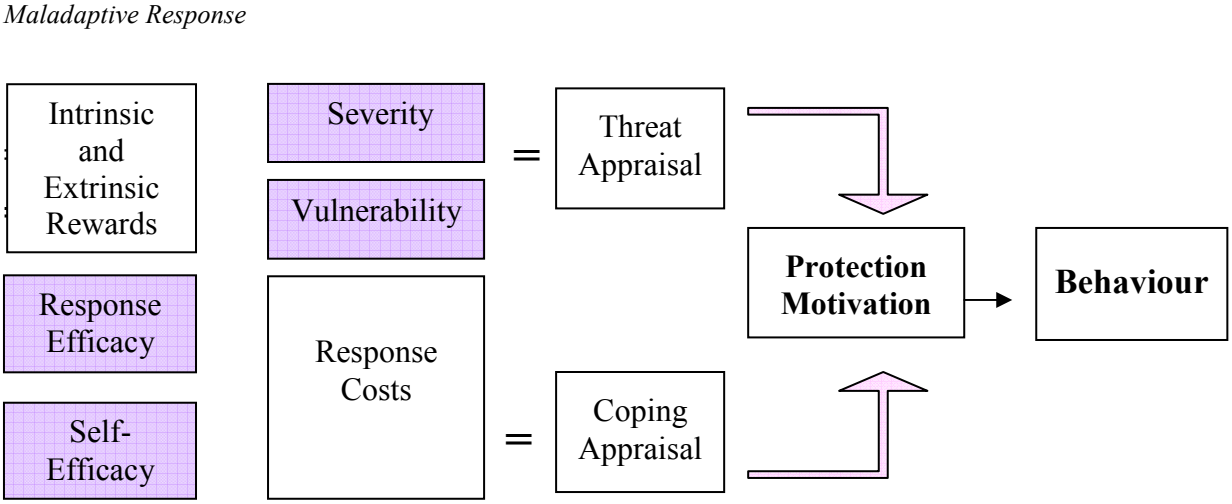

Figure 2.) A schematic representation of the Protection Motivation Theory

1.5 The maladaptive pathway of condom use on Barbados

The second pathway discussed in this research is the maladaptive pathway of condom use. It includes stigmatization, erroneous beliefs and maladaptive responses in context with (risky) sexual behaviour on Barbados. The three constructs are expected to have a negative influence on the intention to use condoms and the actual condom use of the people on Barbados. Furthermore stigmatization, erroneous beliefs and maladaptive responses are expected to influence indications of risky sexual behaviour, like having had commercial sexpartners and experiences with sexually transmitted diseases positively.

1.5.1 HIV/AIDS related Stigmatization

Stigmatization is an important cultural variable which can influence risky sexual behaviour enormously. According to Goffman, stigmatization can be defined as “an attribute that is significantly discrediting” an individual or special group (Goffman, 1963). A research of Kalichman and others brought out that stigmatization best can be measured by reflecting feelings towards people living with HIV/AIDS, thus attitudes against people with HIV, blame and avoidant behaviour against HIV infected individuals (Kalichman et al., 2004) Different dimensions of stigmatization were mentioned within the research of Kalichman and others and will be used within this research also. First, the repulsion and shame dimension, thus beliefs about the negative qualities of people infected with HIV, like feeling that people with

HIV are cursed and dirty and should be ashamed and feel guilty. Second, the avoidance and social sanction dimension of stigmatization, like people with HIV/AIDS should be isolated and must expect restrictions on their freedom (Kalichman et al., 2004). It becomes obvious that stigmatization is a complicated variable which also is expected to have an important influence on behaviour of the Barbadian participants and the HIV/AIDS prevention on Barbados.

Emotions can also affect the process of stigmatization. A research about stigmatization in northern Thailand clarifies that fear and pity for HIV infected people as well as anger towards people living with HIV have an impact on stigmatization (Boer & Emons, 2004). According to this study stigmatization gets higher in context with emotions like fear and anger, whereas pity seems to reduce the degree of stigma (Boer & Emons, 2004). People showing a high degree of stigmatization are expected to view themselves different from the perceived "HIV/AIDS risk-group". According to Liu et al., stigmatization beliefs towards people living with HIV/AIDS are positively associated with the sexual history of an individual. Having had an episode of sexual transmitted diseases, multiple as well as commercial sexpartners increased stigmatization beliefs within the research of Liu et al., 2005. The same research further clarifies that HIV related stigma was negatively associated with HIV preventive processes like using condoms consistently. Therefore people with a high degree of HIV/AIDS related stigmatization display risky sexual behaviour more often than people without stigmatization beliefs. Those people act HIV preventive practices out less because of their fear of being stigmatized (Liu et al., 2005). Within this bachelorthesis it is expected that stigmatization is related to experiences with commercial sexpartners and an episode of sexual transmitted diseases and is negatively associated with the intention to use a condom and actually condom use of the Barbadian population.

1.5.2 Myths and erroneous beliefs of the population on Barbados.

Another psychosocial determinant which is expected to have an impact on sexual behaviour and stigmatization are myths and erroneous beliefs about HIV/AIDS. According to Kalichman et al., erroneous beliefs can be divided into two different types of myths about HIV/AIDS (Kalichman & Simabyi, 2004).

1. Erroneous beliefs about the casual contagion with HIV/AIDS
2. Erroneous beliefs about the transmission and prevention of HIV/AIDS

Erroneous beliefs about HIV/AIDS were analyzed within a research on northern Thailand. This research stated that people with inaccurate beliefs in terms of HIV/AIDS transmission show a higher degree of stigmatization towards HIV infected individuals (Boer & Emons, 2004). KABP surveys on Barbados in the years 2001 and 2005 reveal that the knowledge about the transmission of HIV/AIDS was higher than 84% within the Barbadian respondents. Around 75% of al respondents answered correctly that HIV cannot be transmitted by mosquitoes. But there also exist researches were the level of knowledge about the transmission of HIV/AIDS was lower than expected (Barbados Country Progress Report, 2008). Therefore it is important to get an insight into the erroneous beliefs about HIV/AIDS on Barbados, find out which myths are most common, and try to analyze the impact erroneous beliefs can have on the degree of stigmatization, risky sexual behaviour and condom use. Within this research it is expected that erroneous beliefs and myths are acting as a distal determinant in terms of predicting condom use mediated by the social cognitions of the Barbadian respondents. According to Boer & Emons (2004), myths and erroneous beliefs are able to undermine preventive behaviour like using condoms, thus a high degree of myths is expected to influence protective sexual behaviour negatively.

1.5.3 Maladaptive reactions.

Another aspect which has an impact in terms of the maladaptive pathway of condom use are maladaptive coping responses which are based on the Protection Motivation Theory mentioned above. Maladaptive responses are defined as strategies to reduce the fear of a threat without engagement in activities that actually increase the risk and without actually dealing with the threat itself (Conner & Norman, 2005, p. 94-95). When an individual is confronted with a health threat, in this case the risk of getting HIV/AIDS by not using a condom, in the absence of an effective coping response, he/she may engage in activities that do not actually reduce the health threat but the fear of the threat. Maladaptive responses can include different strategies to cope with a threat (Conner & Norman, 2005, p.94-95). The following strategies are important within this research and are explained by means of the risk to get infected with HIV/AIDS.

1. Denial of the health threat. (An individual disclaims the risk of getting infected with HIV/AIDS while having sexual intercourse.)
2. Belief in god. (An individual trust in her/his belief in god and that god will protect him/her against being infected with HIV/AIDS.)
3. False beliefs. (A person copes with the risk of HIV/AIDS through unrealistic beliefs, such as careful selection of the sex partners or washing after sexual intercourse to avoid an infection with HIV/AIDS.)
4. Belief in destiny. (A person does not engage in any activities to avoid an infection with HIV/AIDS because he/she thinks that it is dependent of destiny.)
5. Risk minimalisation. (An individual evaluates the information's about HIV/AIDS as to exaggerate and therefore does not need to engage in activities to reduce the risk of HIV/AIDS.)

Maladaptive responses therefore are very important in terms of (risky) sexual behaviour. It is expected that this construct has an impact on stigmatization and therefore is expected to be a negative predictor to the intention of condom use and actually condom use (Conner & Norman, 2005, p.94-95). Furthermore maladaptive reactions are expected to influence the indications of risky sexual behaviour of the Barbadian participants. It is expected, that people with a high level of maladaptive reactions are more willing to act out risky sexual behaviour.

1.6 Research model and research questions

Based on the available literature, other researches, own expectations and ideas the following research model was developed.

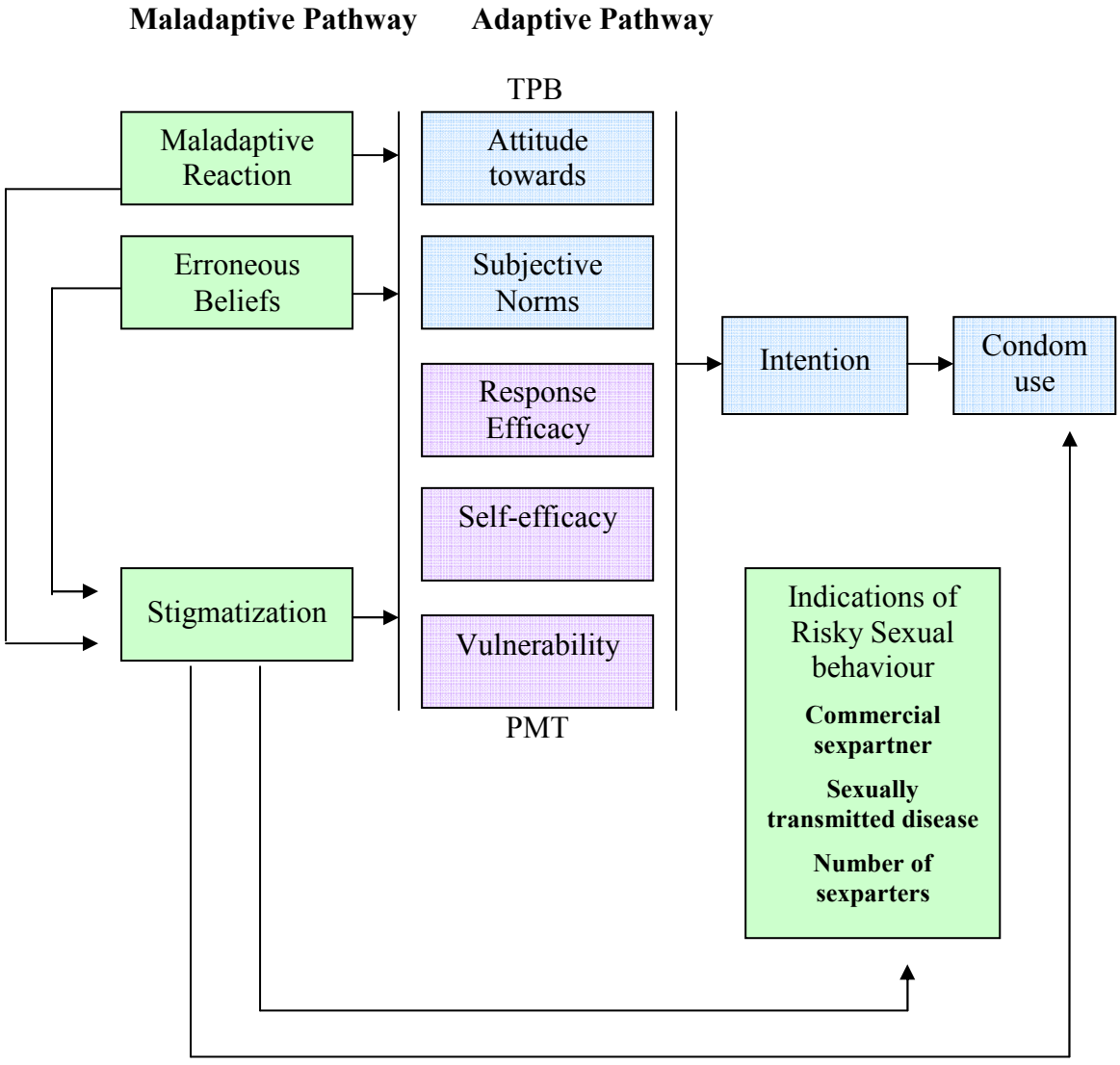

Figure 3.) ***A schematic representation of the research model.***

By means of this model the expectations of this research will be considered. First, the adaptive pathway of condom use is described within this research model. It is expected that the social cognitions are distal determinants of condom use. The influence is expected to run via the intention to condom use. In turn, the condom use intention is expected to be a proximal determinant of condom use.

Secondly, the expectations in terms of the maladaptive pathway of condom use will be explained. The maladaptive reactions and erroneous beliefs of the Barbadian population are expected to be positively correlated to the level of stigmatization. High levels of erroneous beliefs and/or maladaptive reactions therefore are expected to rise up the level of stigmatization against HIV/AIDS infected persons. Stigmatization is expected to be a direct determinant of condom use on the one hand, but on the other hand stigmatization also seems to influence condom use negatively via the social cognitions and the intention to use condoms. With regard to the indications of risky sexual behaviour, stigmatization is expected

to influence the experiences with commercial sex partners, an episode of sexually transmitted diseases and the number of sexpartners.

According to maladaptive reactions and erroneous beliefs it is expected that those constructs act as distal determinants of condom use via the social cognitions and the condom use intention, but also as determinants of the indications of risky sexual behaviour. It is expected that maladaptive reactions and erroneous beliefs are strongly related to stigmatization, and therefore act as distal determinants of risky sexual behaviour indications.

Research questions

Based on the research expectations and the research model the following research questions are developed. Those form the basis and background of the statistical analysis and will be answered at the end of this research.

1. Does the population on Barbados display indications of risky sexual behaviour, like inconsistent condom use, experiences with commercial sexpartners, episodes of sexually transmitted diseases and a high number of sexpartners?

2. Are stigmatization, erroneous beliefs and maladaptive reactions outstanding on Barbados?

3. Are maladaptive reactions, erroneous beliefs and stigmatization significant predictors of the indications of risky sexual behaviour, like commercial sexpartners, experiences with sexually transmitted diseases and the number of sexpartners?

4. Are stigmatization and the intention to use a condom directly related to the actual condom use on Barbados?

5. Are the social cognitions and the condom use intention mediating factors of the relationships between maladaptive reactions, erroneous beliefs and/or stigmatization and condom use of the Barbadian participants?

6. Are the social cognitions mediating factors of the relationship between maladaptive reactions, erroneous beliefs and/or stigmatization and the intention to use a condom?

7. Is the intention to use condoms a mediating factor of the relationship between the social cognitions and condom use?

8. Which pathway (adaptive or maladaptive) is more important on Barbados in terms of the sexual behaviour of the participants?

2. Method

2.1 Respondents and Procedure

The data of this research was collected during the 1st May and 30th of July 2007 on Barbados. Because the respondent group of this research should give a good example of the whole Barbadian population of the age group 15- 49, a representative sample was outstanding important. The Barbadian respondents were contacted on different places known as famous meeting places for the Barbadian population. Those places were the Miami Beach on the South coast, the Accra Beach on the West coast and other public places on the island. Particularly the beaches exposed to be a good place for working out the research, because every weekend all families of the whole island came together at those beaches to have lunch. Furthermore respondents were contacted in Bridgetown, the capital city of Barbados. Because of these different places it was possible to get a valid sample of the whole Barbadian population, even of people living in the inland of Barbados. The research criterion to get part of this research was an age between 15 and 49 and being a native-born Barbadian. Before going to Barbados a multi-item questionnaire was developed to measure the (risky) sexual behaviour of the Barbadian population effectively. To work with an effective measurement in terms of the Barbadian cultural context, the questionnaire was proofread by a native Barbadian man who estimated the questionnaire as good understandable and clearly formulated. Potential respondents were asked if they are interested in filling out the questionnaire and if so also the age and parentage was asked to meet the research criterion. Furthermore the potential participants were informed of the background and purpose of the research: the subject of the questionnaire thus (risky) sexual behaviour of the people on Barbados, the time to fill out the questionnaire, the way the questionnaire must be filled out and the fact that the anonymity of their answers was afforded. It was also explained that the questionnaire should filled out completely. Referring to this it was observed that many people did not want to be part of the research because of the length of the questionnaire and the very private content of the questions. People who wanted to participate in the research almost always filled out the whole questionnaire correctly.(besides some questions) After talking to the people for a while and therefore providing confidence, it was possible to convince potential respondents to fill out the questionnaire, even if they did not want to at the beginning. This was also important to get a valid sample of the Barbadian population, because especially those people give a good insight into the actual sexual behaviour of the participant group. Actual participants of the research got one pen and questionnaire to answer the questions directly. The investigator paced around to assure anonymity but also to answer possible questions. The time to fill out the whole questionnaire was estimated at around 15 minutes before but it became obvious that the Barbadian respondents clearly needed more time to answer all questions. Because of that the time of answering all questions varied between 15 to 40 minutes. After that time the questionnaires were recollected from the participants by putting all the questionnaires into a bag randomly. This procedure assured the anonymity again. In total 135 completed questionnaires were analyzed, due to 3 participants below/about the criterion age group.

2.2 Description of the questionnaire

Demographics

First the demographic information's of the respondents were asked within the questionnaire. Those included gender, age, nationality, religious affiliation, time living on Barbados (to assure being native born Barbadian), education until now, marital status and the kind of work.

Stigmatization

To identify the level of stigmatization within the Barbadian respondents, thirteen items were asked. Those items are based on the stigmatization scale of Kalichman e.a and consist of different stigmatization dimensions. (Kalichman et al., 2004) The items were assessed with a 5-point-Likkert scale, to indentify of people score high or low on stigmatization. (1=completely disagree to 5= completely agree) The stigmatization scale appeared to dispose of a .91 cronbach`s alpha so the reliability of this scale is very high. The items of the Stigmatization scale were:

1. "People who have AIDS are dirty."
2. "People who have AIDS are cursed."
3. "People who have AIDS must expect some restrictions on their freedom."
4. "A person with AIDS must have done something wrong and deserves to be punished."
5. "People who have AIDS should be isolated."
6. "I do not want to be friends with someone who has AIDS."
7. "I would not accept a person with HIV/AIDS within my family"
8. "I do not want to be in the same circle of friends than a person with HIV/AIDS."
9. "People infected with HIV/AIDS should feel guilty."
10. "The majority of the people infected with HIV/AIDS are stupid and foolish."
11. "People with HIV/AIDS should be ashamed of themselves."
12. "Most of al people infected with HIV are self responsible for their sickness."

Myths and erroneous beliefs

The erroneous beliefs and myths of the population on Barbados were measured by five items which reflect erroneous beliefs about casual contagion. Even thus two soorts of erroneous beliefs were measured within the questionnaire before(myths about the casual contagion and the transmission/prevention of HIV/AIDS.), only the erroneous beliefs about the casual contagion exposed to be reliable within this research. Based on a reliability analysis, 5 items about the casual contagion of HIV/AIDS were used within this research. The items were answered on a YES/NO scale. People with higher level of erroneous beliefs and myths count higher on the YES/NO scale than people without erroneous beliefs. (Yes=1 and no=0). The internal consistency of this scale with a cronbach alpha of .73 appeared to be good.

1. "Mosquitoes can transmit HIV/AIDS."
2. "HIV/AIDS can be contracted by hugging an infected person."
3. "HIV/AIDS can be transmitted by sharing cigarettes."
4. "HIV/AIDS can be transmitted by drinking from the same glass as a person with HIV/AIDS."
5. "HIV/AIDS can be contracted through toilet seats."

Maladaptive reactions

The maladaptive responses of the Barbadian respondents were measured by different items of maladaptive responses. Those were risk information, denial, false beliefs, belief in god and destiny. In total 18 items were implied within the questionnaire. Again a 5-point-Likkert scale was used which ranged from 1=completely disagree to 5=completely agree. In total the reliability of al maladaptive response scales were high. The risk information scale has a Cronbach`s alpha of .69. The items of the denial scale come up to a $\alpha$ =.82, false beliefs up to a Cronbach`s alpha of .80, belief in god appeared to have α =.89 and the belief in destiny come up to a Cronbach`s alpha of .64.

Risk Minimalisation:

1. "I think that the information about the risks of HIV/AIDS is often exaggerated."
2. "I think that the risks of getting infected with HIV/AIDS are often represented too high/big."
3. "I think that the risks of getting infected with HIV/AIDS because of unsafe sex are exaggerated."

Denial:

1. "When I am confronted with information about HIV/AIDS, I often try not to think about HIV/AIDS."
2. "I try not to think about HIV/AIDS, when I think about sex."
3. "I try not to think about the infection with the HIV virus because of unsafe sex."
4. "I try to think as less as possible about the negative consequences of unsafe sex."

False Beliefs:

1. "I will not become infected with HIV/AIDS, because I wash myself carefully after sex."
2. "I will not become infected with HIV, because the sexual partners I choose are decent and clean."
3. "I will not become infected with HIV, because I select my sexual partners carefully."

Belief in God:

1. "I will not become infected with HIV, because god holds his protective hand above me."
2. "I feel that God will protect me against the HIV virus."
3. "Higher powers protect me against an infection with HIV."
4. "I pray a lot, God will protect me against the HIV virus."

Destiny:

1. "It is the destination of people that they get infected with HIV."
2. "The fact that someone gets infected with HIV is especially dependent on destiny."
3. "The fact that someone gets infected with HIV is especially dependent on accident."
4. "It does not matter what kind of precautions I take, there will be a chance anyway that I get infected with the HIV virus."

Attitude towards condoms

In terms of the attitude towards condoms seven different items were used to measure this construct. To make sure that higher scores on this scale imply a more positive attitude towards condoms this score were recoded before the analysis. The scale result in a high reliability with an Cronbach`s alpha of .81. The items, again measured by a 5-point-Likert scale, were:

1. "Using condoms will reduce my partner's sexual pleasure."
2. "Using condoms will reduce my sexual pleasure."
3. "Using condoms will make my boyfriend/girlfriend think that I might be infected with HIV."
4. "Using condoms will give my partner the impression that I sleep around."
5. "If I propose that we use a condom my boyfriend/girlfriend will get the impression that I do not trust him/her."
6. "Using condoms will evoke resistance by my boyfriend/girlfriend."
7. "Using condoms will make sex embarrassing."

Subjective norms.

The subjective norms of the population on Barbados were measured by a combination of the motivation to comply and the normative beliefs. Again a 5-point-Likert scale was used for both of those constructs ranged from 1= completely disagree to 5= completely agree. In terms of the normative beliefs four different referent groups were chosen. Those social groups were the current sexual partner, the father, the mother and the circle of friends. To get insight into the subjective norms of each respondent, the normative beliefs were multiplied with the corresponding motivation to comply. Because of that the mean of the subjective norms were computed into a scale which range from -10 to 10. The internal consistency of those items are moderate with a Cronbach`s alpha of .74.

1. "My current sexual partner thinks that we should use condoms."
2. "I would care about the opinion of my current sexual partner."
3. "My friends think that I should use condoms."
4. "I care about the opinion of my friends."

5. "My mother thinks that I should use condoms."
6. "I care about the opinion of my mother."
7. "My father thinks that I should use condoms."
8. "I care about the opinion of my father."

Response efficacy

To measure the response efficacy towards condom use, two items were used. Again the items were assessed by a 5-point-Likert scale and were coded in a way that higher scores indicate a higher response efficacy in terms of condom use. The items used to measure response efficacy referred to unwanted pregnancy and an infection with HIV and reached a moderate reliability with a Cronbach`s alpha of .68.

1. "Using condoms while sleeping with my sexual partner will protect me against unwanted pregnancy."
2. "Using condoms will protect me against being infected with HIV."

Self-efficacy/ Perceived behaviour control

The self-efficacy is measured by eight different items in terms of condom use. Because of the fact that self-efficacy and perceived behaviour control are included in al of those items, both constructs are combined within this research. The Items were coded in such a way that higher scores indicate a higher condom related self-efficacy, thus a 5-point-Likert scale was used. (1= completely disagree to 5 = completely agree). The internal consistency of the eight items appeared to be agreeable with α=.63.

1. "I am able to ask my boyfriend/girlfriend about his/her sexual history."
2. "My partner will get annoyed if I suggested using a condom."
3. "I am afraid of making a bad impression on my boyfriend/girlfriend if I suggested using a condom.
4. "I am able to talk about safe sex with my boyfriend/girlfriend."
5. "I find it difficult to talk about condoms."
6. "I am able to talk about safe sex with my parents."
7. "I am able to talk about my sexual history with my parents."
8. "I am able to ask my parents about how to use a condom."

Vulnerability

The condom related vulnerability of the people on Barbados also was measured within the questionnaire. Three items give insight into the vulnerability in terms of an infection with HIV/AIDS and other sexual transmitted diseases. A 5-point-Likert scale was used and the scale appeared to have a moderate internal consistency with an Cronbach`s alpha of .71.

1. "If I do not use condoms, the chance of getting infected with HIV is high."
2. "In comparison with my peers I run a high risk of getting HIV/AIDS."
3. "If I do not use condoms, I run a high risk of getting infected with other sexually transmitted diseases."

Condom use intention/ Protection motivation

The condom use intention of the Barbadian respondents was measured by 5 items. The protection motivation was operationalized by using the same items than the condom use intention. Again all items were assessed by a 5-point-Likert scale. (1=completely disagree to 5= completely agree.) Because some items were recoded, a higher score on this scale stand for a high level of condom use intention or protection motivation towards condom use. The reliability of all items was α=.83.

1. "In the future I will always use a condom."
2. "In the future I will not have sex if it is not possible to use a condom."
3. "In the future I will demand the use of a condom even if my partner does not want to use a condom."
4. "If my partner does not want to use a condom, I adapt to his/her wish."

5. "If my partner does not want to use a condom, I try to convince him/her to use a condom."

Condom use

The questionnaire used within this research also consists of one item about the condom use of the Barbadian respondents in the last three months. The respondents had to mark a number between 0 and 8(or more) to give answer on the number of condoms used in the last three months. To analyze the actual condom use of each respondent the number of partners with whom always a condom was used were measured in percentage of the number of sexpartners in the last three months.

1. "With how many partners did you have sex during the last three months?"

Risky sexual behaviour

Based on a research of Liu e.a the indications of risky sexual behaviour of the respondents on Barbados were also included within this research. Risky sexual behaviour indicators were measured by three different items. On the one hand the experiences in terms of commercial sexpartners were asked. On the other hand the experience with an episode of a sexual transmitted disease was measured. The items were ranged by a YES/NO scale whereby respondents with an experience of on of both risky sexual behaviors score higher on the risky sexual behaviour scale than individual without such experiences. Secondly, the number of sexual partners in the last three months was measured by one item. The participants therfore had to mark a number between 0 and 8 (or more) to give answer on the number of partners within the last three months before this research was done.

1. "Did you ever have an episode of an sexually transmitted disease?"
2. "Did you ever had a commercial sexpartner?"
3. "With how many of these partners did you always use a condom?"

2.3 Data analysis

The statistical software program SPSS 16.0 was used for all statistical analysis. To get a clear view of the correlations/relations between all variables, the Pearson correlation coefficients were used. Multiple hierarchical regression analysis were used to explain the condom use intention, implications of risky sexual behaviour and condom use. Totally, statistical significance was given when $P<0.05$ (Two-sided).

3. Results

3.1 Sample characteristics

In the following table 1 the demographic characteristics of the Barbadian respondents are presented. The demographics are subdivided into male and female respondents to give an good overview about the sample. During the rest of this analysis the respondents are analyzed as a whole group.

Table 1. Overview of the demographic characteristics of the Barbadian respondents.

	Male	Female	Total
Number of Respondents	58	76	135
Age			
Mean	26.2	25.5	25.7
Std.	6.4	7.9	7.3
Min.	17	15	15
Max.	40	42	42
Missing	-	1	
Religious affiliation			
Protestant	3 (5.2%)	7 (9.1%)	10 (7.4%)
Roman Catholic	7 (12.1%)	9 (11.7%)	16 (11.9%)
Hindu	1 (1.7%)	-	1 (0.7%)
Rastafarian	33 (56.9%)	47 (61%)	80 (59.3%)
No Religion	14 (24.1%)	9 (11.7%)	23 (17%)
Missing	-	5	5
Education			
Primary, elementary	4 (6.9%)	4 (5.2%)	8 (5.9%)
Secondary, High School	28 (48.3%)	31 (40.3%)	59 (43.7%)
University, College	18 (31%)	33 (42.9%)	51 (37.8%)
Other	8 (13.8%)	8 (10.4%)	16 (11.9%)
Missing	-	1	1
Relationship			
Boyfriend/Girlfriend	26 (44.8%)	46 (59.7%)	72 (53.4%)
Single	26 (44.8%)	20 (26%)	46 (34.1%)
Married	4 (6.9%)	9 (11.7%)	13 (9.6%)
Divorced	1 (1.7%)	2 (2.6%)	3 (2.2%)

Totally, 135 participants participated in this research and met the research criterion, among those 58 men and 76 women. Only one respondent gave no statement on his/her gender and was not included in the sample characteristics. The mean age of the Barbadian respondents is 25.7. With respect to the religious affiliation most respondents described themselves as Rastafarian. Another important aspect of the sample characteristics is the relatively high level of education among the respondents. Overall 43.7% of all participants had a secondary/ high school graduation and 37.8% stated going to or having graduated at a university or college. According to the marital status of the respondents, it became apparent that 53.4% were in a

steady relationship and 34.1% indicated to be single. Only a small part of the respondent group stated to be married or divorced

3.2 Frequency analysis

3.2.1 Indications of risky sexual behaviour on Barbados

According to the indicators of risky sexual behaviour on Barbados three different constructs are analyzed: experiences with commercial sexpartners, episodes of sexually transmitted diseases and the number of sexpartners within the last three months before the research.

Multiple sexpartners alone are not defined as risky sexual behaviour but in combination with inconsistent condom use this definitively rises up the chance of getting infected with HIV/AIDS. Because of the strong relation of the number of partners and condom use, the total numbers of partners and condom use are discussed and combined within section 3.2.2.

Table 2. Indications of the risky sexual behaviour of the Barbadian respondents.

	Total number respondents (n=135) n(%)
Experiences with a commercial sexpartner	
YES	20 (14.8)
NO	111(82.2)
Missing value	4 (3)
Episode of sexually transmitted diseases	
YES	18 (13.3)
NO	115 (85.5)
Missing value	2 (1.5)

Table 2 shows that most of all participants got no experiences with commercial sexpartners (82.2%) and never got infected with a sexually transmitted disease (85.5%). Nevertheless 14.8% of all Barbadian respondents stated to have had experiences with commercial sex. Further it can be seen that 13.3%, thus 18 persons out of 133, experienced an episode of sexually transmitted diseases. Totally, 6 respondents did not answer this question.

3.2.2 Number of sexpartners and the condom use among the Barbadian respondents

Within this section the number of sexpartners and the condom use among the respondents on Barbados are represented. Even though condom use and the number of sexpartners are different variables both constructs are strongly related. To assume the risky sexual behaviour of the Barbadian respondents, the number of partners must be seen in relation to the condom use with those sexpartners.

Table 3 summarizes the number of sexpartners of all Barbadian participants within the last three months to give the distribution of the number sexpartners on Barbados. The mean score of the number of partners and the standard deviation are also represented in table 3.

Table 3. Number of sexpartners among the Barbadian respondents within the last 3 months.

	Total number respondents (n=135) n (%)
Number of sexpartners (in the last three months)	
0	20 (14.8)
1	71 (52.6)
2	20 (14.8)
3	9 (6.7)
4	3 (2.2)
5	1(0.7)
6	1(0.7)
8 or more	6 (4.4)
Missing value	4 (3)
Mean score (and standard deviation)	1.6(1.74)

This analysis clarifies that 14.8% of all Barbadian participants stated not having had sexual intercourse within the last three months. Totally, 32.5 % of all respondents had at least more than one sexual partner during the last three months before the research.

Even though the results of table 3 gives an interesting overview over the distribution of the total number of sexpartners of the Barbadian respondents, the number of sexpartners within the last three months alone is no indication of risky sexual behaviour. Because of that, the percentages of (in)consistent condom use in relation to the number of sexpartners were analyzed within the next section of this research. According to that analysis in table 4, 43,7% of all respondents who had sexual intercourse with at least one sexual partner always used a condom while having sex within the last 3 months. 22,2% of all sexual active participants stated that they never used a condom within the last three months and 16.3% stated used a condom irregularly. The missing value of this question was very high with a percentage of 17.8.

Table 4. Consistent condom use among the Barbadian respondents in relation to the number of partners within the last 3 months before research.

	Total number of respondents (n=135) n(%)
Consistent condom use	
NO	30(38.5)
YES	59(43.7)
Missing value	24 (17.8)
Mean score (and standard deviation)	1.31(1.64)

The results of both tables clarify that almost half of all respondents who had sex in the last 3 months did not use condoms regularly (38.5). On the one hand this is a clear indication of risky sexual behaviour but on the other hand it must not be forgotten that 63% of all participants stated being in a steady relationship. Nevertheless, it becomes obvious that the combination of multiple sexpartners and inconsistent condom use is existing on Barbados.

3.2.3 Social cognitions and condom use intention of the Barbadian respondents

The means scores and standard deviations of the social cognitions within the table 5 are differentiated into the attitude towards condoms and subjective norms (based on the theory of planned behaviour) and the constructs response efficacy, self-efficacy and vulnerability (based on the Protection Motivation Theory). Furthermore, this table displays the same statistical descriptives for the condom use intention.

Table 5. Mean scores (and standard deviations) of the constructs based on the theory of planned behaviour and Protection Motivation Theory.

	Total number respondents
Theory of planned behaviour	
Attitude toward condom use	3.9 (0.7)
Subjective norms*	3.5 (3.0)
Protection Motivation Theory	
Response efficacy	3.9 (0.9)
Self-efficacy	3.7 (0.6)
Vulnerability	4.2 (1.0)
Condom use intention	3.7(0.9)

Note all scales range from 1 to 5 . * In terms of this scale the range is between -10 and 10.

The mean scores of the different constructs were somewhat higher than in the midrange of the scale. Noticeable is the vulnerability in terms of HIV/AIDS with a relatively high mean score of 4.2.

3.2.4 Stigmatization within the Barbadian population

The following table gives an overview about the mean as well as the minimal and maximal score of stigmatization. Furthermore the standard deviation is mentioned.

Table 6. Descriptives of stigmatization (score 1-5)

	Number of respondents
Stigmatization	
Means score stigmatization	1.9
Std.	.70
Min.	1.00
Max.	5.00

According to the data from table 6, the mean score of the participants in terms of stigmatization with 1.9 is not very high because the stigmatization scale ranged from 1 to 5. It is interesting that the maximum score on stigmatization with 5.00 is the highest score one individual can get.

3.2.5 Erroneous beliefs/ myths

This section deals with the erroneous beliefs and myths about the casual contagion of HIV/AIDS of the Barbadian respondents. According to those myths it is important to give an overview about each erroneous belief separately to detect myths/erroneous beliefs which are widespread within the Barbadian respondents. Table 7 gives an overview about the distribution of the erroneous beliefs about the casual contagion of all participants in percent.

Furthermore, the erroneous beliefs will be considered as an integrated whole. Thus for all erroneous beliefs the mean, minimal and maximal score is described in table 8. The standard deviation is also given within this table.

Table 7. Beliefs in a certain myth/erroneous belief

	Total number respondents (n=135) n (%)
Erroneous beliefs about casual contagion	
Mosquitoes can transmit HIV/AIDS	20 (14.8)
HIV/AIDS can be contracted by hugging an infected person	7 (5.2)
HIV/AIDS can be transmitted by sharing cigarettes	10 (7.4)
HIV/AIDS can be transmitted by drinking from the same glass as a person with HIV/AIDS	15 (11.1)
HIV/AIDS can be contracted through toilet seats	14 (10.4)

Table 8. Descriptives of the erroneous beliefs/myths within the Barbadian respondent group.

	Number of respondents
Erroneous beliefs/myths	
Mean score	.48
Std.	1.02
Min.	.00
Max.	5.00

The tables show that the erroneous beliefs about the casual contagion of HIV/AIDS are unequal distributed within the Barbadian respondents. The misbelief that mosquitoes can transmit HIV/AIDS are most often held by the Barbadian participants, followed by the belief that HIV/AIDS can be transmitted by drinking from the same glass as a person with HIV/AIDS. Totally, 25.9% of all 135 participants on Barbados held at least one of those five myths about the casual contagion of HIV/AIDS, with 6 respondents missing within this analysis. It becomes obvious that the mean score in terms of erroneous beliefs about the casual contagion of HIV/AIDS is .48.

3.2.6 Maladaptive reactions of the Barbadian respondents.

Within the following statistical tables, the median score and the standard deviation of all different maladaptive reactions are represented separately.

Table 9. Mean score (and standard deviation) of maladaptive reactions

	Total number respondents
Maladaptive reactions	
Belief in god	2.2 (1.1)
Risk Minimalisation	2.3 (1.0)
Denial	2.6 (0.9)
False beliefs	2.1 (1.0)
Destiny	2.4 (0.8)

Table 9 shows that the mean scores were highest on the maladaptive reactions belief in destiny and minimalisation of the risk of HIV/AIDS, and therefore are most common among the Barbadian respondents. Nevertheless those mean scores were in the midrange of the scale, ranging from 1 to 5.

3.3 Correlation analysis of all research constructs

Table 10 contains the Pearson correlations between all research constructs. According to these results, stigmatization was significantly positive correlated with erroneous beliefs about the casual contagion of HIV/AIDS among the Barbadian respondents ($r = .39$, $p<.01$). Furthermore stigmatization was significantly positive correlated to all different maladaptive reactions: Belief in God ($r = .44$, $p<.01$), risk information ($r = .30$, $p<.01$), denial ($r = .42$, $p<.01$), false beliefs ($r = .39$, $p<.01$) and destiny ($r = .32$, $p<.01$). With regard to risky sexual behaviour, stigmatization was significantly positive correlated to an episode of a sexually transmitted disease ($r = .34$, $p<.01$) and having had a commercial sexpartner sometime ($r =.24$, $p<.01$). Stigmatization was not significantly correlated to the number of sexpartners of the Barbadian participants. In terms of the adaptive pathway of sexual behaviour among the Barbadian respondents, stigmatization was negatively correlated to the attitude towards condoms. ($r =.49$, $p<.01$), but was not significantly correlated with all other constructs based on the theory of planned behaviour and Protection Motivation Theory. A significantly negative correlation was found between stigmatization and the condom use intention ($r =-.21$, $p<.05$) and the actual condom use ($r = -.29$, $p<.01$). Erroneous beliefs of the respondents were significantly negative correlated to the attitude towards condoms ($r = -.30$, $p<.01$), but were not significantly correlated to the other constructs of the two theories, the condom use intention and the actual condom use on Barbados. A positive significantly correlation was found between erroneous beliefs and an episode of sexually transmitted diseases ($r = .36$, $p<.01$). Three maladaptive reactions of the Barbadian population were also positive significantly correlated to erroneous beliefs: Belief in God ($r = .21$, $p<.05$), denial ($r = .26$, $p<.01$) and false beliefs about HIV/AIDS ($r = .26$, $p<.01$).

The maladaptive reactions correlated negative significantly with the attitude towards condom use and the self-efficacy of the respondents. Denial and false beliefs about HIV/AIDS were negative significantly correlated to the attitude ($r = -.29$, $p<.01$) and ($r = -.23$, $p<.05$). Beyond, denial of HIV/AIDS was negative significantly correlated with the self-efficacy of the participants ($r = -.19$, $p<.05$). The belief in destiny was also negative and significantly correlated to self-efficacy ($r = -.18$, $p<.05$).

In terms of the social cognitions based upon the theory of planned behaviour and Protection Motivation Theory the following correlations were found: The subjective norms of the respondents were positive significantly correlated to the response efficacy ($r = .20$, $p<.05$), the self-efficacy of the participants ($r = .28$, $p<.01$) and the vulnerability in terms of HIV/AIDS ($r = .35$, $p<.01$). Self-efficacy was further positive correlated to vulnerability ($r = .38$, $p<.01$) and the subjective norms ($r = .28$, $p<.01$). According to the condom use intention, all social cognitions were positive correlated: Attitude towards condoms ($r = .28$, $p<.01$), the subjective norms ($r = .43$, $p<.01$), response efficacy ($r = .18$, $p<.01$), the self-efficacy ($r = .43$, $p<.01$) and the vulnerability in context of HIV/AIDS ($r =.31$, $p<.01$). As expected before, a positive significantly correlation was found between the intention to use a condom and actual condom use on Barbados ($r =.34$, $p<.01$).

Table 10. Pearson Correlations between the constructs of the research model for total number of respondents.

	EB	S	MCG	MCR	MCD	MCFB	MCDT	AT	SN	RE	SE	VU	IN	CU	NSP	STD	CS
Erroneous Beliefs (EB)	-																
Stigmatization (S)	**.39****	-															
Maladaptive Coping Belief in God (MCG)	**.21***	**.44****	-														
Maladaptive Coping Risk Minimalisation (MCR)	.05	**.30****	**.29****	-													
Maladaptive Coping Denial (MCDL)	**.26****	**.42****	**.34****	**.43****	-												
Maladaptive Coping False Beliefs (MCFB)	**.26****	**.39****	**.46****	**.35****	**.30****	-											
Maladaptive Coping Destiny (MCDY)	.09	**.32****	**.32****	**.25****	**.25****	.09	-										
Attitude (AT)	**-.30****	**-.49****	-.17	-.16	**-.29****	**-.23***	-.13	-									
Subjective Norms (SN)	-.01	-.07	.04	.04	.00	-.09	-.04	-.10	-								
Response Efficacy (RE)	-.05	.10	-.02	.03	-.08	.06	.05	-.00	**.20***	-							
Self-Efficacy (SE)	.12	-.10	.08	-.14	**-.19***	-.01	**-.18***	.13	**.28****	.05	-						
Vulnerability (VU)	.03	-.03	.04	-.16	-.14	-.10	-.15	.02	**.35****	.16	**.38****	-					
Condom Intention (IN)	.04	**-.21***	.09	-.03	**-.22***	-.09	-.07	**.28****	**.43****	**.18***	**.43****	**.31****	-				
Condom Use (CU)	-.16	**-.29****	-.14	.05	-.13	-.15	-.12	**.20***	**.23***	-.04	.05	.05	**.34****	-			
Number of Sexpartners (NSP)	.02	.08	-.00	.14	.01	.14	-.02	**-.29****	.11	-.03	-.10	-.03	-.03	.11	-		
Sex.Transmitted Diseases (STD)	**.36****	**.34****	.12	.14	**.29****	.12	.20*	**-.30****	-.07	.02	-.11	-.07	**-.24****	**-.28****	.05	-	
Commercial Sexpartner (CS)	.06	**.24****	.14	**.23****	.13	.09	.07	**-.27****	.08	.01	-.03	.01	-.08	.07	**.53****	**.26****	-

* Correlation is significant at the 0,05 level, ** Correlation is significant at the 0,01 level.

3.4 Regression Analysis

Within the following section of this research, the relative contribution of all different constructs on the indications of risky sexual behaviour, the condom use intention and the actually condom use are measured. For these purposes, different hierarchical regression analyses were done. The variables which are concluded in the regression analysis are based on the results of the correlation analysis in section 3.5. Only constructs which significantly correlated with the indicators of risky sexual behaviour, the intention to use a condom and actual condom use will be considered within the hierarchical regression analysis.

3.4.1 Prediction of the risky sexual behaviour on Barbados

The indications of risky sexual behaviour of the Barbadian respondents are subdivided into the three constructs: episode of a sexually transmitted disease, experiences with a commercial sexpartner and total number of sexpartners.

Prediction of an episode of a sexually transmitted disease

The following table represents the results of the hierarchical regression analysis on the experience with an episode of a sexually transmitted disease. The predictor variables were entered in an order, which is determined by theoretical considerations and are based on the results of the correlation analysis in section 3.5. The first model includes the maladaptive reactions denial and destiny as well as erroneous beliefs about the casual contagion of HIV/AIDS (block 1). Within model 2, stigmatization was additioned in the regression analysis. Within the table, the following aspects are represented: the standardized beta coefficients of all constructs and the incremental R^2 of each model as well as the change of the R^2 between the three models.

Table 11. Hierarchical regression analysis on the experience with an episode of a sexually transmitted disease of the maladaptive reactions denial and destiny, erroneous beliefs and stigmatization.

	Total number respondents	
	Model 1	**Model 2**
Variable		
Block 1:		
Maladaptive Reactions		
Denial	.24*	.18*
Destiny	.09	.05
Erroneous Beliefs	.21*	.15
Block 3:		
Stigmatization		.20
Change in R^2	.15	.03
Incremental R^2	.15	.18

*p<.05. **p<.01. ***p<.001. Standardized beta coefficients of the analysis concerned are presented.

According to table 11, it becomes obvious that maladaptive reactions and erroneous beliefs explained 15% of the variance in an episode of a sexually transmitted disease. Adding model 1 was significant with an F_{Change} (3/111) = 6.5, p<.001. The standardized beta (β) coefficient

of denial was significant (t = 2.6, p<.05). Furthermore erroneous beliefs about the casual contagion of HIV/AIDS were significant (t = 2.3, p<.05). In the last set of analyses stigmatization was entered. It becomes obvious that stigmatization was not able to account for the variance in an episode of sexually transmitted diseases among the Barbadian respondents significantly. The other constructs within model 3 (maladaptive reactions and erroneous beliefs) also did not significantly explain the variance in an episode of a STD when stigmatization was auditioned. Regarding the correlation in table 10, stigmatization was significantly correlated to an episode of a sexually transmitted disease but in addition of maladaptive reactions and erroneous beliefs, stigmatization cannot count as a significant predictor anymore.

Prediction of an experience with a commercial sexpartner.

Just as the table above, table 12 contains the results of the hierarchical regression analysis. This time, the same predictor variables were measured on an experience with a commercial sexpartner among all respondents. The schematic representation includes the standardized β coefficients of each construct, the R^2 and the R^2 change of each model. Again, the variables were entered based on theoretical considerations and the results of the correlation analysis. Risk minimalisation was entered in block 1 and stigmatization within block 2.

Table 12. Hierarchical regression analysis on the experience with a commercial sexpartner of risk minimalisation, denial, erroneous beliefs and stigmatization.

	Total number respondents	
	Model 1	**Model 2**
Variable		
Block 1:		
Maladaptive Reactions		
Risk Minimalisation	.27**	.22*
Block 2:		
Stigmatization		.17
Change in R^2	.08	.03
Incremental R^2	.08	.10

*p<.05. **p<.01. ***p<.001. Standardized beta coefficients of the analysis concerned are presented.

Within model 1, risk minimalisation significantly accounted for the variance in the experience with a commercial sexpartner with a significant standardized beta coefficient (t = 3.1, p<.01). Risk minimalisation counted for 8% of the variance in the experience with a commercial sexpartner among the Barbadian respondent. Adding stigmatization in model 2 was not significant, F_{Change} (1/121) = 3.4, p = .07. Again, risk minimalisation had the only significant standardized beta coefficient (t = 2.4, p<.05). Totally, the constructs of model 2 account for 10% of the variance in an experience with a commercial sexpartner.

Prediction of the total number of sexpartners

Another possible indicator of risky sexual behaviour which was mentioned within this research is the total number of sexpartners. A high number of sexpartners in combination with inconsistent condom use was expected to rise up the risk of getting infected with HIV/AIDS and therefore must be seen as risky sexual behaviour. According to the results of the correlation analysis, no significant correlations were found between the total numbers of sexpartners and stigmatization, erroneous beliefs and maladaptive reactions. Nevertheless a

hierarchical regression analysis with all constructs was done to indentify possible predictors of the number of sexpartners within the Barbadian participants. Within model 1 all maladaptive reactions and erroneous beliefs about the casual contagion of HIV/AIDS were entered in the regression analysis. Stigmatization was additioned within model 2, but neither model 1 nor model 2 were significant. No construct had a significant standardized beta coefficient. To make sure that all results are correct one after another all constructs were removed from the regression analysis, but this did not lead to a statistical significance neither.

3.4.2 Prediction of condom use intention/ protection motivation

To unscramble the importance of denial, stigmatization and the constructs based on the theory of planned behaviour and Protection Motivation Theory on the condom use intention/protection motivation, a hierarchical regression analysis of all constructs were done. Again the regression analysis was based on the results of the correlation analysis. Within model 3 the constructs of the theory of planned behaviour and Protection Motivation Theory were added. Again the standardized β coefficients, the R^2 and the change in R^2 are represented within table 13.

Table 13. Hierarchical regression analysis on condom use intention (protection motivation) of maladaptive reactions, erroneous beliefs, stigmatization and variables of TPB and PMT.

	Total number respondents		
	Model 1	**Model 2**	**Model 3**
Variable			
Block 1: ***Maladaptive Reactions***			
Denial	-.19	-.12	-.05
Block 2:			
Stigmatization		-.19	-.18
Block 3:			
Attitude			.19*
Subjective norms			.31**
Response efficacy			.12
Self-efficacy			.25*
Vulnerability			.10
Change in R^2	.04	.03	.33
Incremental R^2	.03	.07	.40

*p<.05. **p<.01. ***p<.001. Standardized beta coefficients of the analysis concerned are presented.

Among all Barbadian respondents, the maladaptive reaction denial (model 1) explained only 3% of the variance in the condom use intention of the participants. No significant standardized beta coefficient was found within the first model. This result stands in contrast to the results of the correlation analysis, where the denial of HIV/AIDS risk was positively significant correlated to the condom use intention. In terms of model 2, the addition of stigmatization against people infected with HIV/AIDS account for additional 3% of the variance in the intention to use a condom but was not significant F_{Change} (1/97) = 3.4, p =.07. For stigmatization no significant standardized beta coefficient was found within model 2.

According to model 3, the variables of the TPB and PMT explained additional 33% of the variance of the condom use intention. Totally, the constructs of model 4 were able to explain 40 % of the variance in condom use intention on Barbados. The addition of the variables of the TPB and PMT were clearly significant F_{Change} (5/92) = 10.3, p<.001. Within the variables of the two theories, the attitude towards condoms (t = 2.1, p<.05), the subjective norms (t = 3.5, p<.01) and the self-efficacy towards condom use (t = 2.7, p<.05) had a significant standardized beta coefficient.

In comparison with the correlation analysis, the results of the variables of the TPB and PMT were expectable. Within the correlations in table 10 it becomes obvious that all variables of the theories were positively significantly correlated to the condom use intention. With exception of the response efficacy and vulnerability, those expectations were confirmed by the regression analysis. It becomes obvious that the social cognitions are the most important predictors of the condom use intention within this research. In contrast to the expectations of the correlation analysis, stigmatization and denial of HIV/AIDS are no predictors of the condom use intention.

3.4.3 Prediction of the condom use among Barbadian respondents

Table 14 presents the results of the hierarchical regression analysis on the condom use among the Barbadian participants of the stigmatization, the variables based on the TPB and PMT and the condom use intention. Again, predictor variables were entered in an order which is based on theoretical considerations and the results of the correlation analysis. Within block 1 stigmatization against people infected with HIV/AIDS was entered (model 1), in block 2 the attitude towards condoms and subjective norms was additioned to the regression analysis.(model 2). In a final step, the condom use intention was entered in block 3 (model 3). To give a schematic representation of the results, the standardized beta coefficient of each construct, the R^2 and the change in R^2 are represented within table 14.

Table 14. Hierarchical regression analysis on condom use of erroneous beliefs, stigmatization, the variables of the TPB and PMT and the intention to use a condom.

	Total number respondents		
	Model 1	**Model 2**	**Model 3**
Variable			
Block 1:			
Stigmatization	-.22*	-.16	-.13
Block 2:			
Attitude towards condoms		.11	.04
Subjective norms		.22*	.07
Block 3:			
Condom use intention			.31*
Change in R^2	.05	.06	.07
Incremental R^2	.05	.10	.17

*p<.05. **p<.01. ***p<.001. Standardized beta coefficients of the analysis concerned are presented.

Among the Barbadian participants, stigmatization explained 5% of the variance in the condom use and had a significant standardized beta coefficient.(t = -.2.1, p<.05). According to model 2, two variables of the social cognitions based on the TPB and PMT were additioned to the regression analysis. The attitude and subjective norms of the Barbadian respondents

explained additional 6% of the variance of condom use, but adding those variables was not significant F_{Change} (2,84) = 2.6, p = .08. Only the subjective norms had a standardized beta coefficient which was significant (t = 2.1, p<.05). Model 3 shows that the addition of the intention to use a condom explained additional 7% of the actual condom use among the Barbadian respondents and had a significant standardized beta coefficient (t = 2.6, p<.05). All in all, model 4 explained the variance in the condom use on Barbados with 17%. In comparison with the correlations in table 10, those results are partly unexpected. Within the correlations it became obvious that stigmatization, the attitude towards condoms and subjective norms of the Barbadian respondents were significantly correlated to condom use.
A linear relation of the attitude towards condoms and condom use cannot be detected within the results of the hierarchical regression analysis. Just as within the correlation analysis in table 10, the condom use intention is a significant predictor of the actual condom use on Barbados.

4. Discussion, Conclusion and Recommendation

Within the last section of this bachelor thesis the results of the research and analysis are discussed and interpreted. The discussion/conclusion is subdivided into the explanation of the risky sexual behaviour on Barbados, the maladaptive pathway of sexual behaviour and the adaptive pathway of sexual behaviour among the Barbadian respondents. First the distribution of the risky sexual behaviour, the maladaptive as well as the adaptive constructs among the Barbadian participants is explained.

Secondly, possible predictors of risky sexual behaviour and the adaptive and maladaptive predictors of the condom use intention and the actual condom use are defined and explained. In the end, a comparison between the maladaptive and the adaptive pathway of sexual behaviour is given to define which pathway is more important on the sexual behaviour on Barbados.

4.1 Distribution of the risky sexual behaviour, maladaptive and adaptive constructs on Barbados.

At first the distribution of the risky sexual behavior, the maladaptive and the adaptive constructs are mentioned within this discussion. Again maladaptive constructs are subdivided in maladaptive reactions, stigmatization and erroneous beliefs about the casual contagion of HIV/AIDS. The adaptive constructs are the social cognitions based on the Theory of Planned Behavior (TPB) and the Protection Motivation Theory (PMT).

4.1.1 Distribution of the risky sexual behavior on Barbados

The first aspect of this discussion is the risky sexual behaviour of the Barbadian participants. Such as in the other sections of this research, the indications of risky sexual behaviour are divided into an episode of a sexually transmitted disease, experiences with a commercial sexpartner and the total numbers of sexpartners in combination with inconsistent condom use.

Based on the analyses the distribution of risky sexual behaviour among the Barbadian respondents is discussed within this section. To get a better insight into the sexual behavior on Barbados it is important to define the level of risky sexual behaviour on this island because a high level of risky sexual behavior on Barbados could be an important prediction of the HIV/AIDS problem.

According to the experiences with a commercial sexpartner and an episode with a sexually transmitted disease (STD) among the Barbadian participants it became obvious that most of all respondents never got in contact with one of those indicators of risky sexual behaviour (82.2% and 85.5%). Nevertheless 14,8% of the 135 participants stated that they have been in contact with a commercial sexpartner one time and 13.3% were at least once infected with an sexually transmitted disease, with a low missing rate of 3% and 1.5%. With regard to this result it is important to mention that the questions about an episode with a STD and experiences with commercial sexpartners were asked fairly direct and applied to a very intimate and private subject. According to this a higher missing rate and a lower percentage of people stating being infected with a STD one time and being in contact with commercial sexpartners was expected before. With involvement of the percentages and the intimate character of the subject the distribution of those two constructs can be classified as relatively high and must be seen as an important indication of risky sexual behaviour on Barbados.

Another possible indicator of a risky sexual behaviour of the Barbadian population was the number of sexpartners in relation with inconsistent condom use. It was expected that

a high number of sexpartners in combination with an inconsistent condom use can rise up the risk of getting infected with HIV/AIDS and therefore is an important indicatior of risky sexual behaviour. In terms of the total number of sexpartners within the last 3 months before the research it becomes obvious that more than half of all participants had sexual intercourse with only one partner (52.5%). With involvement of the marital status of the respondents, where 53.4% stated being in a steady relationship, this result is really explainable. Even though many participants had sexual intercourse with just one partner, totally 32.5% of the respondents had sex with at least 2 different sexpartners within the last 3 months before the research.

In terms of the condom use of the Barbadian respondents who had sexual intercourse within the last 3 months before research, the research make sure that 43.7% used a condom consistently while having sexual intercourse. Nevertheless nearly one fourth of the participants never used a condom while having sex (22.2%). Totally, 38.5% of all participants acted out an inconsistent condom use while having sexual intercourse. The results clarify that a relatively high percentage of the people on Barbados had multiple sexpartners and that this, in combination with the inconsistent condom use of the Barbadian participants, is an important indication of the risky sexual behaviour on Barbados.

4.1.2 The distribution of maladaptive reactions, erroneous beliefs and stigmatization on Barbados

From the results of the frequency analysis can be concluded that there indeed is stigmatization and maladaptive reactions among the participants on Barbados, even though not in a high level than it was expected before. The results clarify that the maladaptive reactions, denial of the HIV/AIDS risk while having sex and the risk minimalisation are most common on Barbados. According to the erroneous beliefs, it becomes obvious that only myths about the casual contagion of HIV/AIDS play a decisive role among the Barbadian participants. Totally 25.9%, thus more than one fourth of all participants, believe in at least one erroneous belief about the casual contagion of HIV/AIDS. The belief that mosquitoes can transmit HIV/AIDS is most common on Barbados (14.8%), followed by the belief that one can be infected with HIV/AIDS by drinking from the same glass as an infected person. (11.1%) Even though one fourth of all respondents believed in myths, it cannot be concluded that the group of people who held a particular myth are significantly higher than the participant group which did not believe in any erroneous belief. Nevertheless, erroneous beliefs, stigmatization and maladaptive reactions are definitively existing on Barbados and could be important factors in terms of the sexual behavior of the Barbadian participants and the HIV/AIDS problematic on this island.

4.1.3 The distribution of the social cognitions, based on the TPB and PMT among the Barbadian participants.

According to the attitude towards condoms, the subjective norms, response efficacy, self-efficacy and vulnerability, based on the two theories, it becomes obvious that all those constructs remain on Barbados. With regard to the frequency analysis the mean of those constructs was somewhat higher than the midrange in all cases. Vulnerability exposed to be most important within the Barbadian participants. This means that the perceived probability of getting infected with HIV/AIDS through not using condoms while having sex is relatively high on Barbados. Against the expectation the subjective norms, thus a combination of the normative beliefs of others and the motivation of comply, are not really prevalent within the Barbadian participants. Because of the really collectivistic culture, it was expected that the

people of Barbados really care about the opinions of significant others and have a high motivation to comply with these opinions. However it must be mentioned that the different reference groups within this research were the current sexual partner, the circle of friends, the mother and the father. In consideration of the participants age (15-42), it can be expected that the parents have no referent power in terms of the sexual behavior and condom use anymore and in case of the death of one of the two parents the questions also were hard to answer correctly. Because of the referent groups which were analyzed within this research the result is explainable.

4.2 The predictors of risky sexual behaviour, condom use intention and the actual condom use of the Barbadian participants.

After discussing the distribution of all important constructs, the predictors of the risky sexual behavior, the condom use intention and the actual condom use are defined within this section. In terms of the intention to use a condom and the condom use, it is differentiated between possible maladaptive and adaptive predictors. The possible maladaptive predictors are the maladaptive (coping) reactions, erroneous beliefs about the casual contagion about HIV/AIDS and stigmatization. Again, the possible adaptive predictors of the condom use intention and the actual condom use are the social cognitions based on the TPB and PMT.

4.2.1 Predictors of the risky sexual behavior on Barbados

Upon defining the sexual behaviour of the Barbadian participants as fraught with risk, the possible predictors of this risky sexual behavior were analyzed within this research. Possible predictors which were explored in terms of risky sexual behaviour are the maladaptive reactions, erroneous beliefs about the casual contagion of HIV/AIDS and stigmatization. Based on the literature of Liu e.a stigmatization was expected to be significantly related to the indications of risky sexual behaviour (Liu et al., 2005). Furthermore maladaptive reactions and erroneous beliefs strongly related to stigmatization, also were expected to be related to risky sexual behaviour.

According to the correlation analysis, an experience with a commercial sexpartner was significantly related to the level of stigmatization and the risk minimalisation of the Barbadian participants. It becomes obvious that the Barbadian participants who evaluate the information's about HIV/AIDS as to exaggerate and therefore think they do not need to engage in activities to reduce the risk of HIV/AIDS, more often had experiences with a commercial sexpartner than Barbadians who did not minimalize the risk of HIV/AIDS. This relation of both constructs is comprehendible because people who disclaim the risk of HIV/AIDS by estimating the information about HIV/AIDS as exaggerated see no reason to act out healthy sexual behaviour or be frightened of having sex with a commercial sexpartner.

Stigmatization, in combination with the risk minimalisation of the Barbadian participants, was not able to add extra information and is no predictor of an experience with a commercial sexpartner within the Barbadian participants. Individuals who minimalize the risk of HIV/AIDS apparently distance themselves from getting infected with HIV/AIDS through disbelieve in the information about HIV/AIDS, similar to stigmatization which also leads to a alienation of the possibility to get infected with HIV/AIDS.

The next indicator of risky sexual behaviour mentioned within this section is an episode of a sexually transmitted diseases. With regard to the correlation analysis, erroneous beliefs, stigmatization and the denial of HIV/AIDS while having sexual intercourse are significantly correlated with an episode of a sexually transmitted disease. The hierarchical regression analysis clarifies that the denial of HIV/AIDS (while having sexual intercourse) is

the strongest predictor of an experience with a sexually transmitted disease. Barbadian participants who compose a high level of denial of HIV/AIDS while having sexual intercourse, stated that they had an episode of a sexually transmitted disease more often than the participants with a lower level of denial of HIV/AIDS. This outcome clearly make sense, because ignorance of the HIV/AIDS risk while having sex and therefore not thinking about protection against HIV/AIDS and other sexually transmitted diseases, rise up the chance of getting infected with such a disease.

Erroneous beliefs about the casual contagion of HIV/AIDS were able to predict an episode of a sexual transmitted disease partly, but when stigmatization was entered to the hierarchical regression analysis, both of those maladaptive constructs could not predict an episode of a sexually transmitted disease anymore.

The last indication of the risky sexual behavior on Barbados is the total number of sexpartners. As mentioned above the number of sexpartners is high among the Barbadian participants and also inconsistent condom use is clearly prevalent. Nevertheless, the total number of sexpartners could not be predicted by stigmatization, erroneous beliefs and maladaptive reactions within this research.

4.2.2 Adaptive and maladaptive predictors of the condom use intention/protection motivation on Barbados

Within this section, the predictors of the intention to use a condom among the Barbadian participants are discussed. Based on the correlation analysis, the possible predictors on the condom use intention are the maladaptive constructs: denial of the HIV/AIDS risk and stigmatization. In terms of the adaptive constructs, all social cognitions based on the Theory of Planned Behavior and Protection Motivation Theory were significantly related to the condom use intention within the correlation analysis. Before, it was expected that denial of the HIV/AIDS risk and stigmatization are negative predictors of the condom use intention, whereas the social cognitions should predict the intention to use condoms positively.

According to the maladaptive constructs, maladaptive reactions, erroneous beliefs and stigmatization were no predictors of the condom use intention and could not explain it.

In contrast, the social cognitions were strong predictors of the condom use intention of the Barbadian participants. In agreement with the expectations and both theories, the attitude towards condoms, the subjective norms and the level of self-efficacy could predict the participant's intention to use a condom while having sexual intercourse. The more positive the attitude towards condoms, the social pressure and motivation to comply to the referent groups and the self-efficacy of the participants, the more often the Barbadian participants build up a high intention to use a condom. Against the expectations, based on the theories and the correlation analysis, the response efficacy and vulnerability of the participants made no significant prediction on the intention/protection motivation of condom use, even though both constructs were significantly correlated to the intention within the correlation analysis. This is strange because all social cognitions are supposed to have an direct influence on the condom use intention. Nevertheless, almost all social cognitions are proximal predictors of the intention to use a condom, which was expected before.

4.2.3 Adaptive and maladaptive predictors of the actual condom use on Barbados

Finally the predictors of the actual condom use of the Barbadian respondents are explained within this section. In agreement with the correlation analysis, stigmatization was expected to be a possible negative predictor of the condom use on Barbados. The adaptive constructs

expected to predict the actual condom use were the attitude towards condoms and the subjective norms. Furthermore, the condom use intention was analyzed as a possible significant predictor of the actual condom use.

The hierarchical regression analysis clarifies that stigmatization is a proximal negative determinant of the actual condom use. Therefore, a high level of stigmatization leads to a more inconsistent condom use on Barbados. This result clearly makes sense because individuals who distance themself from the people infected with HIV/AIDS through discrediting them, do not feel the need of using a condom to not be infected with HIV/AIDS. Because they think that only a special group of people can get infected with HIV/AIDS and that they are no part of this group, they believe that they do not need to protect themselves against an infection with HIV/AIDS. According to the subjective norm on Barbados, the result clarifies that people with a high motivation to comply to the meaning of significant others, who think that using a condom is importants, are more often using condoms regularly, regardless of their stigmatization level.

Nevertheless in combination with the social cognitions, based on the TPB and PMT, and the intention to use condoms, stigmatization and subjective norms are not able to predict the actual condom use anymore. It turns out that the intention to use condoms is the strongest predictor of the actual condom use on Barbados. Barbadian participants with a high intention to use a condom use condoms more often while having sexual intercourse than people without the intention to do so.

4.3 Conclusion

Within this section a conclusion is drawn about the risky sexual behavior on Barbados, the maladaptive and adaptive pathway of the sexual behavior of the Barbadian participants and their possible impact on the HIV/AIDS problematic on this island.

The first aspect of this section is the risky sexual behavior among the Barbadian participants. Based on this research, it can be concluded that the indications of risky sexual behavior are definitively significantly existing on Barbados. First of all the relatively high presence of experiences with a commercial sexpartner and an episode of a sexually transmitted disease turned out to be an meaningful indicator of risky sexual behavior on Barbados.

Secondly the relatively high number of multiple sexpartners, attended by the high percentage of inconsistent condom use within the last 3 months before this research was done, appears to be an important factor on Barbados.

To get an insight into the most important positive and negative predictors on the condom use intention and the actual (inconsistent) condom use on Barbados, the maladaptive as well as adaptive pathway were analyzed within this research. The results clarify that the adaptive pathway of the sexual behavior on Barbados is clearly more powerful than the maladaptive pathway. According to that building up an high attitude towards condoms, high subjective norms and a high level of self-efficacy are most important to achieve a high condom use intention among the Barbadian participants. In terms of the implementation of the intention into an actual consistent condom use, the level of condom use intention was the most important predictor within this research, and therefore again the adaptive pathway is more existent on Barbados. The maladaptive pathway , like using maladaptive coping responses, the belief in erroneous beliefs and stigmatizing people infected with HIV/AIDS also is common on Barbados and definitively has an positive impact on the risky sexual behavior of the participants, but in terms of the condom use and the intention to use a condom this pathway is not the crucial factor on this island.

With involvement of the HIV/AIDS problematic on Barbados some different information were given through this research. First of all the distribution of indication of risky sexual behavior is relatively high on Barbados and therefore can rise up the risk of getting infected with HIV/AIDS. The high levels of experiences with a commercial sexpartner and episodes of sexually transmitted diseases, were particularly influenced by the level of denial of the HIV/AIDS risk (while having sexual intercourse) and the risk minimalisation, thus thinking about the HIV/AIDS information given as exaggerated on Barbados. Including those maladaptive coping reactions in the HIV/AIDS prevention programs on Barbados therefore could lead to a lower level of those two indications of risky sexual behavior. According to the multiple sexpartners, in combination with inconsistent condom use, this definitively can rise up the risk of HIV/AIDS on Barbados. Within this research it was not possible to define the possible predictors of the total numbers of sexpartners on Barbados and maladaptive reactions, erroneous beliefs and stigmatization are apparently no predictors of this risky sexual behavior indicator. In terms of (inconsistent) condom use the adaptive pathway of sexual behavior is most powerful on Barbados. Stigmatization of people with HIV/AIDS and the denial of the HIV/AIDS risk are probably negatively related to the condom use but cannot be seen as a prediction of the use of a condom among the Barbadian participants. On Barbados it seem to be most important to sustain a positive attitude towards condoms, the subjective norms and the self-efficacy of the Barbadians, to reach a positive intention to the use of a condom. A positive condom use intention in turn could lead to a more consistent condom use among the Barbadian population.

Because of the fact that this research deals with the distribution and possible predictors of the (risky) sexual behavior on Barbados and the impact this could have on the HIV/AIDS problematic on this island, the results of the research will be given to Mr. Anton. R. Best, the Senior Medical Officer of the Chief office of HIV/AIDS, of the Ministry of health on Barbados.

4.4 Recommendations

Furture research should focus on other possible predictors of the indications of risky sexual behvior on Barbados. In this research it was not possible to predict the multiple sexpartners existing within the Barbadian population. In furhter researches it should be focused on other predictors of the risky sexual behavior than the constructs of the Theory of Planned Behavior and Protection Motivation Theory.

Furhtermore a following research should focus on making a better erroneous belief scale. The questions about the erroneous beliefs clarified that some myths are common but other erroneous beliefs were not held at all. Furthermore there might be other erroneous beliefs existing which are more common on Barbados, so other myths should figured out to gain a good possibility to analyze those myths which are most common on Barbados. With involvement of the participants on Barbados less questions should be used. Because of the length of the questionnaire many participants did not want to be part of the research and therefore a relatively small group of participants became part of the research.

Appendix Overview of the items used in the questionnaire

Variable	Items of the questionnaire
Demographic characteristics	gender, age, educational status, religion, nationalities and marital status
Stigmatization	13. "People who have AIDS are dirty."
	14. "People who have AIDS are cursed."
	15. "People who have AIDS must expect some restrictions on their freedom."
	16. "A person with AIDS must have done something wrong and deserves to be punished."
	17. "People who have AIDS should be isolated."
	18. "I do not want to be friends with someone who has AIDS."
	19. "I would not accept a person with HIV/AIDS within my family"
	20. "I do not want to be in the same circle of friends than a person with HIV/AIDS."
	21. "People infected with HIV/AIDS should feel guilty."
	22. "The majority of the people infected with HIV/AIDS are stupid and foolish."
	23. "People with HIV/AIDS should be ashamed of themselves."
	24. "Most of al people infected with HIV are self responsible for their sickness."
Erroneous Beliefs	6. "Mosquitoes can transmit HIV/AIDS."
	7. "HIV/AIDS can be contracted by hugging an infected person."
	8. "HIV/AIDS can be transmitted by sharing cigarettes."
	9. "HIV/AIDS can be transmitted by drinking from the same glass as a person with HIV/AIDS."
	10. "HIV/AIDS can be contracted through toilet seats."
Maladaptive Reactions	
Risk Minimalisation	4. "I think that the information about the risks of HIV/AIDS is often exaggerated."
	5. "I think that the risks of getting infected with HIV/AIDS are often represented too high/big."
	6. "I think that the risks of getting infected with HIV/AIDS because of unsafe sex are exaggerated."
Denial	5. "When I am confronted with information about HIV/AIDS, I often try not to think about HIV/AIDS."
	6. "I try not to think about HIV/AIDS, when I think about sex."
	7. "I try not to think about the infection with the HIV virus because of unsafe sex."
	8. "I try to think as less as possible about the negative consequences of unsafe sex."

False Beliefs	4.	"I will not become infected with HIV/AIDS, because I wash myself carefully after sex."
	5.	"I will not become infected with HIV, because the sexual partners I choose are decent and clean."
	6.	"I will not become infected with HIV, because I select my sexual partners carefully."
Belief in God	5.	"I will not become infected with HIV, because god holds his protective hand above me."
	6.	"I feel that God will protect me against the HIV virus."
	7.	"Higher powers protect me against an infection with HIV."
	8.	"I pray a lot, God will protect me against the HIV virus."
Destiny	5.	"It is the destination of people that they get infected with HIV."
	6.	"The fact that someone gets infected with HIV is especially dependent on destiny."
	7.	"The fact that someone gets infected with HIV is especially dependent on accident."
	8.	"It does not matter what kind of precautions I take, there will be a chance anyway that I get infected with the HIV virus."
Attitude towards condoms	8.	"Using condoms will reduce my partner's sexual pleasure."
	9.	"Using condoms will reduce my sexual pleasure."
	10.	"Using condoms will make my boyfriend/girlfriend think that I might be infected with HIV."
	11.	"Using condoms will give my partner the impression that I sleep around."
	12.	"If I propose that we use a condom my boyfriend/girlfriend will get the impression that I do not trust him/her."
	13.	"Using condoms will evoke resistance by my boyfriend/girlfriend."
	14.	"Using condoms will make sex embarrassing."
Subjective norms	9.	"My current sexual partner thinks that we should use condoms."
	10.	"I would care about the opinion of my current sexual partner."
	11.	"My friends think that I should use condoms."
	12.	"I care about the opinion of my friends."
	13.	"My mother thinks that I should use condoms."
	14.	"I care about the opinion of my mother."
	15.	"My father thinks that I should use condoms."
	16.	"I care about the opinion of my father."

Response Efficacy	3.	"Using condoms while sleeping with my sexual partner will protect me against unwanted pregnancy."
	4.	"Using condoms will protect me against being infected with HIV."
Self-efficacy/ Perceived behavioral control	9.	"I am able to ask my boyfriend/girlfriend about his/her sexual history."
	10.	"My partner will get annoyed if I suggested using a condom."
	11.	"I am afraid of making a bad impression on my boyfriend/girlfriend if I suggested using a condom.
	12.	"I am able to talk about safe sex with my boyfriend/girlfriend."
	13.	"I find it difficult to talk about condoms."
	14.	"I am able to talk about safe sex with my parents."
	15.	"I am able to talk about my sexual history with my parents."
	16.	"I am able to ask my parents about how to use a condom."
Vulnerability	4.	"If I do not use condoms, the chance of getting infected with HIV is high."
	5.	"In comparison with my peers I run a high risk of getting HIV/AIDS."
	6.	"If I do not use condoms, I run a high risk of getting infected with other sexually transmitted diseases."
Condom use intention/ Protection motivation	6.	"In the future I will always use a condom."
	7.	"In the future I will not have sex if it is not possible to use a condom."
	8.	"In the future I will demand the use of a condom even if my partner does not want to use a condom."
	9.	"If my partner does not want to use a condom, I adapt to his/her wish."
	10.	"If my partner does not want to use a condom, I try to convince him/her to use a condom."
Condom use & number of sexual partners in the last 3 months	2.	"With how many partners did you have sex during the last three months?"
	3.	"With how many of these partners did you always use a condom?"
Indications of risky sexual behavior	4.	"Did you ever have an episode of an sexually transmitted disease?"
	5.	"Did you ever had a commercial sexpartner?"

References

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*, *179-211.*

Ajzen, I. (2006). Constructing a TpB Questionnaire: Conceptual and Methodological Considerations. Homepage of Icek Ajzen. Retrieved on July 13, 2008 from www.people.umass.edu/aizen/pdf/tpb.measurement.pdf.

Barbados Country Progress Report 2008. Retrieved on July 10, 2008 from www.data.unaids.org/pub/Report/2008/barbados_2008_country_progress_report_en.pdf.

Boer, H. & Emons, P.A.A.A (2004). Accurate and inaccurate HIV transmission beliefs, stigmatizing and HIV protection motivation in nothern Thailand. *AIDS Care, 16, (2), 167-176.*

Boer, H., & Seydel, E.R. (1996). Protection Motivation Theory. In M. Connor and P. Norman (Eds.) *Predicting Health Behavior*. Buckingham: Open University Press.

Boer, H. & Mashamba, M.T. (2005). Psychosocial correlates of HIV protection motivation among black adolescents in venda, south africa. *AIDS Education and Prevention, 17(6), 590-602.*

Conner, M. & Norman, P. (2005). *Predicting Health Behaviour: Research and Practice with Social Cognition Models (2nd edition)*. Buckingham: Open University Press.

Goffman, E. (1963). Stigma: Notes on the management of a spoiled identity. New York: Simon & Schuster.

Kalichman, S.C. & Simbayi, L. (2004). Traditional beliefs about the cause of AIDS and AIDS-related stigma in South Africa. *AIDS Care*, 16, (5), 572-580.

Kalichman, S.C. & Simbayi, L., Jooste, S., Toety, Y. & Kagee, A. (2004). Development of a Brief Scale to Measure AIDS-Related Stigma in South Africa. *AIDS and Behavior, Vol. 9, No. 2.*

Liu, H. & Li, X. & Stanton, B. (2005). Relation of sexual risks and prevention practices with individuals` stigmatising beliefs towards HIV infected individuals:an exploratory study.

Martinkainen, P., Bartley,M., & Lahelma, E. (2002). Psychosocial determinants of health in social epidemiology. *International Journal of Epidemiology, 31, 1091-1093.*

Pinkerton, S.D., Layde, P.M.,DiFranceisco, W., & Chesson, H. W. (2003). All STD`s are not created equal: an analysis of the differential effects of sexual behaviour changes on different STD`s. *International Journal of STD & AIDS, 14, 320-328.*

United Nations General Assembly (UNGASS). 2006. Country Report: Barbados.