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# HIV Risk-Reduction in Nonmarital Sexual Behavior Among Young Maldivian Males

Mohamed Elmunir Ahmed Safieldin

*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Mohamed Elmunir Ahmed Safieldin

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2019

Abstract

HIV Risk-Reduction in Nonmarital Sexual Behavior Among Young Maldivian Males

by

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MBA, Hull University, 2006

B.Sc., University of Khartoum, 1984

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy Administration

Walden University

May 2019

## Abstract

The low HIV prevalence in Maldives coupled with low HIV comprehensive knowledge presents a challenge to the consistency of the hypothesized HIV knowledge-prevention paradigm. Researchers had not explained why HIV prevalence in Maldives is low despite the low levels of HIV knowledge. The purpose of this qualitative case study was to investigate factors beyond HIV knowledge that contribute to the low HIV prevalence among Maldivian male youth. The research questions focused on the risk-reduction factors in the nonmarital sexual behavior of young Maldivian males that contribute to protecting them from contracting HIV and the predictors of safe and unsafe nonmarital sexual behaviors among this target group. The reasoned action approach (RAA) and the theories embedded in the RRA (i.e., the integrated behavioral model, the theory of reasoned action, and the theory of planned behavior) provided the theoretical foundation for this research. A purposeful sample of 18 male university students participated in open-ended interviews. Data were coded and analyzed to identify themes and subthemes. The results indicated that the low HIV prevalence in Maldives can be attributed to long-standing social values and norms that discourage nonmarital sexual engagement; however, these social values and norms are currently fading away, putting the low HIV prevalence status of Maldives at risk. The implications for social change include providing practitioners with specific risk factors they should address to prevent the spread of HIV that would result in the loss of lives and deterioration in the quality of life among young Maldivian men.

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## Dedication

I dedicate my doctoral thesis to my loved mother, Ms. Zainab Mukhtar, and the memory of my beloved late father, Dr. Ahmed Safieldin. No words are enough to thank them for looking after me and educating me to the best of their abilities. From them, I learned to be ambitious and to care for others.

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## Chapter 1: Introduction to the Study

The purpose of this study was to examine the inconsistency in the hypothesized HIV knowledge-prevention relationship in the context of Maldives. The low HIV prevalence and low HIV knowledge in Maldives poses a challenge to the premise of a relationship between HIV knowledge and HIV prevention (Catania, Kegeles, & Coates, 1990; Jemmott, Jemmott, & Fong, 1992; Joint United Nations Program on HIV/AIDS [UNAIDS], 2016). Although the country has a low prevalence of HIV, the level of HIV comprehensive knowledge among never-married youth ages 15-24 years is low (Ibrahim, Sermsri, & Thepthien, 2012; Ministry of Health and Family [Maldives], & ICF Macro, 2010; UNAIDS, 2012, 2015). Similarly, in Indonesia, HIV prevalence among young people ages 14-24 years is 0.19%, while correct and comprehensive HIV knowledge among the same age group is only 11.4%. The comparative figures for Malaysia are 0.19% and 41.4%, respectively; 0.03% and 12.4%, respectively, for Afghanistan; and 0.04% and 39.6%, respectively, for Cambodia (UNAIDS, 2017). The premise of a relationship between HIV knowledge and HIV prevention does not explain the low HIV prevalence among young people in these countries whose HIV comprehensive knowledge is low. The investment in improving HIV knowledge as a key strategy for HIV prevention seems to be a misleading fallacy in a context like Maldives.

In this study, I addressed the HIV knowledge-prevention inconsistency in Maldives. I explored whether there are risk-reduction factors in the nonmarital sexual behavior of the Maldivian male youth not captured in the standard HIV knowledge-prevention paradigm. Furthermore, I examined the predictors of safe and unsafe

nonmarital sexual behaviors among Maldivian male youth. In this chapter, I provide a discussion of the problem statement, research questions, and the purpose of the study. I also give an overview of the theoretical foundation, research tradition, definition of key terms, operating assumptions, and the scope and delimitations of the study.

## **Background**

### **Public Health Burden of STIs/HIV**

There are many reasons for public policy actors to be concerned about HIV and other viral sexually transmitted infections (STIs). The high disease burden of HIV/STIs is an ongoing global public health concern (World Health Organization [WHO], 2016a).

There are more than 30 types of viruses and bacteria that cause STIs. The WHO (2016a) listed eight ubiquitous STIs, four of which are currently incurable viral infections:

hepatitis B, herpes simplex virus (HSV or herpes), the human immunodeficiency virus (HIV), and the human papillomavirus (HPV). The other four STIs are curable: syphilis, gonorrhea, chlamydia, and trichomoniasis (WHO, 2016b). The WHO (2016a; 2016b) estimated that in 2012, there were 357 million new infections with the four curable STIs—chlamydia, gonorrhea, syphilis, and trichomoniasis—occurring every year, which translates into an average of more than 1 million new curable STIs per day.

HIV, which causes the acquired immune deficiency syndrome (AIDS; Gallo, 2002; Montagnier, 2002), has the most devastating health impact of all STIs. Since the discovery of the virus in 1984, HIV has infected over 75 million people and has led to the death of over 35 million people (WHO, 2016a). The number of people living with HIV reached 36.7 million in 2016. Approximately 1.8 million new HIV infections occurred in

2016, and an average of 5,000 new infections occur every day (WHO, 2016a; 2016b). About 37% of the new HIV infections are occurring among young people 15-24 years old. An estimated 1 million people perished in 2016 from AIDS-related illnesses (UNAIDS, 2017). A large percentage of people living with HIV do not know their HIV-positive status, which increases the gravity of the impact of their risky sexual behavior on those who come into sexual contact with them (UNAIDS, 2017). In 2013, around 54% of the people who were HIV-positive did not know their status (UNAIDS, 2014). The seriousness of HIV comes from the fact that it is one of the incurable STIs and from the significant number of people infected with the virus and those who perished because of it. Moreover, people living with HIV are more susceptible to other life-threatening infections such as tuberculosis and hepatitis B and C (UNAIDS, 2014).

### **Vulnerability of Young People**

Young people ages 15-24 years represent 16.6% of the total world population, or 1 out of every 6 people in the world, and are more vulnerable to HIV/AIDS (UNAIDS, 2014; United Nations Department of Economic and Social Affairs, 2015). The significant reproductive role of this age group, however, is often overlooked. Every year, around 16 million girls (15-19 years) give birth (Blum & Gates, 2015). These births represent around 11% of the annual worldwide childbirths (Morris & Rushwan, 2015). HIV disproportionately impacts young people. Some four million young people ages 15-24 years are HIV-positive, which represents around 11% of the total number of HIV-positive people worldwide (UNAIDS, 2016). Worldwide, 15% of all women living with HIV are 15-24 years old (UNAIDS, 2016). Every year, approximately 380,000 new HIV



infections occur among young girls ages 10-24 years (UNAIDS, 2014). Globally, two thirds of young people do not have correct and comprehensive knowledge of HIV. In 23 countries outside of sub-Saharan Africa, less than 14% of young men and women exhibit correct and comprehensive knowledge of HIV (UNAIDS, 2016).

### **Maldives Context**

The Republic of Maldives is part of the South Asia Region, which ranks second after sub-Saharan Africa regarding HIV prevalence. Young people ages 15-24 years represent 19.9% of the total population of Maldives (National Bureau of Statistics [Maldives], 2014). Maldives has a low prevalence of HIV and other STIs. Less than 0.1% (<0.1%) of Maldivian young males and females ages 15-24 years live with HIV (UNAIDS, 2012). Maldives reported the first HIV case in 1991 (Ministry of Health ([Maldives], 2018). According to the Ministry of Health (2018), during the period from 1991 to 2018, the country reported 25 cases of HIV among Maldivians, in addition to 415 cases among expatriates. The HIV/AIDS prevention program in Maldives is built around the promotion of the use of condoms, staying faithful to one HIV-negative partner who has no other sexual partners, and delaying sexual intercourse or promoting abstinence in young people. Maldives follows the globally accepted premise that people who have correct and comprehensive knowledge about HIV/AIDS are better protected against HIV/AIDS transmission. In the Maldives' context, a person with correct and comprehensive HIV/AIDS knowledge should know that (a) using condoms during sexual intercourse and limiting oneself to one sexual partner who is HIV-negative and who has no other sexual partners reduce the risk of HIV/AIDS transmission, (b) a healthy-looking

individual can be HIV-positive, and (c) HIV/AIDS does not transmit through mosquito bites or by eating with an HIV/AIDS infected person; these represent two common misconceptions in the Maldives (Ministry of Health and Family [Maldives], & ICF Macro, 2010).

The Maldives Demographic and Health Survey (Ministry of Health and Family [Maldives], & ICF Macro, 2010) showed that comprehensive HIV/AIDS knowledge among ever-married women and men ages 15-49 years was 42% and 44%, respectively. Awareness of the importance of using condoms and limiting sexual intercourse to one uninfected partner was 75.9% and 72.8% among ever-married women and men ages 15-49 years, respectively (Ministry of Health and Family [Maldives], & ICF Macro, 2010). Awareness of the importance of using condoms and limiting sexual intercourse to one uninfected partner among never-married youth ages 15-24 years was low (50.9%) for women and moderate (62.3%) for men (Ministry of Health and Family [Maldives], & ICF Macro, 2010). In another study carried out among adolescents, Ibrahim et al. (2012) showed that 50.9% had low HIV knowledge, 35.1% had moderate knowledge, and 14% had high knowledge.

This study addressed the inconsistency of the premise of HIV knowledge-prevention relationship in Maldives and the factors that might explain the low HIV prevalence in Maldives given the low HIV knowledge. An in-depth understanding of the HIV risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth may be used to maintain the status of low HIV prevalence in the country.

### **Problem Statement**

Available literature on Maldives depicts a situation inconsistent with the premise of a relationship between HIV knowledge and prevention (Catania et al., 1990; Jemmott et al., 1992; UNAIDS, 2016). Although the country has low HIV prevalence, the level of HIV knowledge among never-married adolescents is low (Ibrahim et al., 2012; Ministry of Health and Family [Maldives], & ICF Macro, 2010; UNAIDS, 2012, 2015). The premise of a relationship between HIV knowledge and prevention does not explain the low HIV prevalence in Maldives. In this study, I sought to address this HIV knowledge-prevention inconsistency. I explored whether there are additional risk-reduction factors in the nonmarital sexual behavior of the Maldivian male youth that have not been captured in the standard HIV knowledge-prevention paradigm.

### **Purpose of the Study**

Through this qualitative case study, I addressed the HIV knowledge-prevention inconsistency among Maldivian male youth ages 15-24 years. I explored whether there are additional risk-reduction factors in the nonmarital sexual behavior of the Maldivian male youth that are not captured in the standard HIV knowledge-prevention paradigm. I used the well-established reasoned action approach (RAA) as a theoretical foundation for behavioral analysis and prediction. The nonmarital sexual behavior of Maldivian male youth and how this behavior protects them against or exposes them to contracting HIV was the central phenomenon of concern in this study.

### **Research Questions**

Through this study, I attempted to answer two research questions:

1. What are the risk-reduction factors in the nonmarital sexual behavior of young Maldivian males that contribute to protecting them from contracting HIV?
2. What are the predictors of safe and unsafe nonmarital sexual behaviors among the Maldivian male youth?

### **Theoretical Framework**

I used the reasoned action approach (RAA; Fishbein & Ajzen, 2011; Yzer, 2012) as the primary theoretical foundation of this study. The RAA designates the integrated behavioral model (IBM) of Fishbein (2000), as well as the two theories integrated into it: the theory of reasoned action (TRA) and the theory of planned behavior (TPB). I referred to the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the theory of planned behavior (Ajzen, 1991) because they provide the essential elements of the IBM.

The IBM focuses attention on five key predictors of behavior: (a) intention, (b) knowledge and skills, (c) the salience of the behavior, (d) environmental constraints/limitations of behavior, and (e) the influence of habits (Glanz, Rimer, & Viswanath, 2008; Montaña & Kasprzyk, 2008). In Chapter 2, I provide a detailed discussion of the theoretical foundation of this study.

Many scholars have applied the RAA in a considerable number of behavioral studies over the years (Fishbein & Ajzen, 2011). For example, Armitage and Conner (2001) undertook a meta-analysis of 185 independent studies and confirmed the wide and successful application of the behavioral theories of the RAA to predict behavior and intentions. The RAA has proven to be an effective and relevant theoretical framework for

investigating human behavior (Armitage & Conner, 2001; Fishbein & Ajzen, 2011). In the current study, I used the IBM constructs as the underlying theory to explore the nonmarital sexual behavior of Maldivian male youth and to explore the predictors of this behavior. I specifically investigated what intentions, information and knowledge, environmental factors, habits, and salient behaviors underlie the sexual behavior of Maldivian male youth.

### **Nature of the Study**

In this qualitative case study, I explored the nonmarital sexual behavior of Maldivian male youth and attempted to explain the risk and risk-reduction factors underlying this behavior. Corbin and Strauss (2008) argued that qualitative case studies are a suitable research tradition when the purpose of the research is to discover variables rather than test them. In this study, I sought to define the nonmarital sexual behavior of Maldivian male youth but did not intend to measure this behavior. As such, a qualitative case study was a suitable research tradition to guide the investigation. In Chapter 3, I provide a detailed justification of the decision to use a qualitative case study.

The research participants consisted of 18 Maldivian male students ages 20-24 years whom I recruited from the Maldives National University in the city of Malé. Although the original plan was to interview 30 students, early attainment of data saturation resulted in adjusting the planned size of the sample of research participants. Chapter 3 of this study includes a detailed discussion of the planned sample size and the issue of data saturation. I collected data through individual interviews of the purposely selected participants. Using NVivo, which is qualitative and mixed data analysis software

developed by the Australian-based QSR International, I analyzed the data by searching for verbal clues that linked the nonmarital sexual behavior of Maldivian male youth to the IBM constructs and the definitions of risky sexual behavior and safe sex.

### **Definitions**

*Correct and comprehensive HIV/AIDS knowledge:* A person is considered to have correct and comprehensive knowledge about HIV/AIDS if he or she knows that (a) using condoms during sexual intercourse and limiting him- or herself to one sexual partner who is HIV-negative and who has no other sexual partners reduce the risk of HIV/AIDS transmission, (b) a healthy-looking individual can be HIV-positive, and (c) rejecting key misconceptions about HIV/AIDS (Ministry of Health and Family [Maldives], & ICF Macro, 2010; UNAIDS, 2016).

*Risky sexual behavior:* Risky sexual behavior is any form of sexual behavior that puts the individual at the risk of contracting a sexually transmitted illness or results in unwanted pregnancy. Risky sexual behavior includes having sex (i.e., vaginal, anal, or oral mouth-to-genital contact) without a condom, initiation of sexual activity at a young age, having multiple sex partners, having a high-risk partner (e.g., someone who has multiple sex partners or infections), and having a partner who injects drugs or engages in sex work (Dimbuene, Emina, & Sankoh, 2014; Hall, Holmqvist, & Sherry, 2004).

*Safe sex:* Safe sex, also referred to as protected sex, is the practice of sex while keeping bodily fluids discrete to minimize risks associated with sexually transmitted illness (STIs) or pregnancy. This practice may include the use of prophylactics, careful selection of a sexual partner, or refraining from high-risk behaviors (Nugent, 2013).

*Sexually transmitted infections/diseases (STIs/STDs)*: The term sexually transmitted diseases (STDs) is often used interchangeably with STIs, although some health professionals prefer STIs over STDs. There are more than 30 types of viruses, bacteria, and parasites that transmit from one person to the other through sexual contact (WHO, 2016b). Eight of these pathogens cause the most common sexually transmitted diseases: syphilis, gonorrhea, chlamydia, trichomoniasis, hepatitis B, herpes simplex virus, HIV, and human papillomavirus. Some STIs can also spread through nonsexual means such as blood or blood products. Other STIs such as chlamydia, gonorrhea, hepatitis B, HIV, and syphilis can also be transmitted from mother to child during pregnancy and childbirth (WHO, 2016b).

### **Assumptions**

I used four operating assumptions in this study. The first assumption was that although the public in the Maldives usually shies away from discussing sexual behavior with strangers, undergraduate university students would be more open to participating in social research that explores sexual behavior and practices in general terms. I made this assumption because college students are aware of the importance of social research and the ethical principles that are in place to protect social research participants from possible harm.

The second assumption was that the answers provided by the students about the nonmarital sexual behavior of their peers and community would be reflective of the actual behavior that exists. Moreover, I expected some of the respondents would use the opportunity of this research to describe their sexual behavior indirectly when they

referred to a third person. The third assumption was that the answers provided by the respondents would be honest, truthful, and reliable. The fourth assumption was that the data collection tools that I employed in this study would be the best possible tools for answering the research questions.

These four assumptions were necessary to furnish the ground for studying a sensitive social topic that people in the Maldives may not discuss openly with strangers. These assumptions facilitated the collection of data on the nonmarital sexual behavior of Maldivian male youth in a purposely selected group of interviewees, and the treatment of the data as reliable and good for investigating the sexual behavior among Maldivian male youth.

### **Scope and Delimitations**

The scope of this study was the nonmarital sexual behavior that may protect or place the Maldivian male youth at high risk of contracting HIV/STIs. The study focused on Maldivian male youth and explored their nonmarital sexual behavior and the risks and risk-reduction factors underlying this behavior. My interest in the subject stemmed from the desire to sustain the low HIV prevalence and enhance HIV prevention among young Maldivian male youth. It was important to understand the factors that contribute to low HIV prevalence despite low HIV knowledge. Through this study, I provided evidence in support of the premise that although HIV knowledge is an important factor, it is not sufficient to prevent HIV transmission. The transferability of the outcomes of this qualitative case study lies within the concept of analytical generalization rather than statistical generalization. Analytical generalization means the findings are generalizable



to some broader theory instead of generalization of conclusions from a statistically representative sample to the entire population (Yin, 2003).

### **Limitations**

For cultural considerations, I did not ask the participants to describe their sexual behavior and practices. Instead, I asked the participants to talk about the nonmarital sexual behavior and practices of their peers in the community around them. Although this indirect approach was necessary to collect data, the reliability of the data would have been higher if the participants had described their sexual behavior and practices. Another limitation was that the sample did not include female participants. The cultural sensitivity in the Maldives did not allow me, as a male researcher, to interview females on issues related to nonmarital sexual behavior. Therefore, the findings of this study are likely true for young Maldivian males, but may not fully explain the same phenomenon among females.

As the researcher, I had no relation with the research participants, and there was no known bias involved in my execution of this study. I am not working in the health field or any field related to sexual behavior and sexually transmitted infections. My bias to the topic stems from personal concern that young people are more vulnerable to HIV/STIs and that their nonmarital sexual behavior is not well researched. In Chapter 3, I discuss the potential for researcher bias and the measures I took to mitigate this bias.

### **Significance**

In this study, I addressed the HIV knowledge-prevention inconsistency in the case of Maldives. I explained why HIV prevalence is low while HIV knowledge among

unmarried young Maldivian males is also low. I attributed the low HIV prevalence to long-standing protective social norms and values that strongly discourage nonmarital sex. In this study, I identified the risk and risk-reduction factors in the nonmarital sexual behavior of young Maldivian males and listed the key predictors of this sexual behavior.

I demonstrated that there are innovative ways to explore sensitive social issues such as sexual behavior despite possible cultural constraints. The findings of this study may encourage other researchers to follow suit and explore the sexual behavior of young Maldivian females, something this study did not address. Consistent with the vision of Walden University for positive social change that improves human and social conditions, I aimed to create knowledge and in-depth understanding of perceptions and practices to reduce the risk of HIV among Maldivian young men. The acquisition of such knowledge and understanding is the first step in the process of changing sexual behavior among young people toward the practice of safe sex and protection from HIV, other sexually transmitted infections, and unwanted pregnancies. The goal of this process of positive change is saving lives from being lost to HIV and other STIs and improving the quality and enjoyment of life for young people and society at large.

### **Summary**

In this chapter, I provided a background to the study and explained the problem that I attempted to address. I presented the purpose of the study and the research questions I set out to answer. I also discussed the theoretical foundation, the research tradition, definitions of key terms, operating assumptions, and the scope and delimitations. I concluded the chapter with an explanation of the limitations and the

significance of this research. In Chapter 2, I explain the literature search strategy and provide an elaborate discussion of the theoretical foundation and the literature pertinent to this study. Moreover, I explain how the theoretical foundation and literature review guided this study.

## Chapter 2: Literature Review

HIV is a dangerous, incurable STI that represents a global public health challenge (WHO, 2016a). Since the discovery of the virus in the early 1980s, HIV has infected around 78 million people, and it has led to the death of over 35 million people until 2016 (UNAIDS, 2017). Tremendous global efforts to combat the virus resulted in decreasing new infections from 2.1 million in 2015 to around 1.8 million in 2016; however, the reduction rate is far from the Fast-Track Target agreed by the United Nations General Assembly in 2016 of fewer than 500,000 new infections per year by 2020 (UNAIDS, 2017). An estimated 1 million people perished from AIDS-related illnesses in 2016, while some 36.7 million people lived with HIV in 2016, which translates into a global prevalence rate of 0.8% among adults.

There is no known cure for HIV; therefore, prevention is the critical strategy to combat the disease. The premise of the relationship between HIV knowledge and prevention has become widely accepted and has resulted in a clear focus on improving HIV knowledge to prevent the spread of the disease (UNAIDS, 2016). Although the importance of HIV knowledge in combating the disease is undeniable (Catania et al., 1990; Jemmott et al., 1992), available statistics from some countries have suggested that factors other than HIV knowledge may have kept HIV prevalence low. HIV knowledge is low in each of Maldives, Indonesia, Malaysia, Afghanistan, and Cambodia, while HIV prevalence is also low (UNAIDS, 2017). The premise of the relationship between HIV knowledge and prevention does not hold in these countries, and low HIV knowledge cannot explain why HIV prevalence is low. The purpose of this qualitative case study

was to explore what HIV risk-reduction factors other than knowledge could explain the low HIV prevalence in Maldives. An in-depth understanding of the HIV risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth is paramount to the question of how to prevent HIV transmission and maintain the status of low HIV prevalence in the country.

In this chapter, I provide an overview of the literature search strategy and give a detailed description of the theoretical framework of the study. The literature review includes a review of most recent global academic work on risky sexual behavior that contributes to HIV, behavioral factors that contribute to protection against HIV/AIDS, and behavioral change for HIV protection. I conclude the chapter with a summary of important issues and conclusions.

### **Literature Search Strategy**

To identify and access relevant literature, I used the following Walden University library databases: MEDLINE with full-text PsycINFO, Social Science Citation Index, SocINDEX with full text, Education Source, Science Citation Index, CINAHL Plus with full text, ERIC, Directory of Open Access Journals, Expanded Academic ASAP, LGBT, and JSTOR. I used the policy and administration database SocINDEX with full text extensively. I also used the databases of the United Nations and its specialized agencies WHO and UNAIDS to access relevant statistics and facts related to HIV. The search engines that I used in the literature search included Thoreau, EBSCO, ProQuest, and Google Scholar. I also used Maldivian sources of data including the Ministry of Health,

National Bureau of Statistics, and the electronic database of the Maldives National University.

In the initial search with Thoreau, I employed the following search terms as fields: *sexual behavior*, *HIV knowledge*, *HIV prevention*, *HIV*, *STIs*, *AIDS*, *youth*, *adolescent\**, and *condom\**. I limited the search to full text, peer-reviewed scholarly articles published between 2013 and 2018. I obtained the names of seven databases containing at least 20 relevant literature items. To find literature on sexual behavior and HIV/AIDS related to Maldives, I conducted another level of search, adding *Maldives* or *Maldivian\** in the third level of search terms. The search I conducted using Walden Library included six databases (MEDLINE, PsycINFO, Directory of Open Access Journals, Science Citation Index, Social Science Citation Index and Expanded Academic ASAP) for articles on sexual behavior, HIV, and AIDS where Maldives was cited. I conducted the same search using Google Scholar. In some instances, I included older literature either because there was limited recent literature or by way of discussing the evolution of the theoretical foundation.

### **Theoretical Foundation**

Social and personality psychology is the primary discipline concerned with the question of explaining and predicting human behavior including sexual behavior, which was the focus of this study. The reasoned action approach and its three component theories (i.e., the integrated behavioral model, the theory of reasoned action, and the theory of planned behavior) provided the theoretical foundation for this study. The IBM was established by Fishbein in 1999 (Fishbein, 2000; Fishbein & Ajzen, 2011; Yzer,

2012) as an integrative model for the study of human behavior. Behavioral scientists built the IBM sequentially, and it integrates fundamental theories of behavioral prediction and behavioral change (Fishbein, 2000). Fishbein and Ajzen (2011) and Yzer (2012) labeled the IBM and all the theories integrated into this model as the reasoned action approach. Fishbein and Ajzen (2011) argued that the RAA has been in the making for almost 50 years. These two scholars claimed that the RAA grew out of the expectancy-value model of attitude, which was adapted by Fishbein in 1963 from Dulany's verbal learning theory of propositional control (Fishbein & Ajzen, 2011).

The TRA (Fishbein & Ajzen, 1975) and the TBP (Ajzen, 1985) are two essential pillars of the IBM. In this section, I explain the theoretical foundation of this study (the RAA) by discussing each of its three components. Given the historical evolution of the RAA starting from the TRA, TPB, and IBM, I present an overview of the TRA followed by the TPB and IBM.

### **Theory of Reasoned Action**

Fishbein and Ajzen (1975) developed the TRA with the objective of explaining the relationship between attitudes and behaviors in human actions. The theory assumes that individuals behave sensibly, take into consideration existing information, and explicitly or implicitly consider the consequences of their actions (Fishbein & Ajzen, 1975). The TRA claims that for volitional behaviors, the individual's intention toward that behavior is the immediate predictor of the action (Ajzen, 1985; Fishbein & Ajzen, 2011). The theory postulates that intention is a joint function of personal and social influence factors (Ajzen, 1985). Ajzen explained that the personal factor is termed

attitude toward the behavior and refers to the person's positive or negative assessment of performing the intended behavior. Furthermore, the social influence factor is termed subjective norm and relates to the individual's perception of existing social pressure on him or her to perform or not perform the intended action. According to Ajzen, individuals tend to carry out behaviors when they evaluate them positively and believe that referent persons around them think they should perform the behaviors in question. The weight individuals place on attitudinal considerations and normative considerations vary from one intention to the other. The theory of reasoned action assumes that salient beliefs about a given behavior predict the person's attitude toward that behavior (Ajzen, 1985). Each salient belief associates the behavior with a valued attribute or behavioral outcome (Ajzen, 1985; Fishbein & Ajzen, 2011).

According to the TRA, a person is more likely to hold a favorable attitude toward a behavior if he or she believes that performing this behavior would produce a positive outcome, and the opposite is true (Ajzen, 1985; Fishbein & Ajzen, 2011). Fishbein and Ajzen explained that the theory of reasoned action uses the term behavioral beliefs to denote the beliefs that underlie a person's attitude toward any specific behavior. The theory assumes that normative beliefs, which are the person's belief of whether referent or influential people around him or her would approve or disapprove of the behavior, predict subjective norms (Ajzen, 1985; Fishbein & Ajzen, 2011).

The sequential logic of the TRA in explaining human behavior can be summarized as follows. Intentions predict behavior, and attitudes and subjective norms influence intentions. Attitudes and norms, in turn, are explained by beliefs, and beliefs



are based on information (correct or incorrect) available to individuals about their worlds. It follows, therefore, that information predicts human behavior (Ajzen, 1985; Fishbein & Ajzen, 2011). When human sexual behavior is examined through the TRA lens, the importance of information and knowledge of risky sexual behavior becomes vivid.

As I later elaborate, scholars like Ajzen (1985), have provided empirical evidence to support the assumptions of the TRA; however, this theory contains several key limitations. First, the TRA does not account for nonmotivational factors that influence behavior. Second, the accuracy of the theory in predicting behavior depends on the degree to which intention remains stable between the time it is measured and the time the observed behavior is carried out. Third, the theory's ability to predict behavior is limited to only behavior under volitional control (Ajzen, 1985). The TPB was developed to address the first two limitations of the TRA.

### **Theory of Planned Behavior**

Ajzen (1985; 2002; 1991) postulated the theory of planned behavior with the objective of explaining and predicting human action. The TPB expands the TRA to include nonvolitional factors and addresses the limitations of the theory of reasoned action. The TPB starts with the premise that intentions are good predictors of attempted rather than actual behavior (Ajzen, 1985; Fishbein & Ajzen, 2011). The theory postulates that to ensure the accurate prediction of behavior, there is a need to assess intentions as well as the extent to which a person is apt to exercise control over the intended behavior. According to Ajzen (1985), to exercise control, the individual must have an adequate plan for performing the planned behavior. As in the TRA, in the case of behavior

exhibited under volitional control, the TPB considers intentions as the motivational factors that inspire behavior and indicate the level of effort and determination an individual has for performing a specific behavior. The existence of other nonmotivational factors, such as the availability of important opportunities and resources (i.e., skills, time, and money), is necessary for behavioral intentions to result in actual behaviors or behavioral achievements. Ajzen (1991) argued that for a person to succeed in performing a behavior, he or she must acquire the necessary opportunities and resources.

The TPB suggests that intentions have three conceptually independent predictors. The first predictor is the attitude toward the behavior or the degree to which the person assesses the behavior under question favorably or unfavorably. The second predictor is subjective norms, or whether there is social pressure to perform or not perform a behavior. The third predictor is the degree of perceived behavioral control (PBC), which depends on experience with similar behavior in the past and anticipated current difficulty or easiness in performing the behavior. The concept of PBC is compatible with Bandura's (as cited in Ajzen, 1991) concept of perceived self-efficacy, which is about judging the extent to which a person can execute actions related to prospective situations. Armitage and Conner (2001) argued that the addition of PBC allows researchers to use the TRA to predict nonvolitional behavior.

The TPB hypothesizes that perceived behavioral control together with the behavioral intention are good predictors of behavioral achievement. In other words, performing any specific behavior is a joint function of intentions and perceived behavioral control (Ajzen, 1991; Fishbein & Ajzen, 2011). The theory postulates that

accurate prediction of behavior requires the fulfillment of three necessary conditions. First, compatibility exists between the measures of intention and the measure of perceived behavioral control with the behavior under prediction (Ajzen, 1991; Fishbein & Ajzen, 2011). Second, intentions and perceived behavioral control must remain unchanged throughout the period between their initial assessment and the completion of the behavior under prediction (Ajzen, 1991; Fishbein & Ajzen, 2011). Third, perceptions of behavioral control should reflect actual behavioral control (Ajzen, 1991; Fishbein & Ajzen, 2011).

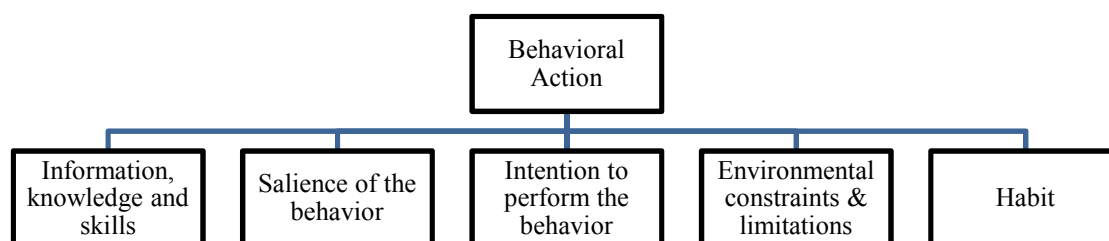
Some have scholars questioned the rationality of distinguishing between three types of beliefs—behavioral, normative, and control—and the distinction between attitudes, subjective norms, and perceived behavioral control under the TPB (Miniard & Cohen, 1981). Ajzen (1991) defended these distinctions arguing that they have theoretical and practical value to researchers. Other scholars such as Gorsuch and Ortberg (1983) have suggested that, in addition to social pressure, the TPB should consider the moral obligation a person may feel about performing or refraining from certain behavior in certain contexts.

### **Integrated Behavioral Model**

The IBM was first proposed by Fishbein in 1999 under the title of the integrative model (Fishbein, 2000; Fishbein & Ajzen, 2011; Montaña & Kasprzyk, 2008). Fishbein and Ajzen (2011) developed the model further, emphasizing that the purpose of the model is to explain, predict, and change human behavior. The IBM focuses on five main constructs considered as the predictors of behavior: (a) intention, (b) knowledge and

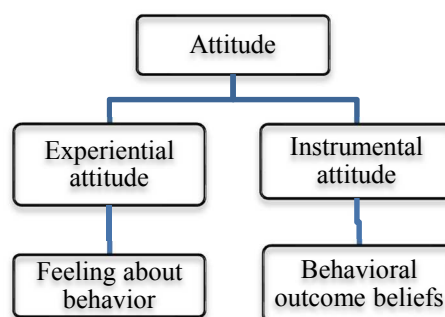
skills, (c) salience of the behavior, (d) environmental constraints/limitations of behavior, and (e) habits. The IBM emphasizes the same assumption made by the TRA and TPB that intention is the motivational factor without which a person is unlikely to perform a behavior. Four additional factors are important in addition to intention. First, intention alone is not a sufficient condition as the person requires knowledge and skills to perform the intended behavior. Second, there should be no insurmountable environmental constraints that render the intended behavior impossible. Third, behavior should be salient to the person. Finally, the repeated experience of performing the same behavior may make the behavior habitual. Once a behavior is habitual, intention becomes a less important determining factor of the behavior for that person. In short, the likelihood of performing a particular behavior is considered high when the person has strong intention, backed with knowledge and skills to perform the behavior, there are no serious environmental impediments to prevent the behavior, the behavior is salient, and the person has previous experience with the performance of the same behavior (Montaño & Kasprzyk, 2008).

Figure 1 below serves as a schematic presentation of the five IBM constructs that serve as predictors of behavioral action.



*Figure 1.* Schematic presentation of the IBM predictors of behavioral action.

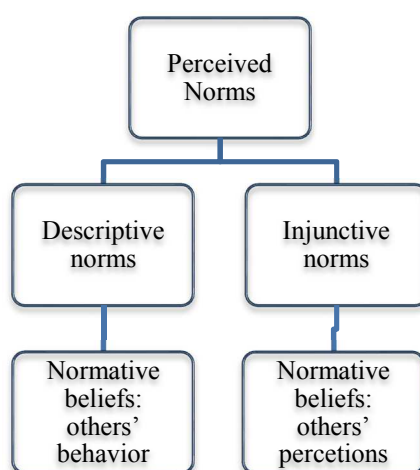
The IBM stipulates that behavioral intention is determined by three key factors: attitude toward the behavior, perceived norms, and personal agency. Furthermore, the IBM considers two types of attitude: experiential attitude and instrumental attitude. Experiential attitude, also known as the affect, is the person's positive or negative emotional response or reaction to the idea of performing a behavior. Experimental attitudes are determined by the person's feelings about the desired behavior. People tend to perform behaviors for which they have a positive emotional response. Instrumental attitude is the person's favorable or unfavorable assessment of the outcome of the intended behavior. The assessment of these outcomes is influenced by the person's outcome beliefs (Fishbein, 2000; Montaño & Kasprzyk, 2008; Yzer, 2012). Figure 2 presents a schematic summary of the predictors of attitude



*Figure 2.* Schematic presentation of the IBM predictors of attitude.

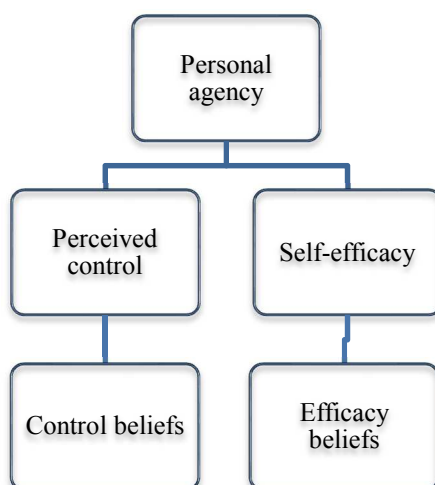
Perceived norms, as in TRA and TPB, represent the pressure a person feels from the society to perform or not perform a behavior. The IMB breaks down perceived norms into two types: injunctive norms and descriptive norms. The injunctive norm construct is equivalent to the subjective norm construct discussed under the TRA and the TPB. Injunctive norms are a function of the normative beliefs related to perceived expectations

others have of one's behavior. The descriptive norm is an additional construct that reflects the strong social identity in some cultures. It represents what others in a person's society or network are doing. Descriptive norms are a function of normative beliefs related to the perceived typical behavior of other people in the person's society or network (Fishbein, 2000; Fishbein & Ajzen, 2011; Montaño & Kasprzyk, 2008; Yzer, 2012). Figure 3 presents a schematic summary of the predictors of perceived norms.



*Figure 3.* Schematic presentation of the IBM predictors of perceived norms.

Personal agency is a construct that refers to the ability of the individual to initiate and direct actions for a given purpose. The IMB identifies two types of personal agency: perceived control and self-efficacy. The construct of perceived control, as in the TPB, refers to the degree of control a person believes to have over a behavioral performance. Perceived control is a function of control beliefs. Self-efficacy is the person's degree of confidence in his/her own ability to perform a behavior in the face of all challenges and obstacles (Montaño & Kasprzyk, 2008). Figure 4 presents a schematic summary of the predictors of personal agency.



*Figure 4.* Schematic presentation of the IBM predictors of personal agency.

**Role of underlying beliefs.** According to the IBM, instrumental attitudes, injunctive and descriptive norms, perceived control, and self-efficacy are functions of their corresponding underlying beliefs.

**Key elements of behavior.** The definition of a given behavior consists of a minimum of four elements: the action, the target, the context, and time frame within which the behavior is observed. Fishbein (2000) provided an illustrative example of the minimum four elements of behavior. This theorist highlighted that the use of a male condom is a behavioral action for a man but a goal for a woman. Fishbein argued that given the fact that condoms are used for different sexual behaviors (e.g., for vaginal or anal sex) and with different sexual partners (e.g., spouse or a sex worker), condom use is a behavioral category, rather than a single behavior. In the case of a man using a condom whenever he has vaginal sexual intercourse with his spouse, therefore, the four elements of the behavior are described as follows. The behavioral action is the use of the male

condom, the target is the condom, the context is vaginal sex with one's spouse, and the time frame for observing the behavior is always (Fishbein, 2000).

### **Applications of the Theoretical Foundation**

The RAA has guided a considerable volume of research over the last 50 years. While research has led to some modifications of the reasoned action approach, the basic assumptions of the model have stood the test of time (Fishbein & Ajzen, 2011). Many meta-analyses were carried out by different researchers to examine the validity of the reasoned action approach. For example, Armitage and Conner (2001) undertook a meta-analysis of a database that contained 185 independent studies with the intention of examining the predictability of behavior from intention. The studies that the researchers included in this meta-analysis covered a broad spectrum of human behaviors such as the use of public transportation, smoking cessation, physical activity, leisure activities, fruit and vegetable consumption, charitable donations, blood donation, and video games playing among many others. The authors concluded that the TPB accounts for 27% of the variance in behavior and 39% of the variance in intention. The meta-analysis also confirmed strong multiple correlations of attitude, subjective norms, and PBC. The findings from this meta-analysis were congruent with the results of previous meta-analyses conducted by Randall and Wolf (as cited in Armitage & Conner, 2001) and Sheeran and Orbell (as cited in Armitage & Conner, 2001).

Ajzen (1985) analyzed the intention-behavior correlations from nine independent studies that covered re-enlisting in the military, infant feeding, voting choices in presidential elections, smoking marijuana, use of contraceptives, choice of career



orientation, having another child, and cooperation in prisoner's dilemma game. All intention-behavior correlations exceeded 0.70, except for the study related to having another child, wherein the correlation was 0.55, which is still significant. The same analysis confirmed that behavioral beliefs and outcome evaluations are useful estimators of attitudes toward behavior, and normative beliefs and motivations to comply are reliable estimators of subjective norms. Nelson, Cook, and Ingram (2014) applied the TPB to explore why many healthcare providers continue to provide an inaccurate measure of patients' blood pressure despite repeated sessions of teaching them correct ways for accurate blood pressure measurement. The researchers sought to identify the predictors of accuracy of blood pressure measurement by nurses and concluded that perceived control and social norm are good predictors of nurses' intention to provide an accurate measure of patients' blood pressure. The researchers, however, found a negative relationship between knowledge and intention. Accordingly, the intention was the only significant predictor of the accuracy of blood pressure measurement by nurses. The researchers confirmed the reliability of the TPB constructs to predict the healthcare providers' intention to measure blood pressure accurately

Regarding HIV/AIDS and sexual behavior, many scholars have applied the reasoned action approach to predict, explain, and change sexual behavior about HIV/AIDS. This section discusses some of the academic research that applied the IBM, TRA, and TPB to explore and better understand behavioral issues related to HIV/AIDS. The discussion under this section demonstrates why the IMB is the appropriate theoretical foundation for the current study.

Perhaps the two best examples of applications of the IBM to sexual behavior and condoms use are the studies carried out by Kasprzyk, Montaño, and Fishbein (1998) and Kasprzyk and Montaño (2007). In the first scholarly work, the researchers used a prospective design to test the IBM's ability to predict condom use by four high-risk groups. The four groups of high-risk sexual behavior consisted of men who have sex with men, users of injectable drugs, commercial sex workers, and multiple-partnered heterosexuals. The researchers examined the participants' condom use for vaginal, anal, and oral sex. The researchers started with elicitation interviews which helped them develop a questionnaire for a prospective survey that covered 993 participants at Time 1 and 686 returning for Time 2. All the participants were involved in the four types of high-risk sexual behavior listed earlier. The statistical regression yielded strong evidence confirming attitude, social norms, and environmental facilitators/constraints as reliable predictors of sexual behavior in general. The researchers also confirmed that attitude, social norm, perceived control, and environmental facilitators and constraints contribute to explaining behavioral intention. The most significant findings of the study about the use of condoms with different types of sexual partners and the three distinct kinds of sex (i.e., vaginal, anal, and oral) can be summarized as follows. In the case of sex with a regular partner, the attitude was a significant predictor of condom use for all three types of sex. In the case of a casual sexual partner, the attitude was a significant predictor of condom use for vaginal sex only.

Kasprzyk et al. (1998) claimed that their study was the first test of an integrated behavioral model to predict condoms use and related sexual behavior. The researchers

also criticized some of Ajzen's (1991) earlier conceptualizations of perceived control (Kasprzyk et al., 1998). In their second study, Kasprzyk and Montaño (2007) also tested the applicability of the IBM to explain HIV prevention behavior among high-risk men in rural Zimbabwe. This study was part of an evaluation of an intervention program to promote safe sex, and the researchers applied a quantitative design to answer the research questions. The main findings of this study can be summarized as follows. In the case of condoms use intention with a spouse, attitude and subjective norms are good predictors of intention. In the case of condoms use intention with a steady sexual partner, attitude and subjective norms are good predictors of intention. In the case of condoms use intention with a casual partner, attitude and subjective norms were good predictors of intention. In the case of condoms use intention with a commercial sex worker, the researchers concluded that attitude and subjective norms were good predictors of intention.

Kasprzyk and Montaño (2007) also tested the significance of a set of seven behavioral beliefs about the intention to avoid commercial sex workers. The key finding was that three behavioral beliefs were significant: difficult when wife/steady partner not available, not having something to occupy time, and when wife/girlfriend does not provide the desired type of sex (Kasprzyk & Montaño, 2007). The scholarly work by Kasprzyk and Montaño is of high relevance and value to the current study, as these authors offered well-formulated sets of behavioral beliefs, normative beliefs, and self-efficacy beliefs that I could further explore in this study. Moreover, the level of sexual behavior analysis that Kasprzyk and Montaño offered is much refined compared to the earlier scholarly work by Kasprzyk et al. (1998).

Tlou (2009) carried out a longitudinal quasi-experimental study in South Africa engaging 170 participants to determine if the behavioral variables postulated by the TRA and TPB would predict sexual behaviors related to HIV/AIDS and if theory-based interventions would result in desired sexual behavioral change. The researcher obtained evidence that the combined behavioral variables of the TRA and TPB were able to predict intentions to use condoms and to seek HIV testing. This author also showed that attitudes have direct influence over intentions.

Albarracin, Johnson, Fishbein, and Muellerleile (2001) conducted a meta-analysis of 96 data sets to determine whether the TRA and TPB can predict condoms use. The results of the meta-analysis confirmed that, in alignment with the TRA, condoms use was related to intentions, attitudes and subjective norms determined intentions, attitudes were influenced by behavioral beliefs, and norms were associated with normative beliefs.

Ortega and Prado (2012) applied the TRA in conjunction with the ecodevelopmental theory in order to understand the HIV risk behaviors among Hispanic adolescents living in the United States. These researchers sought to obtain evidence indicating that adolescents' self-efficacy has a direct effect on their risk behavior. The researchers used a quantitative approach and engaged a sample of 493 Hispanic adolescents (i.e., 7th and 8th graders), but did not find a strong correlation between self-efficacy and avoidance of risky sexual behavior. Villarruel, Jemmott, Jemmott, and Ronis (2004) carried out a study to identify the predictors of sexual intercourse and condoms use among a community of Spanish-Dominant Latino youth. These investigators tested the validity of the theory of the planned behavior, finding that attitudes, subjective norms, behavioral beliefs,

normative beliefs, and control beliefs are good predictors of sexual behavior among the study participants. Through the literature that I review in the following section of this chapter, I further elaborate on the scholarly work grounded on the RAA.

I used the RAA, specifically the IBM component, as the theoretical foundation for this study. I chose the RAA as a theoretical foundation because of the well-established applicability of the IBM to explain and predict the sexual behavior of young people (Kasprzyk et al., 1998; Kasprzyk & Montaño, 2007). Scholars have also effectively applied the RRA to change the sexual behavior of individuals for the prevention of HIV transmission. This study will contribute additional scholarly testing of the ability of the RAA to explain and predict the risky sexual behavior of young people.

I answered two research questions in this investigation. Through the first question, I investigated the risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth that contribute to their protection from contracting HIV. Through the second question, I explored the predictors of safe and unsafe nonmarital sexual behavior of Maldivian male youth. The relevance of the RAA to the research questions stems from the fact that the main purpose of the RAA is to explain and predict human behavior, which was the focus of the research questions. While the RAA served as the theoretical foundation for this study, the constructs of the IBM, which is a component of the RAA, are directly related to the second research question that explores the predictors of the safe and unsafe nonmarital sexual behavior of young Maldivian men. The RAA recognizes the importance of information, knowledge, and skills as a predictor of behavior, but also considers other predictors such as intentions, habits, the salience of the

behavior, and environmental constraints and enablers. In the subsequent sections of this chapter, I further elaborate upon the relevance and applicability of the RAA to the research questions.

### **Literature Review**

In the previous section, I discussed the RAA as the theoretical foundation of this study and provided a literature review of some of the academic research that applied the RAA to predict the sexual behavior related to HIV prevention and HIV transmission. In the following section, I provide more extensive literature review related to the purpose of this study. I organized the literature review under this section around four key topics: (a) risky sexual behaviors and the transmission of HIV, (b) the vulnerability of young people to HIV transmission, (c) population mobility and HIV transmission, (d) the required behavioral change in favor of HIV prevention. While I drew extensively from global literature, I gave special attention to available literature on Maldives and the Maldivian population, especially young people.

#### **Risky Sexual Behaviors and HIV Transmission**

In this section of the literature review, I explore and define unsafe/unprotected sex, explore the factors that underpin this behavior, and establish the relationship between HIV transmission and the practice of unsafe/unprotected sex.

**Unprotected sex.** Sexual contact is the major mode of HIV transmission among adults (Hasse et al., 2010; Wolf et al., 2003). Nugent (2013) defined safe or protected sex as the practice of sex while keeping bodily fluids discrete to minimize risks associated with STIs or unwanted pregnancy. Safe sex practices include the use of prophylactics and

the careful selection of a sexual partner. It is reasonable, therefore, to state that unsafe/unprotected sex happens when sex is practiced without keeping bodily fluids discrete or without careful selection of a sexual partner. Several researchers have confirmed that the practice of unsafe/unprotected sex has been a major cause of HIV transmission in many countries. In Sudan, for instance, 95% of the known HIV cases are due to sexual intercourse without condoms (Ministry of Health [Sudan], 2004). Mohamed and Mahfouz (2013) performed a study in Sudan, revealing that 98% of the participants ( $n = 1,016$ ) were against the use of condoms because they perceived condoms to be a method of contraception, rather than a means for HIV and STI prevention.

The region of South Asia enjoys low HIV prevalence with India hosting the largest number of people living with HIV outside Africa. Heterosexual sex is the common mode of HIV transmission in the region. Given the massive population size in the region, any HIV epidemic would have a serious impact at the global level. It is, therefore, important to maintain the low HIV prevalence status in South Asia (Rodrigo & Rajapakse, 2009). Rojanapithayakorn (2006) argued that the massive HIV transmission in Asia is attributable to the transmission between sex workers and their clients due to the practice of unsafe sex. Chamrathirong and Kaiser (2012) conducted a study in Thailand to determine the factors associated with levels of condom use with regular and casual sexual partners among heterosexual Thai males. The researchers conducted quantitative analysis based on the statistical data from the 2006 National Sexual Behavior Study, which covered a nationally representative sample of 2,281 men ages 18–24 and 25–59 years old. The investigators concluded that the use of condoms by Thai men with their

regular sexual partner is positively correlated to education and knowledge of condom effectiveness, while negatively correlated to nonprofessional employment, status of registered marriage, and short duration of a relationship. According to the researchers' findings, condom use with casual sexual partners is positively related to education, condom knowledge, nonprofessional occupation, short relationship duration, and lack of history of paid sex. In China, Li et al. (2014) confirmed that negative attitudes toward safe sex and the use of condoms had a severe adverse impact on the spread of HIV infection among some Chinese communities. The negative attitudes toward safe sex that Li et al. discussed are aligned with the description of IBM negative experiential attitudes construct.

In sub-Saharan Africa, where HIV prevalence is the highest globally, the low use of condoms is contributing to the spread of HIV endemic. Analysis of data from 13 sub-Saharan countries, including the AIDS Indicator Surveys (AIDS) and Demographic and Health Surveys (DHS), revealed that the use of men's condoms is meager in sub-Saharan Africa. The rate of usage of male condoms during the last sexual intercourse in these countries ranged from as low as 4% to 30% at best. The use of male condoms during last sexual intercourse between unmarried couples in the same countries ranged between 32% and 68% (de Walque & Kline, 2011). Scholars have linked the low use of condoms between married couples to perceived low risks of HIV and STIs, desire for pregnancy, or fear that the use of condoms might indicate lack of trust or unfaithfulness (Reynolds, Luseno, & Speizer, 2013; Westercamp et al., 2010). In a study on condom use, risk perceptions, and HIV knowledge among Nigerians, Lammers, Wijnbergen, and



Willebrands (2013) confirmed that low-risk perceptions of engaging in unsafe sex and not knowing that condoms prevent HIV infections are good predictors of risky sexual behavior among men.

In contrast, several researchers have shown the positive effect of the practice of safe sex and specifically the use of condoms in reducing HIV transmission. Evidence from Malunguzaa, Mushayabasaa, Chiyakaab, and Mukandavireab's (2010) measurement of the effect of condom use on HIV prevention among heterosexuals, homosexuals, and bisexual males and females in Africa confirmed that the use of condoms led to a reduction in HIV infections. Researchers such as Holmes, Levine, and Weaver (2004), Weller and Davis-Beaty (2002), and Reynolds et al. (2013) have documented existing evidence of the effectiveness of consistent condom use in the prevention of heterosexually transmitted HIV.

**Occasional and multiple sexual partners.** Practicing sex with occasional partners, as well as concurrency of multiple sex partners, are factors that are associated with the transmission of HIV and other STIs (Hasse et al., 2010; Hingson, Heeren, Winter, & Wechsler, 2003). In the study that Shipitsyna et al. (2013) conducted among Russian youth ( $n = 432$ ), the researchers found young age (i.e., 15–19 years) and multiple sex partners to be reliable predictors of STIs positivity in women. The 2012 HIV prevalence, incidence, and behavior survey conducted in South Africa ( $n = 38,431$ ) confirmed high rates of new HIV infections among those who reported multiple sexual partners (Zuma et al., 2012). An assessment of the risk factors associated with HIV among men who have sex with men (MSM) in Ecuador found that participants with

multiple male sexual partners have 3.7 times higher likelihood of contracting HIV compared with those with only one partner. The assessment revealed that participants with multiple sexual partners had reduced chances of condom use. Although the participants have had high levels of HIV/AIDS knowledge, HIV prevalence rate among them was high. Commercial sex workers are among those who are involved in concurrent multiple sexual relations. Some studies disclosed that unequal gender and economic power dynamics do not allow women engaged in sex with elder men nor sex workers (men and women alike) to insist on the use of condoms (Gregson et al., 2002; Langeni, 2007; Zuma et al., 2012); therefore, commercial sex workers and their customers are at high risk of HIV transmission.

Mohamed and Mahfouz (2013) revealed the high risk of prevalent multiple sexual partners and extramarital relations in Sudan. Most of the men (78.3%) who participated in the study had two sexual partners, of whom 51.1% were extramarital, and only 3.5% of these men used a condom during the last sexual intercourse. As for women, 49.3% reported having one sexual partner, of whom 92.8% were extramarital (Mohamed & Mahfouz, 2013).

Overall, engaging in concurrent multiple sexual relations is a common high-risk sexual behavior associated with HIV transmission. Unequal economic and age dynamics (i.e., perceived control and self-efficacy factors) reduce the ability of young women and sex workers to negotiate protected sex with their partners and clients. Early age of sexual activity initiation is a high-risk factor.

**False sense of security.** Some people may underestimate the risk of contracting HIV and act with a false sense of immunity or security. This false sense of security underlies many sexual risk behaviors. The false sense of security is often attributable to over-confidence or trust of the HIV status of a sexual partner and his/her sexual behavior. Thanavanh, Harun-Or-Rashid, Kasuya, and Sakamoto (2013) emphasized that although high levels of awareness of HIV means of transmission may exist, the presence of misconceptions about false prevention could result in risky sexual behavior. Some studies also implied that some people living with HIV who are receiving antiretroviral therapy, or those who are under optimal viral suppression, might tend to engage in unprotected sex based on a false sense of security (Wolf et al., 2003). Some scholars have criticized the claims that male circumcision reduces the risk of HIV transmission and have considered these claims as misleading and creating a false sense of security among African males (Green, McAllister, Peterson, & Travis, 2008). More and Amburgey (2000) draw attention to a common misconception among healthcare providers that men over 50 years of age are at lower risk of HIV transmission because they are less sexually active compared to younger men. In their view, this misconception led to ignoring the HIV protection needs of older men and resulted in a 138% increase in HIV infections among older men in America between 1993 and 2000.

In sum, there are certain beliefs and perceptions about HIV that can lead to risky sexual behavior. A realistic assessment of the HIV transmission risks among various age, and cultural groups and the development of evidence-based communal and individual

protection interventions should replace misconceptions and false beliefs about security and immunity from HIV transmission.

### **Vulnerability of Young People to HIV Transmission**

**Disproportionate HIV burden.** Young people in the age cohort of 15-24 years represent 16.6% of the total world population (UNAIDS, 2014; United Nations Department of Economic and Social Affairs, 2015). UNAIDS (2014) reported that 11% of the HIV-infected people worldwide are young people ages 15-24 years old. Moreover, young people are more disadvantaged in terms of HIV knowledge, as two thirds of young people do not have correct and comprehensive HIV knowledge. This low HIV knowledge puts young people at high risk of HIV infections. Young women ages 15-24 years are at particularly high risk of HIV infection. While they represented only 11% of the world adult population, they accounted for 20% of new HIV infections among adults in 2015. At the same time, 15% of all women living with HIV are 15-24 years old (UNAIDS, 2016). Silverman (2011) emphasized that many of the persons engaged in injecting drugs and sex work initiated these risky behaviors before the age of 18 years.

**Peer pressure and early sexual debut.** G. C. Patton et al. (2016) argued that adolescence is a phase of life when young people try to form an identity independent of their parents and family. However, parents and family potentially have an important role to play in HIV prevention among adolescents. Researchers have provided consistent, although limited, evidence that adolescents who speak to their parents about sex tend to delay the initiation of sexual activity; more frequently use contraceptives; have higher self-esteem, self-worth, and social functioning skills; and fewer mental health problems.

These scholars discussed the evidence that peer pressure has a significant role in shaping the sexual behavior of adolescents and HIV prevention. Adolescents whose peers are involved in risky behaviors tend to behave the same way (G. C. Patton et al., 2016). Masatu, Kazaura, Ndeki, and Mwampambe (2009) performed a study on the predictors of risky sexual behavior among adolescents in Tanzania and attributed the early age engagement of school adolescents (10-14 years) in sexual activity to peer pressure within the school system. The study of the National Research Council and Committee on Population (2005) concerning the changing transitions to adulthood in developing countries illustrated that the average age of marriage in most developing countries is being delayed due to school attendance. The percentage of young people practicing premarital sex before the age of 18 years, however, is increasing. There is a high likelihood that the first sexual experience for most young people is before marriage. In the mega-study of Kirby, Laris, and Rolleri (2007), which covered 83 studies from different countries, the researchers also confirmed the rise of risky sexual behaviors among young people, including premarital sex.

**Injecting drugs, early sexual debut, and HIV misconceptions.** One third of the world's population of people who injects drugs (PWID) reside in Asia and the Pacific. In 2015, national HIV prevalence was over 5% among young people ages 15-24 years who injected drugs in four of the ten Asia and the Pacific countries that provided age-disaggregated data (UNAIDS, 2016). According to the UNAIDS *Prevention Gap Report*, the HIV epidemic in Asia and the Pacific is concentrated among PWID and other

categories of key populations (i.e. gay men and other MSM, transgender people, and sex workers) and their intimate sexual partners.

According to Sharma, Oppenheimer, Saidel, Loo, and Garg (2009), HIV prevalence among PWID in Asia has historically been one of the highest worldwide. A high proportion of the HIV infections in many of the Asian countries are among PWID. For instance, around half of the cumulative HIV cases in Indonesia are linked to injecting of drugs. In a study into the predictors of risky sexual behavior among young people in Botswana, the researchers found that most of the young people who were sexually active had sex under the influence of alcohol, had multiple concurrent sexual partners, and had their first sexual intercourse before reaching the age of 15 years (Letamo & Mokgatlhe, 2013).

Drug injection is a growing global concern. In an early study, Mathers et al. (2008) estimated that around 15.9 million people ages 15-64 years worldwide were injecting drugs. These researchers estimated that of the 15.9 million drug injectors, around 3 million people were HIV-positive (Mathers et al., 2008). Aceijas, Stimson, Hickman, and Rhodes (2004) analyzed injecting drug use and HIV/AIDS data from 130 countries, finding that 25 countries around the globe reported over 20% HIV prevalence among injecting drug users. These researchers also cited official reports from the United Nations estimating that 10% of the worldwide cases of HIV/AIDS are attributed to injecting drug use.

In a study among young men working as motorbike-taxi riders in Uganda, known locally as the bodabodamen, Nyanzi, Nyanzi, and Kalina (2005) revealed highly risky

sexual behaviors and misconceptions. The study participants ( $n = 212$ ) believed that their society has unwritten rules (i.e., injunctive norms, using the IBM language) about how a boy becomes a man. Specifically, a young man must engage in sex to prove to his peers that he has become a man. In the culture of the bodabodamen, sexual debut is a public venture and the peers must know about it. A young man scores high points among his peers based on his nonmarital sexual activity and the number of acquired sexual partners. Manhood is measured by the number of sexual partners and how renewable these partners are; however, this sexual debut is disapproved by parents, teachers, and elderly people in the community. Young people keep their initial sexual activity hidden from the elderly people in order to avoid the infliction of punishment upon them. For these Ugandan young men, abstinence and safe sex are not only impossible—they are unnatural. Many of these young men despise virginity in both women and men. They believe that any virgin adult must have deep religious influence or health problems preventing him or her from having sex. Many of the study participants believed that sex with virgins is painful, straining and that the virgins are not experienced in different types of sexual styles or do not know what to do at all. Most seriously, these young men believe that STDs other than HIV/AIDS are associated with brave and heroic behaviors (Nyanzi et al., 2005). Previous researchers have established that young males are exposed to multiple risks of HIV transmission.

**Harmful impact of social norms.** Fennie and Laas (2014) studied HIV/AIDS knowledge, attitudes, and risky sexual behavior among university students. These authors concluded that though HIV knowledge may be high among some adolescents, these

young people may tend to underestimate personal risk or may desire to experiment risky sexual behaviors (Fennie & Lass, 2014). Mavedzeng, Olson, Doyle, Chungalucha, and Ross (2011) highlighted the role of social and cultural norms in shaping the sexual behavior and HIV prevention among young people. These researchers concluded that societies that do not accept to see young people sexually active tend to limit young people's access to HIV preventive care and reproductive healthcare in general. This type of social norm increases the vulnerability of young people to HIV transmission. Lack of confidentiality and stigma associated with young people's accessing sexual and reproductive healthcare deprived many adolescents from benefiting from these services and increased their risk of contracting HIV (Mavedzeng et al., 2011).

**HIV risks facing Maldivian youth.** The population of young people ages 15-24 years in Maldives is 76,228, which represents 19.8% of the total population of Maldives (National Bureau of Statistics [Maldives], 2014). This population of young people in Maldives is highly literate. Over 95% of young people ages 15-24 years are literate in both English and their mother tongue (National Bureau of Statistics [Maldives], 2014); however, unemployment among young people is high. According to the World Bank statistics, 13.78% of Maldivian young people ages 15-24 years were unemployed in 2017 (TheGlobalEconomy.com, 2019). Mental health, drug use, and organized gang violence are among the challenges facing young people due to limited employment opportunities and limited opportunities for meaningful social engagements. The World Bank (2014) reported that 15% of the young people who participated in the survey knew someone who attempted suicide, 9% of them attempted suicide over the past 12 months, and 28% felt



sad, at a loss, or depressed for two weeks or more. The World Bank report revealed that 68% of young people ages 15–24 years who participated in the 2005 survey identified drug use as a challenge. The 2011–2013 National Drug Use Survey estimated the drug use prevalence at 6.64% in Malé, compared to 2.02 in Atolls. Most of the survey participants who ever used drugs were ages 15-19 years. Some of the drug users in Malé initiated their drug use at the age of 15 years, and most of them were unmarried and unemployed. The results of the survey indicated that many of the drug users were sexually active and were paying for sex (United Nations Office on Drugs and Crime, 2013).

The 2008 Biological and Behavioral Survey on HIV/AIDS reported alarming findings (Ministry of Health and Family, & UNDP [Maldives], 2008). The survey identified several behavioral and environmental risk factors that could result in an unfavorable change in the low HIV prevalence in Maldives. According to the survey report, there were gaps in the HIV knowledge-practice, low HIV self-risk perceptions, and ineffective HIV prevention programs. The results of the survey indicated the presence of several ulcerative STIs linked to HIV transmission such as syphilis and hepatitis C as well as overlapping risk populations. The authors identified the following cases of STIs: 0.2% HIV and 2% hepatitis B prevalence among resort workers, and 1.2% prevalence of syphilis in the survey sample. The survey disclosed the existence of MSM as follows: 6% of MSM in Addu and 1% of MSM in Malé, 4% of seafarers, and 2% of migrant construction workers. Also, 31% of IDUs in Malé share unsterile needles and syringes compared to 23% in Add. The survey reported hepatitis C among 0.7% of IDUs

in Malé and in 0.8% of IDUs in Addu. According to this survey, the presence of hepatitis C is an indication of common needles and syringes sharing, which is a potential route for HIV transmission. The survey results confirmed the common practice of unprotected sex with multiple partners among higher risk populations. The results indicated buying and selling of sex, nonmarital sex, group sex, and sex with occasional partners among young people. As an indication of a wide spread of a false sense of HIV protection, despite all the alarming practices reported by the survey, most of the respondents believed they will not contract HIV (Ministry of Health and Family, & UNDP [Maldives], 2008).

Ibrahim et al. (2012) conducted a cross-sectional descriptive study of the risk behavior of sexual health and related factors among adolescent (18-24 years) students in private colleges in Malé, the capital of Maldives. This study included 285 participants, of which the composition was 68% females and 32% males. The researchers found that 60% of the male students were engaged in high-risk sexual behaviors. The researchers revealed that adolescents in the age group of 18 to 19 years are at a higher risk compared to those in the age group 20-24 years. The researchers found a significant association between the availability of financial resources and the level of risk. The 56% of the students who were receiving monthly allowances were at twice higher risk of risky sexual behaviors compared to those without monthly allowances. Apparently, students with monthly allowances were able to spend more on dating girls and engaging in risky health behavior. Students who have parents educated to high secondary level or above were at higher risk compared to those whose parents were less educated. These authors revealed that adolescents with good relation and communication with parents (i.e., 60% of

participants) were at less risk compared to those with poor relation and communication with parents. Furthermore, the authors disclosed that adolescents with divorced or separated parents were at significantly higher health behavior risks. The investigators found a correlation between attitudes toward sexuality and sexual health and the level of risk. According to the study, 45% of the participants had negative attitudes toward sexual health, and 42% of the participants were engaged in risky behaviors, although they found no significant correlation between the level of sexual health knowledge and the level of risky behaviors. Participants with high levels of sexual health knowledge shared the same level of risky behavior with those with low levels of sexual health knowledge. The researchers found that 51% of the participants had low levels of sexual health knowledge. Peers, Internet, and media were the main sources of adolescents' information on reproductive health (Ibrahim et al., 2012).

Merhi, Cockcroft, and Andersson (2004) conducted a Reproductive Health Survey of Maldives, reporting that 46% of the never-married youth participants ( $n = 1,141$ ) had never talked about sex to anyone, while 32% of the males and 24% of the females talked about sex to a friend, compared to 28% females and 12% males who talked to a parent. Regarding HIV protection, 69% of the participants suggested that compliance with religious traditions is the best way to avoid HIV/AIDS infection. Half of the participants agreed that condoms can protect against HIV/AIDS, while 35% did not know if condoms can provide that protection. Regarding HIV misconceptions, 13% of the participants believed that HIV can be transmitted by eating with an infected person, while 34% did not know whether an HIV infected person can look healthy. The survey results

indicated that 9% of never-married youth were sexually active, with two thirds of them having had their first sexual intercourse before the age of 18 years. According to the survey, 45% of the sexually active never-married youth reported they never used condoms, while 2% had been pregnant or fathered a child (Merhi et al., 2004). In conclusion, young people are globally more vulnerable to HIV transmission, and scholars have provided evidence from Maldives confirming that young Maldivian people are as vulnerable to HIV as their global peers.

### **Population Mobility and HIV Transmission**

Maldives is a country that is visited every year by over 1 million tourists from all over the world (Ministry of Tourism [Maldives], 2018). According to the Maldives Controller General of Immigration, the country hosts around 144,607 migrants on work visas (representing 32% of the estimated total 451,738 population of the country). Moreover, there are over 63,000 illegal migrant workers in the Maldives (Hussain, 2019). While only 25 cases of people living with HIV have been reported among the local population of Maldives between 1991 and 2018, during the same period 415 cases of people living with HIV have been reported among the expatriates living in Maldives (Ministry of Health ([Maldives], 2018). It is, therefore, important to examine existing literature on cross-border population movement and the HIV transmission effect on host communities.

There is a growing concern in developed countries about risky sexual behavior and increased levels of HIV infections brought to these countries by refugees and immigrants from HIV high prevalence countries. For instance, HIV prevalence among

the general population in Denmark in 2003 was 0.09%, 0.03% among Danish-born heterosexuals, and 0.34% among immigrants. Another example is the Midwestern states of Iowa and Minnesota in the United States of America. HIV/AIDS surveillance report in 2003 showed that HIV prevalence among African-born immigrant and refugee population was higher than that of the general population (Tompkins, Smith, Jones, & Swindells, 2006). Stigma, exploitation, xenophobia, cultural and linguistic barriers, as well as limited access to health education and health services are factors that often place immigrants and refugees at greater HIV risk in the new communities of resettlement. The risky behaviors some of these immigrants and refugees may engage in by way of finding means of living in the countries of resettlement place the local communities to new HIV risks. These concerns have prompted researchers and public health authorities in developing countries to pay special attention to the sexual behavior and practices of immigrants and refugees from countries with high HIV prevalence rates (Tompkins et al., 2006).

Spiegel, Schilperoord, and Dahab (2014), in partnership with the United Nations High Commissioner for Refugees, conducted a behavioral surveillance survey among refugees and surrounding host communities in 10 countries. The researchers intended to explore the potentially dynamic role of mobility on HIV transmission. The authors found that refugee camps and surrounding communities had the lowest prevalence of multiple sexual partners. The data showed no significant difference between refugees and host communities regarding risky sexual behavior such as pre-marital sex, multiple sexual

partners, and prevalence of HIV. Spiegel et al. concluded that there is no evidence to support the claims that refugees are spreading HIV among surrounding host communities.

Researchers such as Tompkins et al. (2006) have supported that given the high population mobility, risky sexual behavior constitutes a public health risk beyond the political boundaries of individual states. At the same time, existing data from some countries that host refugees does not support the claims these refugees are responsible for the risky sexual behavior and HIV transmission among the host communities. An important lesson learned from the experience of countries hosting large immigrant populations is that combating HIV/AIDS should not exclude immigrants. The services that are required to combat HIV/AIDS should cover local and immigrant populations alike. Another lesson learned is that HIV/AIDS should be considered a global public health priority as the disease has no political boundaries.

### **Required Behavioral Change in Favor of HIV Prevention**

Fisher and Fisher (1992) argued that because HIV is transmitted through specific forms of risky behaviors, it is possible to prevent transmission through appropriate behavioral change. A great deal of scholarly research around HIV/AIDS prevention since the discovery of the HIV in the 1980s has focused on the risky behaviors responsible for the transmission of the virus and effective ways for behavioral change. Many of the studies that I reviewed in this chapter focused on investigating risky behaviors and behavioral change among specific ethnic groups (Green et al., 2008; Jemmott et al., 1992), age groups (Shipitsyna et al., 2013), or groups of people with bisexual or homosexual orientations (Hernandez et al., 2017). An important subject of discussion by

behavioral scientists and scholars who dealt with behavioral change is what are the key determinants or predictors of risky behavior and behavioral change. While some scholars identified one single determinant or predictor of sexual behavior, others identified multiple determinants and predictors of sexual behavior and behavior change. Some scholars argued in support of a strong relationship between HIV knowledge and HIV prevention, singling out HIV knowledge as the key determinant or predictor of sexual behavior. Other scholars either completely dismissed such a relationship or argued that HIV knowledge is a necessary—but not sufficient—condition for HIV prevention. In this section, I present and discuss the literature that supports these different points of view.

Emmons et al. (1986) and Kegeles, Catania, Coates, and Adler (1986) concluded that knowledge of safe sex guidelines and HIV risk behaviors are associated with self-reported risk behaviors in cross-sectional and longitudinal studies alike. For instance, the level of HIV knowledge is the key divide between low-risk and high-risk behavior among gay men. Moreover, high levels of HIV knowledge are associated with high frequencies of condom use and low numbers of sex partners. Catania et al. (1990) developed an AIDS Risk-reduction Model (ARRM) as a framework for preventing AIDS transmission. This model consists of three stages. In the first stage of problem perception, the concerned individual identifies his or her own risky behaviors that make him or her susceptible to AIDS transmission. At this stage, the individual also develops the conviction that contracting AIDS is undesirable. In the second stage of commitment to change, the individual develops a strong conviction to change his or her risky behavior in order to avoid contracting AIDS. In the third stage of acting, the individual gathers necessary

information about alternative safe behaviors and eventually changes his or her risky behaviors to safe ones. Catania et al. emphasized the multiple important roles of knowledge in the ARRM. For instance, knowledge of how AIDS transmits is important for the first stage, when the individual can identify his or her own risky or problematic behaviors that increase susceptibility to contracting AIDS. The knowledge of condom effectiveness to prevent AIDS transmission is important for the second stage when the individual develops the commitment to change his or her risky behaviors.

Jemmott et al. (1992) randomly assigned one group of Black male adolescents to an AIDS risk-reduction intervention emphasizing attitudes, knowledge, and skill-building, while assigning another similar group to a control intervention on career opportunities. The researchers found that the interventions that increase AIDS knowledge and change attitudes toward risky sexual behavior had greater AIDS knowledge and less positive attitudes and intentions regarding risky sexual behavior compared with the control group. The researchers concluded that interventions that increase AIDS knowledge and changed attitudes toward risky sexual behaviors may have salutary effects on Black adolescents' risk of HIV infections.

Several researchers have linked misconceptions about HIV and false senses of security from HIV transmission to low levels of correct HIV knowledge and skills. Because of the low level of knowledge of HIV transmission among Sudanese, the majority (84%) of the participants in the study carried out by Mohamed and Mahfouz (2013) refused the idea of living or working with someone infected with AIDS. In a study conducted among the Sudanese immigrants in the United States, the participants



disclosed low levels of HIV awareness (Tompkins et al., 2006); 55% of the participants believed that mosquitos could transmit HIV, and 55% thought that one could protect him/herself from HIV by having sex with a person that looks healthy. The respondents showed negative beliefs and attitudes toward people living with HIV. More than one third (36%) of the participants believed that HIV infection is a punishment for wrong doing and that the individual who contracts HIV deserves to suffer (Tompkins et al., 2006). Other scholars, however, did not find evidence for the importance of knowledge as a determinant or predictor of safe or unsafe sexual behavior. For instance, Baldwin and Baldwin (1988) did not find a relationship between the frequency of condom use and knowledge of HIV transmission behaviors. In a cross-sectional and longitudinal study, McKusick, Hortsman, and Coates (1985) also failed to confirm a relationship between knowledge and risky sexual behaviors.

Overall, HIV knowledge is a predictor of intention to use condoms. Previous researchers (Mohamed & Mahfouz, 2013; Tompkins et al., 2006) have highlighted that gender, age, and the level of education are predictors of HIV knowledge, including information, ability, and skills. These authors have pointed to some successful interventions to disseminate information, raise HIV knowledge/awareness, and build essential HIV protection skills among young people.

There is evidence that positive behavior changes—whether driven by improved HIV knowledge and/or other factors—reduce the risk of HIV transmission. Johnson, Hallett, Rehle, and Dorrington (2012) estimated that the use of condoms in South Africa reduced HIV incidence by 23% to 37% between 2000 and 2008. South Africa is an

example of a country that developed an evidence-based strategy for the promotion of condoms use. In the 2012–2013 fiscal year, South Africa distributed over 500 million condoms free of charge. Researchers have provided evidence indicating that this program of free condoms distribution is one of the interventions associated with the reduction of HIV cases among adolescents aged 14 years and older (Zuma et al., 2012). Hearst and Chen (2004) estimated that in developing countries, the use of condoms is 90% effective in the prevention of HIV transmission. A key conclusion from the experience of South Africa is that the supply of free condoms is an enabling or facilitating factor that has the potential effect of positively influencing the practice of safe sex. I predicted that the free supply of condoms may also contribute to creating positive injunctive normative beliefs linked to a perception that society expects individuals to use condoms to protect themselves.

### **Extracting the Relevant Concepts and Constructs**

In this section, I extracted and summarized from the above literature review and discussion the salient IBM concepts and constructs related to this study of the nonmarital sexual behavior among Maldivian male youth. In the subsequent parts of this study, I used the extracted concepts and constructs to sharpen the focus of the study and build the interview questions accordingly.

#### **Key predictors of sexual behavior among young males. *Intention.***

Maximization of sexual pleasure seems to be an essential behavioral intention among people engaged in risky sexual behavior. The low rate of consistent use of condoms and engagement in concurrent multiple sexual partnerships indicate that HIV prevention and

self-protection is not an explicit intention (Mohamed & Mahfouz, 2013; Zuma et al., 2012).

***Knowledge and skills.*** Low levels of HIV awareness, misconceptions related to the transmission of HIV (e.g., believing that mosquitos can transmit HIV), never having seen a condom before, believing that HIV is a punishment from God for wrong doing, being unwilling to live with an HIV-positive person, and believing that having unprotected sex with a healthy-looking person constitutes no HIV risk, are examples of poor knowledge and skills that misinform sexual behavioral actions.

***Habit.*** Habits are not well explored and documented in the available literature. In the current study, I explored the importance of habit as a predictor of unsafe sex practice.

***Environmental constraints/limitations.*** From the discussion of how the distribution of free condoms has had a positive impact on the use of condoms and HIV prevalence in South Africa, one can infer that the absence of such an intervention is an environmental constraint/limitation (Zuma et al., 2012).

***The salience of practicing unsafe sex.*** This factor is not well explored or documented in the available literature. In this study, I explored the salience of the practice of nonmarital sex as a predictor of unsafe sex among young Maldivian males.

**Three predictors of behavioral intention. *Attitude.*** Few researchers have explored the experiential attitudes and underlying feelings about the practice of unsafe sex in the available literature, such as the negative attitudes toward safe sex among Chinese MSM (Li et al., 2014). In this study, I investigated the experiential attitudes and feelings about the practice of unsafe sex among Maldivian male youth. The available

literature did not cover the instrumental outcome beliefs. I contributed to filling the existing knowledge gap linked to the instrumental feelings about the practice of risky sexual behavior among Maldivian youth.

***Perceived norms.*** The available literature has given more attention to injunctive normative belief expectations (i.e., others' expectations) compared to descriptive normative beliefs (i.e., others' behavior). In this study, I aimed to contribute to filling this knowledge gap.

***Personal agency.*** The available literature has covered perceived control beliefs and self-efficacy beliefs very well (Ortega & Prado, 2012; Villarruel et al., 2004). I considered this construct as well in this study.

### **Summary and Conclusions**

HIV infections pose a global threat to human beings, their welfare, and economic productivity. Over the last 34 years, more than 35 million people lost their lives because of the virus (WHO, 2016a). The virus increased the proportion of orphaned children in sub-Saharan Africa from 3.5% to 32% within one decade (United Nations, 2004), increasing the vulnerability of children in countries where social protection systems are already weak. Because there is no known cure for HIV/AIDS, protection is the main global strategy to combat HIV transmission. Understanding the risky sexual behavior of young males and how it could be modified toward the practice of safe sex is of paramount importance in the war against HIV/AIDS.

Europe and the United States have done very well in educating their citizens about the risks of HIV/AIDS. Europe and the United States, however, are now paying

more attention to potential HIV risks associated with refugees and immigrants from countries with high HIV prevalence and low awareness of the disease (Tompkins et al., 2006). This is an indication that the fight against HIV must be a global campaign.

The RAA/IBM is a relevant theoretical foundation that scholars have been applying for the last 50 years (Fishbein & Ajzen, 2011). Previous researchers have successfully tested the applicability of the IBM to the study of condom use and sexual behavior (Kasprzyk et al., 1998; Kasprzyk & Montaño, 2007). In this study, I applied the IBM to explore the risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth and to understand the predictors of this sexual behavior. In Chapter 3, I discuss how I designed this study to address the research questions and knowledge gaps that I discussed in Chapter 2. I discuss the research design, methodology, and data collection and analysis procedures, which were guided by the findings of the literature review.

### Chapter 3: Research Method

The main purpose of this study was to investigate the HIV knowledge-prevention inconsistency in the Maldives. In doing so, I explored whether there are additional risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth that are not captured in the HIV knowledge-prevention paradigm. I also attempted to define the key predictors of safe and unsafe nonmarital sexual behavior of those youth. In this chapter, I provide an explanation of the research design and rationale, a description of the role of the researcher, a discussion of the research methodology, and an account of the issues of trustworthiness.

#### **Research Design and Rationale**

I answered two research questions: (a) What are the risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth that contribute to protecting them from contracting HIV? and (b) What are the predictors of safe and unsafe nonmarital sexual behaviors among the Maldivian male youth? I employed a qualitative case study design to guide this study. Schramm (as cited in Yin, 2003) argued that the essence of all types of case study designs is the attempt to “illuminate a decision or set of decisions: why they were taken, how they were taken, how they were implemented and with what results” (p. 12). I recruited a total of 18 Maldivian male youth ages 20-24 years for participation in open-ended qualitative interviews. The data I obtained through these interviews provided an in-depth understanding of the nonmarital sexual behavior of the Maldivian male youth with a real-life contemporary context (see Yin, 2003). The current case study fell into the category of the single holistic case study design with embedded

units (see Baxter & Jack, 2008), also known as the single instrumental case study (see Stake, 1995).

The rationale for selecting a qualitative case study design stemmed from the nature and aims of the study. First, I sought to provide an in-depth interpreted understanding of the social world of Maldivian male youth by learning about their social circumstances, experiences, and perspectives about nonmarital sexual behavior and the predictors of this behavior. I did not intend to quantify any characteristics or phenomena and did not seek statistical generalization of the findings on the basis of a statistically representative sample; therefore, I excluded the option of applying quantitative research methods.

Second, because I explored the nonmarital sexual behavior of Maldivian male youth, this study fell into the category of socially sensitive research. Socially sensitive research includes topics such as sexual conduct and preferences that require the disclosure of personal behaviors that the research participants might consider private and are likely to feel uncomfortable sharing (Liamputtong, 2007). Gregory and McKie (1996) emphasized that qualitative research methods allow the research participants to express their personal experiences and feelings using their words. The interest of qualitative researchers is in the research participants' perspective of the everyday practices and knowledge of the social issue under investigation. In addition, qualitative researchers use text instead of numbers as the empirical material (Flick, 2008). Liamputtong (2007) argued that qualitative research methods are the most appropriate approach when conducting sensitive social research.

Mills, Durepos, and Wiebe (2010) explained that qualitative case studies are a useful research methodology in public policy. When applied to public policy issues, case studies allow the reader to obtain a thorough understanding of the situation and issues that require decisions/actions from public policy actors, while also allowing the researcher to develop different perspectives and acquire a deeper understanding of why a public policy decision emerges in a particular way.

Fourth, I focused on understanding rather than measuring the nonmarital sexual behavior of Maldivian male youth as a socially sensitive topic in the cultural context of Maldives. Qualitative case studies are appropriate when the focus of the research is on discovering variables rather than testing them and when the researcher is trying to understand the way meanings are formed within specific cultural contexts (Corbin & Strauss, 2008).

The qualitative case study approach allows the use of a variety of data sources and lenses in a manner that reveals the multiple facets of the social phenomenon under investigation (Baxter & Jack, 2008). As Yin (2003) and Stake (1995) argued, the qualitative case study approach is based on a constructivist paradigm that sees truth as relative and dependent on a person's perspective. Yin suggested that researchers should consider the case study design when examining contemporary events and cannot manipulate the behavior of the research participants. For these reasons, I chose the qualitative case study approach to explore the nonmarital sexual behavior of Maldivian male youth. As I expected, the research findings revealed the range of perspectives of the



research participants and the multiple facets of the nonmarital sexual behavior of Maldivian male youth.

I purposefully selected the study participants (see Corbin & Strauss, 2008; Ritchie, Lewis, Nicholls, & Ormston, 2013) and could therefore not treat them as representative of the entire population of Maldivian male youth. The participants were information-rich cases (M. Q. Patton, 1990) who were willing to take part in socially sensitive research for the benefit of better protecting young Maldivians against HIV and STI transmission. M. Q. Patton defined information-rich cases as those individuals from whom the researcher can learn a great deal about the central issues of the purpose of the research. Through the participants' expression of views of reality, I was able to better understand the nonmarital sexual behavior of the Maldivian male youth as described by their peers who participated in this study.

### **Role of the Researcher**

As the researcher in this study, I assumed the participant-observer role. Within a cultural setting of individual and collective interviews, the researcher, as the interviewer, gains close access to the research participants and draws on their knowledge and experience (M. Q. Patton, 2002). As an observer, Patton argued, the researcher acquires relevant reflections and introspection that become part of the data collection. The participant-observer role allows the researcher to use multiple and overlapping strategies of data collection (M. Q. Patton, 2002).

In my role as the principal researcher in this study, I hoped that I could obtain informed answers to the research questions about the risk and risk-reduction factors in the

nonmarital sexual behavior of Maldivian male youth, as well as the predictors of this behavior. The key roles that I assumed as the principal researcher included defining the research problem, undertaking a literature review, formulating the research questions, selecting an appropriate research methodology, developing the research instrument, recruiting and interviewing the research participants, analyzing and interpreting the data, and constructing the final narrative. Given the nonexperimental nature of the study, I had no control over the study environment or events (see O'Sullivan, Rassel, & Berner, 2008).

I did not have any personal or professional (e.g., supervisory or nonsupervisory) relationship with the research participants. To the best of my judgment, there was no known researcher bias or power relation involved. I remained mindful of a potential perceived bias related to the common perception among Maldivian youth that people of my age tend to value-judge their sexual behavior. Such a perception could have made the study participants less candid and less open in describing their sexual behavior during the interviews. I incorporated two strategies to mitigate this potential bias. First, I did not ask the research participants direct questions about themselves or their sexual behavior. Instead, I asked the participants to describe what they knew about the sexual behavior of male youth in their community. Second, at the outset of the interviews, I informed the participants of the objective of the research and emphasized that the research did not represent any form of value judgment of the behavior of the study participants.

All of the participants were adults and were free to decide whether to participate in this study. I did not include children under the age of 18 years, prisoners, patients, or

any group of people who had lost their ability or freedom to choose. The participants were well informed of what the study involved and how the outcome of the study could inform public health policies. The participants had the option to opt out at any stage during the interview. I did not ask any of the participants to provide their names during the audio recording, and the identity of all participants was fully concealed and protected.

### **Methodology**

O'Sullivan et al. (2008) described a research methodology as including six key steps: (a) deciding on type and frequency of data collection, (b) developing/selecting measures for the research variables, (c) identifying the sample population/study participants, (d) deciding on a strategy to contact the participants, (e) planning the data analysis, and (f) presenting the research findings.

### **Target Population**

The population in this study was undergraduate Maldivian male youth ages 20-24 years. I made the decision to select only undergraduate students even though they may not have been reflective of the entire population of youth in the age cohort of 20-24 years. I considered that undergraduate students are presumably educated on the importance of social research, are more likely to take part in an exploration of a sensitive social issue, and are more likely to be information-rich participants compared to their less educated peers.

### **Sampling Strategy**

I employed a purposive sampling technique to recruit participants (M. Q. Patton, 2002; Ritchie, Lewis, & Elam, 2003). I planned to recruit 30 Maldivian undergraduate

students ages 20-24 years; however, because I achieved data saturation at an earlier stage, I adjusted the number of participants to 18.

### **Participant Selection Criteria**

Given the taboo around the issue of nonmarital sexual behavior and cultural sensitivity, I selected the research participants based on two criteria. First, the participants were required to be male undergraduates ages 20-24 years. I excluded females because cultural sensitivity guidelines do not allow a male researcher to interview females on issues related to nonmarital sexual behavior. Second, the participants' willingness to give informed consent to participate in the study was an important criterion.

### **Participant Selection and Recruitment Processes**

First, I purposely selected Maldives National University (MNU) as the largest of the two universities in the Maldives. MNU has numerous campuses all over the capital city Malé and enrolls students from all parts of Maldives. Second, after obtaining the MNU's IRB approval and in consultation with the research department, I shared a public announcement through the students' council, inviting participants to join the study. Appendix C includes the public announcement through which I invited undergraduate students to take part in this study. Third, I received responses from many students and engaged in interviewing the volunteer participants on a first-come-first-served basis provided that the selection criteria were met.

### **Saturation**

Morse (1995) defined saturation as "data adequacy" (p. 147). Saturation occurs when the researcher collects data until no new information can be obtained from

additional data collection. The concept of saturation is pertinent to the question of what the adequate sample size in research is. Unlike quantitative research, qualitative research does not require large samples. The frequency of the occurrence of a code or a piece of data is not as important in qualitative research as in quantitative research. A single occurrence of a code or piece of data in qualitative research is sufficient to ensure that code or piece of data is included in the data analysis framework (Morse, 1995). Ritchie et al. (2003) advised that qualitative research is used for in-depth coverage of an issue; therefore, it is better to retain the depth of data collection rather than breadth regarding sample size. Ritchie et al. also argued that the analysis of qualitative research data is labor intensive, and it is advisable to keep the data volume within a manageable limit.

Guest, Bunce, and Johnson (2006) argued that although the concept of saturation is helpful, it does not offer practical guidance for estimating sample size. In a literature review, Guest et al. found that other scholars in qualitative research suggested between 30 and 60 interviews for ethnographic and ethnoscience studies, between 30 and 50 interviews for studies based on grounded theory methodology, between five and 25 interviews for phenomenological studies, and no fewer than 15 interviews for qualitative studies in general. Mason (2010) reviewed 560 doctoral theses to examine what sizes of qualitative samples were involved, and found that the average sample sizes were between 20 and 30 participants.

My selection of a homogenous sample of 18 students was consistent with the established tradition of qualitative doctorate studies as Guest et al. (2006) and Mason (2010) explained. This sample was sufficient to provide the required in-depth qualitative

information, as Guest et al. (2006) suggested. Furthermore, this sample size was manageable within a doctorate thesis (see Ritchie et al., 2003).

### **Data Collection Instruments**

Individual interviews with the participants was the main source of data for this study. Yin (2003) explained that there are six sources of data most commonly used in case studies: documentation, archival records, interviews, direct observations, participant-observations, and physical artifacts. Yin emphasized the importance of interviews as the main source of data in case studies (Yin, 2003).

I developed the data collection instrument for the current study. The IBM constructs and academic research in the field (see de Walque & Kline, 2011; Li et al., 2014; Reynolds et al., 2013; Westercamp et al., 2010) guided and informed my effort to develop the data collection instrument. I focused the interview questions on assessing the key predictors of nonmarital sexual behavior among male youth. Through the open-ended qualitative questions, I explored the key predictors of human behavior as per the IBM construct: intentions, information and knowledge, environmental factors, habits, and salience of the behavior.

The data collection instrument consisted of an initial list of 12 potential open questions for interviewing the participants (Appendix A). The actual number of questions that I asked during the interviews was more extensive due to the follow-up questions that were a natural part of the interview process (see Table 1). These open-ended questions provided a deep understanding of numerous factors, other than HIV knowledge, which influence the nonmarital sexual behavior of male youth in Maldives. I added follow-up

questions during the interviews to further probe into some of the information shared by the interviewees.

My original plan was to review the outcome of the first three interviews to assess whether there was a need to adjust the data collection instrument based on the participants' ease of understanding the questions and their ability to provide useful information. The first three interviews went very well, and I decided to continue with the same data collection instrument and to add follow-up questions as required. The number and nature of follow-up questions that I asked the participants varied from one interview to the other based on the depth of the participants' responses. I conducted all the interviews in English, and there was no need to translate the questions to any other language.

### **Data Collection Plan**

I conducted all the interviews by myself and the average time of each interview was 30 minutes. With the consent of the participants, the interview sessions were audio-recorded and subsequently manually transcribed into text. All the interviews were conducted face-to-face in a quiet private office space. As an exit from each interview, I thanked the participant and reiterated the global seriousness of HIV and other STIs.

### **Data Analysis Plan**

The analysis of the data collected from the study participants consisted of five steps. First, I prepared and organized the collected data for analysis. I transcribed the audio recorded interviews into written. I cross-checked and synchronized all sources of data. The purpose of this step was to pull together all the interview data into one master

record. The outcome of this step was a coherent and reliable master record of all the qualitative data collected from each of the research participants.

In the second step, I critically read through the master record of text data to ensure completeness and consistency. Whenever I found any inconsistency or inaccuracy, I referred to the raw sources of data with the objective of fixing the master record of data. In the third step, I extracted word categories and themes from the master data record and related them to the key IBM constructs discussed under the theoretical foundation (see Appendix B). For instance, I looked for words and statements that fit into the definitions of intentions, attitudes, norms, beliefs, and so forth. I assigned a standard code to each construct and subsequently completed the coding of the collected text data by the standard construct codes. I also searched the collected data for descriptions of risk and risk-reduction factors based on the definitions of risky sexual behaviors and safe sex.

In the final fifth step, I analyzed the data looking for meaning and explanation of the predictors of safe and unsafe nonmarital sexual behavior of Maldivian male youth. I used NVivo to store and code the qualitative text data that I collected as part of this study, as well as to archive the references that I used for the literature review.

### **Issues of Trustworthiness**

#### **Validity/Credibility**

This case study was not about establishing causal relationships. As such, there was no concern about spurious effects (see Yin, 2003). The specific internal validity concern of this qualitative case study related to the correctness of inferences and how to consider rival explanations (see Yin, 2003). The strategy that I used to deal with this



important internal validity concern was threefold. Firstly, I relied on the propositions of the IBM as the theoretical foundation of the study for analyzing and interpreting the data. Secondly, I based the data collection instrument on asking the participants to explain “why” certain sexual behaviors take place. Third, in the literature review, I had already established some useful sexual behavior trends from around the globe that I used to evaluate the consistency of the inferences from this case study.

External validity in qualitative case study designs relies on analytical generalization instead of statistical generalization as in quantitative survey research designs (Yin, 2003). Analytical generalization means that the findings are generalizable to some broader theory (Yin, 2003), instead of generalizing a set of results obtained from a statistically representative sample to the entire universe or population from which the sample was drawn. In the case of this particular case study, the external validity was assessable by the extent to which the findings are generalizable within the domain of behavioral theories (see Yin, 2003). In other words, the evidence for the external validity of this study was the consistency of the study findings with the results of similar studies in which the researchers applied the IBM framework to explore sexual behavior of young people.

### **Dependability**

I ensured the dependability of this case study through two arrangements. First, I documented the study protocol and processes, including the study questions, methodology, theoretical foundation, data collection instrument, participant selection, and

data analysis process (see Yin, 2003). Secondly, I created a database using NVivo in which I saved all the organized data (see Yin, 2003).

### **Confirmability**

I ensured the confirmability or objectivity of this study through the following steps. Firstly, I based the study on the well-established IBM as a theoretical foundation. Secondly, I followed the examples of the already established academic research practices that I documented as part of the literature review. Thirdly, I followed the well-established research tradition of a qualitative case study.

### **Ethical Considerations and Procedures**

According to Ramos (1989), qualitative researchers may encounter challenges concerning the researcher-participant relationship, the subjective interpretation of data by the researcher, and the study design. Orb, Eisenhaur, and Wynaden (2001) argued that adherence to the three well-established ethical principles of autonomy, beneficence, and justice could alleviate the challenges inherent in qualitative research. In qualitative research, autonomy refers to the principle of the participant's right to be informed about the study, to decide whether to participate in the study freely and the right to withdraw from the study at any point without the fear of penalties. Under the ethical principle of autonomy, participants are treated as independent persons whose rights to give informed consent is respected and protected. The ethical principle of beneficence refers to doing good for others while preventing harm. In qualitative research, this principle refers to the protection of the identity of the participants making sure that their participation in research does not cause them any harm. I informed the participants how the results of the

research would be published and whether their names would be quoted. The ethical principle of justice refers to equal share and fairness. In the context of qualitative research, this principle translated into avoiding the exploitation and abuse of participants, and not burdening the already vulnerable and burdened participants (Orb et al., 2001).

Participation in this study was voluntary and based on the participants' informed consent, which was withdrawable any time during the interview without any fear of penalties. In planning for this research, I obtained approvals from and adhered to the ethical guidelines of the National Health Research Committee of the Ministry of Health in Maldives, as well as the Institutional Review Boards of both the Maldives National University and Walden University. I used the Walden University IRB standard consent form. Through the participant recruitment announcement, I informed all invitees of the nature of the research. Through the consent form, I informed the invitees of the nature of questions that I would ask during the interview, as well as the expected duration of the interview.

I did not infringe on the privacy of any participant, and I did not ask any participants to describe their own sexual behavior. I did not quote any participant by name. The consent forms are the only documents that bear the names of the participants. These forms are not part of any public report. The data generated by this study were anonymous, but not confidential. No names of participants appeared in the database. Access to the data did not pose any identity risk to any of the participants. The data and all official documents related to this study will be kept for 5 years in alignment with the

recommendations of Walden University. After 5 years, I will erase the files and burn the hard copies of data documents.

There is no conflict of interest involved. The research does not fall within the work environment of the researcher, and there is no job or any supervisory or reporting the relationship between the researcher and the participants. I paid each of the participants who completed the interview a small amount of Maldivian Rufiyaa 500 (equivalent to \$32). This amount is only a token of appreciation of the participants. There was no risk of participant manipulation because of this small payment. The participants came to know about this payment at the time of signing the consent form, which was long after their expression of interest to participate in the study.

### **Summary**

In this chapter, I discussed the research methodology and the instrument I used for exploring the nonmarital sexual behavior of the Maldivian male youth. I discussed the rationale for using a qualitative case study design and explained the role of the researcher. I also discussed the data collection instrument I developed. I explained and described the research participants. I elaborated the plan for data analysis, clarified the relevant issues of trustworthiness, and discussed the ethical considerations and procedures. In Chapter 4, I discuss the outcome of the data collection and analysis and answer the research questions.

## Chapter 4: Results

The purpose of this study was to examine the inconsistency in the hypothesized HIV knowledge-prevention relationship in the context of Maldives. I also explored the risk and risk-reduction factors in the nonmarital sexual behavior of male youth in Maldives. Further, I explored the predictors of safe and unsafe nonmarital sexual behavior among young Maldivian males. The specific research questions that I designed this study to answer were the following: (a) What are the risk-reduction factors in the nonmarital sexual behavior of young Maldivian males that contribute to protecting them from contracting HIV? and (b) What are the predictors of safe and unsafe nonmarital sexual behaviors among the Maldivian male youth? In this chapter, I provide an overview of the demographics of the study participants, data collection procedures, data analysis procedures, and key issues of evidence of research trustworthiness. I also provide a detailed description of the research findings and discuss how these findings enabled me to answer the research questions.

### **Demographics**

The participants in this study included Maldivian male youth in the age group of 20-24 years. Although all of the participants resided in the capital city Malé at the time of the study, many of them were originally from islands outside of Malé.

### **Data Collection**

I completed 18 interviews, which yielded rich information that was of high relevance to the purpose of the study and the research questions. My original plan was to interview a purposeful sample of 30 undergraduate students ages 20-24 years; however, I

achieved data saturation earlier than expected, so I adjusted the target number of interviews to 18 instead of 30 undergraduate male students.

I collected data according to the data collection plan outlined in Chapter 3. All of the interviews took place in a private office space in Malé, the capital city of Maldives. I conducted the interviews between November and December of 2018. I conducted each interview session during one face-to-face meeting. The average length of each interview session was around 30 minutes. With the consent of the interviewees, I audio-recorded the interview conversations using a digital audio recording device. I did not encounter any unusual circumstances during the data collection process. Following the signing of the consent forms and the start of the interviews, there were no incidents of consent withdrawal or decisions to opt out of the interview. All of the participants were very relaxed during the interviews, and none of the participants demonstrated signs of stress or discomfort. Although the number and order of questions and follow-up questions varied between the different interview sessions, in aggregate the participants shared 36 responses to the main and follow-up questions. The interview questions were designed to (a) correspond to the research questions, (b) correspond to the IBM constructs, and (c) verify which sexual behaviors are safe or unsafe.

Table 1 provides a complete list of the main and follow-up questions that I asked during the interviews. The order of the questions and the depth of follow-up questions varied between the interviews depending on how brief or elaborate the answers of each participant were. The questions are inclusive of the initial 12 potential questions that I developed while planning this study, in addition to the follow-up questions that emerged

during the interviews. The flow of the conversation with each participant dictated the number and depth of additional probing questions.

Table 1

*List of Questions Asked During the Interviews*

Serial No.	Main questions	Additional probing questions
1.	Is it common that young males in Maldives are engaged in nonmarital sexual relations with girls?	
2.	Is young men's engagement in nonmarital sex in Malé city similar or different from what is happening in the other islands of Maldives?	
3.	At what age do young men become sexually active here in Maldives?	
4.	What intention/s do young men usually have when they engage in nonmarital sexual relations?	
5.	Is it common that a young man would have the opportunity to engage in a nonmarital sexual relation with a girl and he would refrain?	
6.	If a young man in Maldives is presented with the opportunity to engage in nonmarital sexual relation and he decides to refrain, what reason/s would usually prompt such a decision?	
7.	Is it common that young males in Maldives are engaged in sexual relations with other men?	
8.		If not, why are young men averting sex with other men in Maldives?
9.		Any difference between young men engagement in heterogenous sex and sex with other men?
10.	Are most young men in Maldives aware of sexually transmitted diseases such as HIV/AIDS?	

*(table continues)*

Serial No.	Main questions	Additional probing questions
11.	What is the usual source of information on HIV/AIDS/STIs for young men?	
12.	Is it common that many young men refrain from nonmarital sex because of fearing HIV/AIDS?	
13.	How common is the use of condoms among young men in Maldives as for the protection from HIV/AIDS?	
14.	Is it easy for unmarried young men to obtain condoms?	
15.	What do young men who are engaged in nonmarital sexual relations fear most?	<p>Transmission of STIs/HIV/AIDS?</p> <p>Out of wedlock pregnancy?</p> <p>Being caught by the police?</p> <p>Angering their parents or someone important to them?</p>
16.	What do they do when pregnancy happens?	
17.	What happens if a young Maldivian man who is engaged in nonmarital sex is arrested?	
18.	Is it common that a young man would have multiple concurrent nonmarital sexual partners?	
19.	Is it common for a group of friends to have concurrent sex with the same girl?	
20.	Is it common for a young man to pay to have sex with a girl?	
21.	Is young men's engagement in nonmarital sex linked to their use of alcohol and/or drugs?	
22.	How important are culture and religion in shaping the sexual behavior of young men in Malé, Maldives?	
23.	Is nonmarital sex legal or illegal in Maldives?	
24.	Does the fear of being caught/arrested by the police because of having nonmarital sex hold young men back from engaging in such relations?	

*(table continues)*



Serial No.	Main questions	Additional probing questions
25.	To what extent do young men feel that their sexual behavior must follow social norms and the expectations of their elders?	
26.	What happens if parents find out that their son is engaged in nonmarital sexual behavior?	
27.	How do parents react if they discover the son is browsing porn websites?	
28.	To what extent do young men feel they have full control over their sexual behavior, that their sexual behavior is not dictated upon them by someone else?	
29.	What are the enabling environmental factors that make the practice of nonmarital sex possible for young men in Malé, Maldives?	
30.	What are the environmental constraints or factors that make the practice of nonmarital sex difficult for young men in Malé, Maldives?	
31.	Who are the most important people that young men take into consideration when they are deciding on their sexual behavior?	Parents? Brothers? Sisters? Anyone else?
32.	To what extent do young men feel they must act the same way as their peers?	
33.	To what extent do young men feel they must act the same way as their parents/elder?	
34.	Do young men who are engaged in nonmarital sex feel proud about it?	Do they brag about it?  Do they speak about what they are doing?  To whom do they talk about it?
35.	Do young men who are engaged in nonmarital sex feel ashamed about it?	Does this behavior negatively impact their self-respect/self-esteem?
36.	Is there any information important to the study of the sexual behavior of young men in Maldives I did not ask about? Anything important you would like to add?	

## **Data Analysis**

For the purposes of data analysis, I treated the nonmarital sexual behavior of Maldivian male youth as a behavioral category and not a single behavior. In alignment with Fishbein's (2000) analysis of condom use in a marital relationship that I discussed in Chapter 2, the nonmarital sexual behavior of these young men included several aspects and forms of behavioral actions. This behavior included young men having sex with women, men having sex with men, practicing safe sex, and engaging in unsafe sex.

To prepare the data for qualitative analysis, I transcribed the audio-recordings of the interviews into written text. I used two different types of software for automatic transcribing of voice into written text. Due to the accent and nonnative English pronunciation of the research participants, the text that the automatic transcription produced was incoherent. After several unsuccessful attempts, I performed manual transcription, which was a tedious and time-consuming process. I transcribed each interview separately. After completing the transcription of each interview, I played the audio recording while following the written text to ensure its accuracy. In case of inconsistency between the audio record and the transcription, I paused the audio recording and made the necessary corrections to the transcription. I assigned the same serial number to each audio recording and its corresponding transcription.

Once the transcripts were completed, I uploaded them to NVivo as interview files. I also uploaded the audio recordings to NVivo as audio interviews. The audio interviews were uploaded to NVivo for record keeping only and were not part of the data analysis. I used NVivo to establish the coding themes and subthemes as nodes and subnodes. I then

used the nodes and subnodes to go through the each of the interview files (i.e., the collected data) and code each data/statement to the relevant nodes and subnodes. I coded some data/statements under more than one node/subnode as needed. Later in this chapter, I provide further details on the nature of the analysis I conducted as well as the results of the data analysis. Based on the literature review and the research questions, I created three main coding themes/nodes to guide the data analysis: (a) risk factors, (b) risk-reduction factors, and (c) predictors of safe and unsafe nonmarital sexual behavior of the Maldivian male youth. Each of these three main coding themes (i.e., nodes) consisted of several subthemes (i.e., subnodes). In total, I generated 21 subthemes for data analysis purposes.

### **Evidence of Trustworthiness**

#### **Credibility**

I established the internal validity of this study by checking the consistency of the statements made by all the research participants to the 36 questions that I posed to them. The answers provided by the participants were consistent to the extent that data saturation was reached by the 12th interview. To confirm the consistency of all the responses and the internal validity of the research, I continued with six additional interviews to complete 18 interviews. As attested by the audio recordings and the text transcripts, the responses from all the 18 participants across the 36 questions were consistent. As Yin (2003) recommended, I established the external validity of this research by confirming the analytical generalizability of the findings to the RAA/IBM as my study's theoretical foundation. The findings of this study confirmed that beyond HIV knowledge, there were

other predictors of nonmarital sexual behavior of Maldivian male youth that were consistent with the IBM constructs.

### **Transferability**

I ensured the transferability of this study by describing the situation and context in which the study had been carried out, the methodology, the theoretical foundation, and the data collection and analysis instruments and processes. I explained the assumptions and limitations of this study. I included all of the relevant instruments and references in an NVivo database to make it easy for any interested researcher to examine the credibility of this study or to apply the instruments and methodology in a comparable context.

### **Dependability**

I established the dependability of this study through two steps. First, I documented all aspects of this study, including the appendices, research questions, and interview questions used as a tool for data collection. I also documented and justified the research methodology, the selected theoretical foundation, the process of participant selection and interviewing, and the data analysis process. Second, I included all of the information relevant to this study in an NVivo database.

### **Confirmability**

I established the confirmability or objectivity of this study through three measures. First, I used a reliable theoretical foundation (the RAA/IBM) to guide and frame the theory on which the study was founded. Second, I followed the examples that researchers set in existing academic work. Third, I followed the qualitative case study tradition to ensure the consistency and objectivity of this study.

## **Results**

Maldives represents a situation that is inconsistent with the premise of a relationship between HIV knowledge and HIV prevention. While HIV prevalence in Maldives is low, HIV knowledge among Maldivian male youth is also low. I conducted this study to investigate the inconsistency of the premise of HIV knowledge-prevention relationship in the context of Maldives. I designed this study to answer two research questions: (a) What are the risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth that contribute to protecting them from contracting HIV? and (b) What are the predictors of safe and unsafe nonmarital sexual behavior among Maldivian male youth?

### **Risk and Risk-Reduction Factors**

To better understand the risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth, it was important to investigate the perceived risk factors first. My investigation of risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth was founded on the definitions of risky sexual behavior (Dimbuene et al., 2014; Hall et al., 2004) and safe sex (Nugent, 2013) that I discussed in Chapter 1. Except for Interview Questions 2 and 16, listed in Table 1, through all of the interview questions, I directly or indirectly probed into the level of safety in the nonmarital sexual behavior of Maldivian male youth. Through the first level of data analysis using NVivo, I produced the risk and risk-reduction factors in the nonmarital sexual behavior of young Maldivian males. These factors are outlined in Table 2.

Table 2

*Risk and Risk-Reduction Factors in the Nonmarital Sexual Behavior of Maldivian Male Youth*

Risk factors	Risk-reduction factors
1. Low HIV knowledge,	1. Compliance with protective social values and norms,
2. A false sense of security against HIV transmission,	2. Pressure from parents who disapprove nonmarital sex,
3. Low and inconsistent condom use as a contraceptive rather than a means for HIV prevention.	3. Positive pressure from (few) religious conservative peers,
4. Nonmarital sex is regarded as a cool behavior,	4. Strong culture against the practice of sex between men (MSM or homosexuality),
5. Negative pressure (from most) peers (virgin boys are derided and ridiculed).	5. Limited opportunities for privacy to practice nonmarital sex,
6. Some boys become sexually active at an early age (14 years),	6. Engagement in commercial (paid) sex is very limited,
7. Concurrent multiple sexual partnerships,	7. Generally, sexual activity is initiated around the age of 17 years.
8. Increased use of drugs among young people.	
9. Growing disregard for protective social values and norms.	

**Risk factors.** The results of my data analysis revealed the existence of nine risk factors that contribute to HIV transmission among young men in Maldives. The first two risk factors—low HIV knowledge and a false sense of security against HIV transmission—are linked to each other. All of the interviewees stated that almost all the Maldivian male youth have heard about STIs and HIV either from the media or from the school days; however, because there are very few HIV cases detected in the country, the fear of contracting HIV is not strong and does not prevent young people from engaging in risky nonmarital sexual relations. The participants shared expressions such as, “HIV is not a big deal [in Maldives],” and “HIV is not an issue in Maldives” to describe the way

many Maldivian young people perceive the HIV risk. It seems that the low HIV prevalence rate is misinterpreted to mean “no HIV risk,” or “HIV is not an issue in Maldives.” This misinterpretation of low HIV prevalence to mean no HIV risk underlines a deep HIV misconception. The statements by the interviewees that almost all young Maldivian men heard about STIs/HIV is not an indication of their acquisition of the required level of HIV knowledge that is adequate for HIV prevention. The low HIV comprehensive knowledge reported by the DHS 2009 (Ministry of Health and Family [Maldives], & ICF Macro, 2010) confirms this point. In fact, several of the research participants accurately described HIV knowledge as low among Maldivian male youth.

Consistent with the two risk factors of low HIV knowledge and the misconception of low HIV risk, I discovered that low and inconsistent use of condoms is a third risk factor in the nonmarital sexual behavior of Maldivian male youth. I found that condom is used as a contraceptive to avoid unwanted pregnancies rather than a means for HIV prevention. When condoms are perceived as a means of preventing unwanted pregnancies only, one would expect that sexual intercourse happens without a condom when the sexual partner is already pregnant, when she is in her pregnancy safe-days, or when oral sex is practiced. Hence, the low and inconsistent use of condoms is a real risk factor that seems to be associated with low HIV knowledge and the misconceived security against HIV transmission.

The fourth risk factor is the way most young males describe nonmarital sex as a “cool [behavior].” Peers expect each other to share their nonmarital sexual adventures in details. According to the research participants, young men who have multiple sexual

partners or whose sexual intercourse lasts long are considered “cool.” As a fifth risk factor, young males feel the pressure to experience nonmarital sex to avoid being ridiculed and to have exciting sexual experiences to share with their friends. Some study participants elaborated that though the peers who are sexually active may not practice direct pressure on others to become sexually active, those who are not sexually active “feel left out” of the conversations about sexual adventure. This results in them engaging in nonmarital sex due to indirect peer pressure and the desire to “be like the others.”

The sixth risk factor is the early age initiation of sexual activity among some boys in Malé. According to my findings, some boys become sexually active at the age of 14–15 years. A boy at the age of 14–15 years is not likely to have the knowledge and capacity to protect himself from STIs, and his sexual behavior is most likely to involve multiple risks.

The seventh risk factor that I revealed is the wide spread of concurrent multiple sex partnerships among young men. All of the study participants highlighted that while some young men are loyal to one sexual partner, others are engaged with multiple sexual partners. The study participants also highlighted that due to the unsustainable relations between young men and women, once relations are broken, each of the two parties would engage in another sexual relation, thereby increasing the risk of HIV and STI transmission.

The eighth risk factor is an increasing tendency among young men to use different types of drugs. According to the study participants, the chances of engaging in risky sexual behavior are always higher when the young man, the young women, or both are



under the influence of alcohol or drugs. The ninth risk factor is related to changing social norms. I found that the Maldivian community has many values and norms that discourage nonmarital sex, which may have contributed to the low prevalence of HIV in the country over the past years. I discovered, however, that these values and norms are fading away, as there is a clear growing disregard of these social norms and values among many young people. The growing disregard of these social values and norms is an additional risk factor that could negatively impact the low HIV prevalence status of Maldives. The study participants emphasized that there is a growing sense of emancipation from these social norms and that young men increasingly feel that their sexual behavior is their own business. The study participants stated that there is no strong feeling of guilt among young people who engage in nonmarital sex. Other participants stated that such a feeling of guilt may occur at an early stage of practicing nonmarital sex, but soon vanishes when the practice of nonmarital sex becomes habitual. Several participants pointed out that the feeling of guilt may occur at a later stage in life when a person advances in age and has settled down in his family life.

**Risk-reduction factors.** I identified seven risk-reduction factors that contribute to protecting young Maldivian men from contracting HIV. The first risk-reduction factor is that most of the young Maldivian males are fully convinced that nonmarital sex is against the teachings of their religion, is not approved by their parents, and is inconsistent with the social values and norms taught to them by school teachers, parents, and the elders. The existence of social values and norms that discourage nonmarital sexual relations seems to have been an important risk-reduction factor that contributed to low HIV

prevalence in Maldives. The study participants highlighted the fact that these social values and norms were quite strong and most young people complied with them until recently. According to some of the study participants, the growing disregard of these social values and norms is a recent phenomenon. Some of the study participants stated that though not very common, but there are young Maldivian men who refrain from nonmarital sex because it is “haram,” or prohibited by religion. The study participants pointed to the statements they heard as children from teachers and parents that nonmarital sex is prohibited by God, “haram,” and that “those who practice it end up in hell.”

The second risk-reduction factor is parental pressure on their children to stay away from nonmarital sex. Almost all young men in Maldives believe nonmarital sex is not welcomed by parents. Parents’ actual reaction to the engagement of their sons in nonmarital sex takes different forms and varies in its effect to deter or discourage this behavior. Some young men who have close relations with their parents may decide to refrain from nonmarital sex in order “not to anger their parents.” Others may see refraining from nonmarital sex as a sign of respect to their parents. I found that some young men believe that they can stay free of parental pressure by hiding their nonmarital sexual behavior from their parents. Other participants highlighted two important observations: many parents shy away from discussing with their children issues related to sexual behavior, and that, in general, interaction and dialogue between young people and their parents is limited and diminishing.

The third risk-reduction factor is that there are some committed religious young men who practice positive peer pressure and support by encouraging each other to abide

by the teachings of religion and the social norms which disapprove nonmarital sex. The study participants believe that this positive peer pressure is working well to the extent that if one of these young people engages in nonmarital sex he would make every effort to keep it a secret, so the peers do not look him down.

The fourth risk-reduction factor is that men having sex with men is very uncommon. The common belief among most young Maldivian men is that homosexuality or MSM is “not natural,” “a big sin,” and something that the society strongly condemns and “frowns at” is a factor that reduces the risk of MSM among Maldivian male youth. All of the study participants stated that MSM is very uncommon, although it exists in a very limited and hidden way. Some participants stated that there is a slowly unfolding talk these days about the rights of lesbian, gay, bisexual, and transgender individuals, which seems to have encouraged the disclosure of homosexuality or MSM in Malé.

The fifth risk-reduction factor is what the study participants highlighted as an environmental constraint of limited privacy opportunities in the overcrowded city of Malé as a factor that reduces the ability of many young people to freely and easily engage in nonmarital sex. Some of the study participants mentioned that sexual engagement sometimes happens in college buildings and other public facilities where there are no security surveillance cameras. Some of the study participants cited a case when someone captured a sexual engagement on camera that happened in a public place in Malé. The wide circulation of this video clip in social media must have caused huge embarrassment for the people involved. Young people who intend to engage in nonmarital sex must be able to afford the rent of a room in a guesthouse, find a friend who can provide access to

his/her private room, or plan their sexual engagement when the parents and other siblings are away from home.

I identified the limited engagement of Maldivian male youth in commercial sex as an important sixth risk-reduction factor. All the study participants emphasized that young Maldivian men rarely involve in sex with sex workers. The nonmarital sex engagement of these young men is mainly with Maldivian female peers who share the same sexual desire and no money is exchanged for sex.

The seventh risk-reduction factor revealed by this study relates to the age of initiating sexual engagement among most young people. Although few boys initiate sexual activity at the early age of 14–15 years, I noted that young men generally become sexually active around the age of 17–18 years. This is another relative risk-reduction factor that contributes to reducing the chances of HIV transmission.

### **Predictors of Safe and Unsafe Nonmarital Sexual Behavior**

In the previous data analysis, I identified risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth. In the third level of data analysis, I looked for the predictors of safe and unsafe nonmarital sexual behavior among young Maldivian men. The intention behind this level of analysis was to discover behavioral predictors of the sexual behavior of young Maldivian men beyond “information, knowledge, and skills” that is already covered by the HIV knowledge-prevention premise. I based this third level of data analysis on the IBM constructs that I have already discussed under the literature review in Chapter 2. Table 3 outlines the analysis of the predictors of nonmarital sexual behavior among the Maldivian male youth based on the

IBM constructs as revealed through NVivo data analysis. The key predictors identified in Table 3 can be summarized in the following points.

**Intentions.** I showed that “intention” is an important predictor of the nonmarital sexual engagement of young Maldivian men. I revealed seven key intentions that underline the engagement of Maldivian male youth in nonmarital sex. When they engage in nonmarital sex, most young Maldivian men intend to (a) gratify their sexual desire, (b) achieve sexual adventure, (c) try out some of what they may have watched in porn videos, (d) respond to direct and indirect peer pressure, (e) express their emotions and affection to a girlfriend, (f) pass time, and/or (g) cope with stressful work/life conditions. I concluded that protection against HIV and other STIs is not part of the intentions that drive the nonmarital sexual engagement of young Maldivian men.

I further analyzed the identified intentions to explore young men’s attitude toward nonmarital sex. The analysis of young men’s attitudes covered four key subthemes—namely, experiential attitudes and instrumental attitudes, as well as the underlying feelings and outcome beliefs. The key elements of young Maldivian men’s attitudes toward nonmarital sex are that (a) it is a cool behavior; (b) it is a desired adventure; (c) it is a way of passing time because young people in Malé do not have much to do; (d) it is a way of expressing affection and emotions to a girlfriend; (e) though it is against inherited social values and norms, it is becoming increasingly accepted as a new norm; (f) men sex with men is faced with wide rejection among young men.

I analyzed the data searching for control beliefs and the efficacy beliefs related to personal agency, or the ability of the individual to initiate and direct actions for a given

purpose. The following beliefs stood out as important elements of perceived control (i.e., the degree of control a person believes to have over a behavioral action) and self-efficacy (i.e., the person's degree of confidence in his/her ability to perform a behavior in the face of all challenges/obstacles):

1. Young Maldivian men believe that they have full control over their sexual behavior. They believe that their sexual behavior is their own choice. In their view, despite the numerous types of positive and negative peers and parental pressures, the control and decision over their sexual behavior remain with them.
2. Many young men believe that they can avert parental pressure by hiding their nonmarital affairs from their parents.
3. Some young men are of the view that the preaching practiced by most religious scholars about nonmarital sex does not appeal to them because it focuses on the consequences of actions in the second life not in this immediate life.

Three underlying beliefs are clearly predictive of risky sexual engagements:

1. The belief that nonmarital sex is a cool behavior,
2. The belief that nonmarital sex is a desired adventure, and
3. The belief that nonmarital sex is a way of coping with stressful work and life situations.

The results of this study, however, highlighted the widespread belief that men-to-men sex is unacceptable as predictive of safe sexual engagement among young Maldivian men.

**Information, knowledge, and skills.** In this study, I further analyzed the fact that HIV knowledge among Maldivian young men is low. My findings revealed two serious misconceptions are good predictors of risky sexual engagements. Most young Maldivian men are misinterpreting low HIV prevalence to mean no HIV risk; therefore, they are not taking any protective measures to separate bodily fluids when engaged in nonmarital vaginal, oral, or anal sex. Furthermore, these young men do not acknowledge the importance of condoms as a means for HIV prevention. For most of them, condoms are used only when they intend to prevent unwanted pregnancy; therefore, oral, anal, or vaginal sex during the girls' safe period is likely to be unprotected and highly risky.

**Salience of nonmarital sexual engagement.** My findings revealed that nonmarital sexual engagement among young Maldivian men is a very salient and important aspect of life. Young men tend to brag about and share the details of their nonmarital sexual engagements with their peers. Young men without nonmarital sexual adventure are often ridiculed by their peers; therefore, the desire to have some adventurous nonmarital sexual engagement to share with peers is a clear predictor of risky sexual behavior.

**Environmental constraints and enablers.** The data analysis revealed one environmental constraint to the practice of nonmarital sex which could be indicative of the limited opportunities for engagement in nonmarital sex for some young Maldivian men. In Malé, access to privacy is limited and may require the ability to pay for a room in a guesthouse. Sexual engagement in places which are not private and secure could expose the person to social embracement. Another unfavorable environmental constraint is the

access to condoms for boys who may be perceived by some pharmacists as too young to be married. I found that some local pharmacists, acting on their own, may refuse to sell condoms to young boys. This action may not prevent minors from sexual engagement, but it is more likely to force them to engage in unprotected sex. Restricted access to condoms is a predictor of unsafe sex for young men who have already decided to be sexually active. As I discussed earlier, some boys start their sexual activity at the age of 15 years old.

**Influence of habit.** The results of my data analysis revealed two habitual behaviors that are predictive of risky nonmarital sexual engagement among young Maldivian men. Nonmarital sex has become a widely practiced habit among young people despite conservative social values and norms. Engagement in concurrent multiple sexual partnerships is the other predictor of highly risky sexual practice among young men in Maldives.

Table 3

*Analysis of the Predictors of Safe and Unsafe Nonmarital Sexual Behavior Among Maldivian Male Youth*

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
Intentions underlying the practice of nonmarital sex: <ul style="list-style-type: none"> <li>• Gratification of sexual desire.</li> <li>• <u>Seeking sexual adventure.</u></li> <li>• <u>Trying out what they watch in porn videos.</u></li> <li>• <u>Virgin boys are ridiculed by their peers.</u></li> </ul>	Attitude	Experiential attitude (is the person's positive or negative emotional response or reaction to the idea of performing a behavior). <ul style="list-style-type: none"> <li>• Cool</li> <li>• adventurous</li> <li>• a way of passing the time</li> </ul>	Feeling about behavior (Experimental attitudes are predicted by the person's feelings about the desired behavior. People tend to perform behaviors for which they have a positive emotional response).

*(table continues)*



1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
<ul style="list-style-type: none"> <li>• A way of expressing emotions to a girl.</li> <li>• Young men don't have much today (sex is something to keep them busy).</li> <li>• <u>Young men working is in stressful environments such as resorts, practice stress sex.</u></li> </ul>		<ul style="list-style-type: none"> <li>• A way of expressing affection and emotions to a girl</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Young men see nonmarital sex (with girls) as a cool behavior</u></li> <li>• <u>Nonmarital sex is an adventure young man share with their peers.</u></li> <li>• <u>A way of reacting to life-work imbalance, stress, and isolation.</u></li> </ul>
		<p>Instrumental Attitude (Instrumental attitude is the person's favorable or unfavorable assessment of the outcome of the intended behavior. The assessment of these outcomes is influenced by (or function of) the person's outcome beliefs).</p> <ul style="list-style-type: none"> <li>• It is against religion but becoming commonly accepted among young people.</li> </ul>	<p>Behavioral Outcome Beliefs</p> <ul style="list-style-type: none"> <li>• Some young men may regret the behavior at the beginning, but as they repeat the behavior again and again, that feeling of guilt disappears.</li> <li>• Some people regret this behavior very late in life when they settle down</li> </ul>

(table continues)

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
		<ul style="list-style-type: none"> <li>• <u>Men-to-men sex is more strictly against religion and is not natural.</u></li> </ul>	but not when they are young.
	<p>Perceived Norms (represent the pressure a person feels from the society to perform or not perform a behavior)</p>	<p>Descriptive Norms (The strong social identity in some cultures. It represents what others in a person's society or network are doing. Descriptive norms are a function of normative beliefs related to the perceived typical behavior of other people in the person's society or network).</p>	<p>Normative Beliefs (<i>Others' Behavior</i>).</p> <ul style="list-style-type: none"> <li>• <u>Among peers, it is seen as a cool behavior</u></li> <li>• <i>Many parents disapprove the behavior.</i></li> <li>• Some young men believe their parents were once engaged in nonmarital sex.</li> <li>• While some young men believe nonmarital sex is a new phenomenon in their society, others believe it has always been there for generations.</li> <li>• <i>Few very religious young people disapprove the behavior</i></li> <li>• Religious scholars don't approve the behavior</li> </ul>
		<ul style="list-style-type: none"> <li>• Nonmarital sexual relations are common among young people, peer pressure to join the behavior.</li> <li>• Many parents don't approve this behavior</li> <li>• Religious breaching emphasizes this behavior is sinful and punishable in the second life</li> </ul>	

(table continues)

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
			<ul style="list-style-type: none"> <li>• Making a girl pregnant out of wedlock is seen as major social stigma that young men try to avoid.</li> </ul>
		<p>Injunctive Norms (Injunctive norms are a function of the normative beliefs related to perceived expectations others have of one's behavior).</p>	<p>Normative Beliefs (Others' Perception)</p> <ul style="list-style-type: none"> <li>• Most peers are supportive of the behavior</li> <li>• Those who disapprove the behavior are less influential compared to peers.</li> </ul>
	<p>Personal Agency (the ability of the individual to initiate and direct actions for a given purpose).</p>	<p>Perceived Control (The degree of control a person believes to have over a behavioral performance. Perceived control is a function of control beliefs).</p>	<p>Control Beliefs</p> <ul style="list-style-type: none"> <li>• Young men believe they have full control of their sexual behavior.</li> <li>• Young men's sexual behavior is their own choice, not dictated by someone else.</li> <li>• Many young men believe peers influence sexual behavior but not control it or dictate it.</li> </ul>

*(table continues)*

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
Information, Knowledge, and Skills	<ul style="list-style-type: none"> <li>• <u>Most of the young men heard about HIV/AIDS and STIs</u></li> <li>• <u>Most young men believe HIV/AIDS and STIs are not a major risk in Maldives.</u></li> <li>• <u>Knowledge of HIV/AIDS does not translate into fearing the transmission of these diseases.</u></li> <li>• <u>Condoms are not seen to prevent HIV/AIDS transmission but rather a means to prevent unwanted pregnancy.</u></li> </ul>	<p>Self-efficacy (Self-efficacy is the person's degree of confidence in his/her own ability to perform a behavior in the face of all challenges and obstacles).</p>	<p>Efficacy Beliefs</p> <ul style="list-style-type: none"> <li>• The disapproval of parents is not a barrier: young men can hide their sexual behavior from their parents</li> <li>• The disapproval by religious scholars does not appeal to many young men.</li> </ul>

*(table continues)*

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
The salience of the Behavior	<ul style="list-style-type: none"> <li>• Nonmarital sex is an important aspect of behavior for young men.</li> <li>• Nonmarital sex is an important subject of frequent discussion among peers.</li> <li>• <u>A young man with adventurous nonmarital sexual affairs to share with peers is seen as a cool person.</u></li> </ul>		
Environmental constraints/Limitations And enablers	<ul style="list-style-type: none"> <li>• <i>Access to a private place to practice nonmarital sex can be a constraint,</i></li> <li>• Familiarity with a girl from studying or working together facilitates nonmarital sex.</li> <li>• Familiarity and communication over social media facilitate nonmarital sex.</li> <li>• Having money to pay for a room in a guest house facilitate nonmarital sex.</li> <li>• Having a friend who can allow access to his private place/room facilitate nonmarital sex.</li> </ul>		

(table continues)

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
Habit	<ul style="list-style-type: none"> <li>• The predictable absence of parents from home facilitate access to a private place and facilitate nonmarital sex.</li> <li>• <u>Some national Maldivian pharmacist can restrict access to condoms and contraceptive for underage boys and girls.</u></li> <li>• <u>The underground market of medication to induce abortion reduces the fear of pregnancy out of wedlock.</u></li> <li>• Despite the existence of laws against nonmarital sex, laws are not strictly enforced.</li> <li>• Guest house managers are flexible in renting out rooms for nonmarried young people.</li> </ul>		
	<ul style="list-style-type: none"> <li>• <u>Nonmarital sex has become a wide practiced habit among young men (and women).</u></li> </ul>		

*(table continues)*

1 <sup>st</sup> Level Predictors	2 <sup>nd</sup> Level Predictors	3 <sup>rd</sup> Level Predictors	4 <sup>th</sup> Level Predictors
	<ul style="list-style-type: none"> <li>• <u>The use of condoms to prevent sexual diseases transmission is not a habit among most young men.</u></li> <li>• <u>Multiple concurrent sexual relations have become a habit among young males.</u></li> <li>• <i>Men-to-men sex is not a habit.</i></li> </ul>		

*Notes.* Underlined statements = risky attitude or practice, *Statements in italic letters* = safe attitude or practice.

### Summary

I designed this qualitative case study to answer two research questions related to HIV transmission: (a) What are the risk-reduction factors in the nonmarital sexual behavior of Maldivian male youth that contribute to protecting them from contracting HIV? and (b) What are the predictors of safe and unsafe nonmarital sexual behavior among the Maldivian male youth? To answer the first research question, I closely examined the risk and risk-reduction factors associated with the nonmarital sexual behavior of Maldivian youth. I concluded that the current low HIV prevalence rate in Maldives is largely attributable to long-standing protective social values and norms that discouraged nonmarital sex and MSM. These social values and norms seem to have reduced the risk of HIV transmission, despite the low levels of HIV knowledge. The facts that HIV knowledge is still low, that the long-standing protective social values and norms

are fading away, and that risky sexual behaviors among young men are rising, however, constitute a worrisome situation that may soon change the HIV low status of Maldives.

To answer the second research question about the predictors of safe and unsafe nonmarital sexual behavior of Maldivian male youth, I found that all of the IBM constructs able to offer good prediction of safe and unsafe nonmarital sexual behaviors among Maldivian male youth. I captured a total of 11 predictors of nonmarital sexual behavior among Maldivian male youth: two predictors of safe nonmarital sexual behaviors and nine predictors of unsafe nonmarital sexual behaviors. The two predictors of safe nonmarital sex are widespread intention belief that men-to-men sex is unacceptable, and limited access to safe and affordable private places to engage in nonmarital sex. The nine predictors of unsafe nonmarital sex are (a) the belief that nonmarital sex is a cool behavior, (b) the belief that nonmarital sex is a desired adventure, (c) the belief that nonmarital sex is a way of coping with stressful work and life situations, (d) the misinterpreting low HIV prevalence to mean no HIV risk, (e) the misconception that condoms are only means for preventing unwanted pregnancy, (f) the desire to have some adventurous nonmarital sexual engagement to share with peers, (g) restricted access to condoms for minors who intend to engage in nonmarital sex, (h) nonmarital sex has become a widely practiced habit among young people, and (i) increased engagement in concurrent multiple sexual partnerships. In Chapter 5, I discuss the interpretation of the findings of this study and my recommendation for further research. I also discuss the implications of this study on positive social change.



## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to investigate the nonmarital sexual behavior of Maldivian male youth to determine the risk and risk-reduction factors related to HIV transmission and to identify the predictors of safe and unsafe sexual practices. I followed a qualitative case study tradition to guide the study. I identified nine risk factors and seven risk-reduction factors in the nonmarital sexual behavior of young Maldivian men. Furthermore, I identified 11 predictors of nonmarital sexual behavior of Maldivian male youth and the perceptions underlining these predictors. In this chapter, I present an interpretation of the findings of the study and how these findings compare to the literature review presented in Chapter 2. I also discuss the limitations, recommendations, and social change implications of the study and my findings.

### **Interpretation of the Findings**

In this section, I discuss the main findings of the study and how these findings confirm, disconfirm, or extend knowledge in the field. I also discuss the following topics: (a) how the risk and risk-reduction factors in the nonmarital sexual behaviors of Maldivian male youth identified in this study compare with similar factors identified and discussed in relevant peer-reviewed literature, (b) how the predictors of nonmarital sexual behavior of Maldivian male youth identified in this study compare with similar predictors identified in relevant peer-reviewed literature, (c) areas where I extended knowledge in the field of nonmarital sexual behavior and HIV transmission, and (d) how the findings of this study relate to the theoretical foundation of the study.

### **Risk and Risk-Reduction Factors Identified in This Study**

At least seven of the HIV risk and risk-reduction factors in the nonmarital sexual behavior of Maldivian young men identified in this study confirm the findings from previous peer-reviewed literature.

**Low HIV knowledge and false sense of security against HIV transmission.** I identified two interlinked risk factors associated with HIV transmission: low HIV knowledge and a false sense of security against the transmission of HIV/AIDS. This finding is consistent with similar findings from several studies. The findings of the Thanavanh et al. (2013) study of HIV-related knowledge, attitudes, and practices among male high school students in Lao People's Democratic Republic, as well as the study of Mohamed and Mahfouz (2013) in Sudan, both confirmed the prevalence of low HIV knowledge associated with misconceived sense of security against the transmission of the disease. The false sense of insecurity could be linked to overconfidence or trust in the HIV status of a sexual partner or believing that a healthy-looking person is HIV-free. Such misconceptions are attributable to low comprehensive understanding of HIV transmission.

**Low and inconsistent condom use.** In this study, I identified low and inconsistent condom use as a risk of HIV transmission among the Maldivian male youth. I discovered a common misperception that condoms are means of preventing unwanted pregnancies rather than means for HIV prevention. This finding is consistent with the finding from the 2004 Reproductive Health Survey of Maldives, which indicated that 45% of sexually active never-married youth never used condoms (Merhi et al., 2004).

Moreover, Merhi et al. discovered that 50% of the participants agreed that condoms can protect against HIV/AIDS, while 35% did not know whether condoms can provide that protection. Through a study conducted in Thailand, Chamrathirong and Kaiser (2012) concluded that the use of condoms by Thai men with their casual sexual partners is positively related to education, condom knowledge, nonprofessional occupation, short relationship duration, and lack of history of paid sex. Also, Li et al. (2014) confirmed that negative attitudes toward condom use escalated the spread of HIV among some Chinese communities. In an analysis of data from the AIDS Indicator Surveys and DHS, which covered 13 sub-Saharan countries in which HIV prevalence is very high, De Walque and Kline (2011) confirmed the low use of condoms in these countries. Several scholars including Weller and Davis-Beaty (2002), Reynolds et al. (2013), and Holmes et al. (2004) confirmed the effectiveness of the consistent use of condoms in HIV prevention.

**Peer pressure has a significant impact on sexual behavior.** I identified peer pressure, both positive and negative, as having a significant impact on the sexual behavior of young Maldivian males. Although the direct and indirect peer pressure for engaging in nonmarital sex is more common among Maldivian male youth, there are small groups that place pressure on peers to refrain from nonmarital sex. This finding confirms similar findings and conclusions from several studies. For instance, G. C. Patton et al. (2016) concluded that peer pressure has a significant role in shaping the sexual behavior of adolescents and HIV prevention. In addition, adolescents whose peers are involved in risky behaviors tend to behave the same way (G. C. Patton et al., 2016).

Masatu et al. (2009) identified peer pressure as the main reason behind the engagement of Tanzanian school adolescents ages 10-14 years in risky sexual activities.

**Early age initiation of sexual activity.** Initiation of sexual activity at an early age is globally considered an HIV transmission risk factor (Dimbuene et al., 2014; Hall et al., 2004). Masatu et al. (2009) identified a very early age (i.e., 10-14 years) of sexual activity initiation among school students in Tanzania as a predictor of HIV transmission. In a study of the predictors of risky sexual behavior among young people in Botswana, Letamo and Mokgathe (2013) identified early sexual debut (i.e., before reaching age 15 years) as one predictor of risky sexual behavior among male adolescents. Silverman (2011) emphasized the fact that many adults engaged in sex work or drug injection initiated these risky behaviors before the age of 18 years. Silverman disclosed that some adolescents in Maldives start their sexual engagement at the age of 15 years, which increases their vulnerability to contracting HIV. Most Maldivian male youth initiate sexual activity around the age of 17 years, which reduces the risk of HIV transmission (Silverman, 2011). Finally, the results of the 2004 Reproductive Health Survey in Maldives indicated that 9% of never-married youth were sexually active, with two thirds having had their first sexual intercourse before the age of 18 years (Merhi et al., 2004).

**Concurrent multiple sexual partnerships/Commercial sex workers.** In this study, I confirmed the prevalence of unpaid concurrent multiple sexual partnerships as an HIV transmission risk factor among Maldivian male youth. This finding is consistent with the findings and conclusions from several studies including Zuma et al. (2012) in

South Africa, Mohamed and Mahfouz (2013) in Sudan, Shipitsyna et al. (2013) in Russia, Hasse et al. (2010) in Switzerland, and Letamo and Mokgathe (2013) in Botswana.

I also identified the prevailing tendency among most Maldivian male youth to stay away from commercial sex workers as an HIV-transmission risk-reduction factor. Unsafe sex between sex workers and their clients is a crucial route of HIV transmission in Asia (Rojanapithayakorn, 2006). Several scholars linked HIV transmission or the risk of the HIV transmission to the sexual engagement of young men with both male and female commercial sex workers (Gregson et al., 20002; Langeni, 2007; Zuma et al., 2012).

**Use of drugs among young people.** Consistent with the findings from several studies, I confirmed the rising use of drugs among young Maldivian males as an HIV transmission risk. The National Drug Use Survey in Maldives conducted by the United Nations Office on Drugs and Crime (2013), as well as the World Bank (2014) report on youth in Maldives provided statistics on the prevalence of drug use in Maldives among young people. Aceijas et al. (2004) reported that 25 countries around the globe have over 20% HIV prevalence among people injecting drugs. Aceijas et al. cited official reports from the United Nations estimating that 10% of the worldwide cases of HIV/AIDS are attributed to injecting drugs. Mathers et al. (2008) estimated that worldwide, around 15.9 million people ages 15-64 years might inject drugs, of whom around 3 million are HIV-positive.

### **The Predictors of Nonmarital Sexual Behavior Identified in This Study**

Looking at the 11 identified predictors of safe and unsafe nonmarital sexual behavior from the point of view of confirming, disconfirming, or extending knowledge in the field, seven predictors confirm the findings of the peer-reviewed literature. These are:

**The belief that nonmarital sex is a way of coping with stress:** The finding of this study that some young Maldivian men engage in nonmarital sex as a mechanism to cope with stress, especially for those working in remote resort islands, is consistent with the findings from peer-reviewed literature. For instance, Zaleski, Levy-Thors, and Schiaffino (1993) studied stress coping mechanisms among fresh college students, concluding that college students with high socioeconomic status, low religiosity, and limited perceived family support tend to engage in risky sexual behavior as a mechanism to cope with stressful college life.

**Misinterpreting low HIV prevalence to mean no HIV risk:** Low comprehensive HIV knowledge is the root cause of many misconceptions including the wrong belief that low HIV prevalence justifies the practice of unsafe sex. The 2004 reproductive health survey in Maldives found no significant correlation between the level of sexual health knowledge and the level of risky behaviors. Regarding HIV misconceptions in Maldives, 13% of the never-married youth who participated in the 2004 reproductive health survey believed that HIV can be transmitted by eating with an infected person, while 34% did not know if an HIV infected person can look healthy (Merhi et al., 2004). Several researchers have investigated various types of HIV misconceptions and have identified low HIV comprehensive knowledge as the root cause

(Mohamed & Mahfouz, 2013; Tompkins et al., 2006). Scholars including Fennie and Laas (2014) have claimed that although HIV knowledge may be high among some adolescents, these young people may tend to underestimate personal risk or may desire to experiment risky sexual behaviors.

**Condoms viewed as means for preventing unwanted pregnancy only:** My finding that many young Maldivian male youth view condoms as a contraceptive rather than a means for HIV prevention is consistent with the misconception reported by Mohamed and Mahfouz (2013) and Tompkins et al. (2006) among Sudanese living in Sudan and in the United States. The results of the study of Lammers et al. (2013) on condom use, risk perceptions, and HIV knowledge among Nigerians confirmed that low-risk perceptions of engaging in unsafe sex and not knowing that condoms prevent HIV infections are reliable predictors of risky sexual behavior among men. Furthermore, Merhi et al. (2004) concluded that 35% of the never-married youth who participated in the 2004 reproductive health survey in Maldives did not know that condoms can protect against HIV transmission.

**The desire to have adventurous nonmarital sexual to share with peers:** My finding that young Maldivian men desire to engage in nonmarital sex by way of having adventurous stories to share with peers confirms the results of the study of Nyanzi et al. (2005). These scholars disclosed the tradition among young motorbike-taxi riders in Uganda to engage in sex to prove to their peers that they have reached manhood. Sexual debut among these young men is a public venture, and they perceive that their peers must know about it. A young man scores high social 'points' among his peers based on his

nonmarital sexual activity and the number of acquired sexual partners (Nyanzi et al., 2005).

**Restricted access to condoms for minors:** The finding that some Maldivian pharmacists may refuse to sell condoms to minors who intend to engage in nonmarital sex confirms the finding of Mavedzenge et al. (2011) that societies that do not approve sexual activity by young people tend to limit young people's access to HIV preventive care.

**Nonmarital sex has become a widely practiced habit among young people:** The finding that nonmarital sex has become a widely practiced habit among young people in Maldives is consistent with the conclusions of the mega-study of Kirby et al. (2007) and the National Research Council and Committee on Population (2005). Researchers studying the changing transitions to adulthood in developing countries have shown that the average age of marriage in most developing countries is delayed due to school attendance. The percentage of young people practicing premarital sex before the age of 18 years, however, is increasing. There is a high likelihood that the first sexual experience for most young people will occur before marriage.

**Increased engagement in concurrent multiple sexual partnerships:** The finding that increased engagement in concurrent multiple sexual partnerships is a predictor of unsafe sex among Maldivian male youth is consistent with the conclusions of the studies of Shipitsyna et al. (2013) in Russia, Zuma et al. (2012) in South Africa, and Hasse et al. (2010) in Switzerland.



### **New Knowledge in the Field of Nonmarital Sexual Behavior**

Six of my findings (two factors and four predictors) extend knowledge in the study of the nonmarital sexual behavior among young people in general and in the Maldives more specifically.

**Existence of protective social values and norms.** In this study, I identified some specific social values and norms in Maldives which discourage nonmarital sex. For instance, the society inculcates in young people social norms and values emphasizing that nonmarital sex is a sinful behavior strongly prohibited by God. Out of wedlock pregnancy is an immoral and shameful act. It is interesting to note that 69% of the never-married youth who participated in the 2004 Reproductive Health Survey in Maldives suggested that compliance with religious traditions is the best way to avoid HIV contraction (Merhi et al., 2004).

**Strong prohibition of MSM.** The common Maldivian social values and norms promote a very strong culture against the practice of sex between men, or homosexuality.

**Parental pressure.** I also identified pressure from parents who disapprove nonmarital sex to enforce the established social norms and values and to ensure compliance of their sons with these protective social values and norms. These social norms and values explain why HIV prevalence has been low in Maldives, despite the low HIV knowledge.

I identified a growing disregard for these protective social values and norms among young Maldivian males. In contrast to the protective social values and norms that discourage nonmarital sex, I identified a new growing attitude among young males who

consider nonmarital sex as a cool behavior and as a desired adventure to share with their peers. This new attitude underlines the ever-increasing nonmarital sex in which young Maldivian males are engaged in with their female peers in Malé; however, most young men continue to comply with the social values and norms that emphasize the “prohibition” of sex between men. Limited opportunities of privacy to practice nonmarital sex is one new finding of this study that extends knowledge in the field of studying nonmarital sexual behavior among young people in general and in Maldives more specifically. It is worth noting that in their study of risky behaviors in Maldives, Ibrahim et al. (2012) found a significant association between the availability of financial resources and risky sexual behaviors. Of the college students who participated in the study, 56% were receiving monthly allowances and had a twice higher risk of engaging in risky sexual behaviors compared to those without monthly allowances (Ibrahim et al., 2012). The researchers suggested that students with monthly allowances were able to spend more money on dating girls (Ibrahim et al., 2012).

### **How Findings of This Study Relate to the Theoretical Foundation**

Through this study, I confirmed the strong relevance and applicability of the RAA/IBM to predict and explain the nonmarital sexual behavior of young Maldivian men. I verified that all the factors hypothesized by the authors of the RAA/IBM—namely, intentions, knowledge and information/skills, environmental constraints and enablers, habits, and salience of the behavior—were important predictors of the nonmarital sexual behavior of Maldivian male youth. My analysis of the predictors of the safe and unsafe nonmarital sexual behavior included in Table 3 provided an explicit

mapping of the degree of relevance and applicability of each of the IBM constructs to the sexual behavior of young Maldivian males.

### **Limitations of the Study**

This study contained two limitations. First, the sample of study participants did not include females because it is not culturally acceptable in Maldives for a male researcher to interview young females on nonmarital sexual behaviors and practices. If young Maldivian females could have participated in this study, the findings would have been true for the entire community of young people in Maldives. As of now, the findings of this study pertain only to the community of Maldivian male youth. Second, to encourage the participants to talk freely about the sensitive topic of the research without the fear of disclosing their private sexual behavior, I opted to ask the study participants to describe the predominant sexual behavior among the community of young Maldivian males. The collected data would have been more reliable if the participants could have described their sexual behavior.

### **Recommendations**

In the literature review that I conducted as part of this study, I uncovered that most of the academic research in sexual behavior, especially among young people, related to HIV/AIDS has focused on sub-Saharan Africa where the current HIV prevalence is highest and has reached alarming levels. There is a shortage of academic research in the determinants and predictors of risky and safe behaviors related to HIV transmission and prevention in the South Asia region. Academic researchers are encouraged to address the current knowledge gap in the area of safe and unsafe sexual

behavior, especially among young people, in South Asia. Without such knowledge, public policy practitioners will find it challenging to design and implement evidence-based HIV prevention interventions.

The range of information available in international and regional reports on HIV in the Maldives is somewhat limited. For instance, almost all the statistical tables in the *UNAIDS Prevention Gap Report of 2016* indicated that data were not available on Maldives. It was not possible to find in regional and international reports data on Maldives about the percentage change in new HIV infections, distribution of new HIV infections by mode of transmission, HIV prevalence among the different categories of key populations, information on HIV testing, and condom use. Given the limited number of people living with HIV in Maldives, the generation and reporting of such data would certainly not cost much. Such data, however, would allow public policymakers to assess HIV trends and to make informed decisions to protect people from HIV transmission. I strongly recommend that the relevant public health authorities in Maldives address the existing HIV information and reporting gaps.

Given the important and exciting findings of this study, I recommend that interested researchers undertake a similar investigation into the nonmarital sexual behavior of young Maldivian females. This study revealed essential knowledge that relevant practitioners can use for developing/enhancing HIV prevention programs among young males. Similar knowledge about the community of young females could equally contribute to improvements in the HIV prevention care and services for young females. I also recommend that interested researchers use the findings of this qualitative case study

to develop and apply quantitative research tools with the objective of quantifying the prevalence of safe and unsafe sexual behavior. Such statistics would provide needed knowledge about the scale of risky behaviors—which, in turn, could assist in costing the necessary HIV preventive care and services.

### **Implications**

Through this study, I aimed to bridge the literature gap related to the failure of the premise of a relationship between HIV knowledge and HIV prevention (Catania et al., 1990; Jemmott et al., 1992; UNAIDS, 2016) in order to explain why HIV prevalence in Maldives is low, despite low HIV knowledge. Focusing on the population of Maldivian male youth and using the RAA/IBM (Fishbein & Ajzen, 2011; Yzer, 2012) as a theoretical foundation, I concluded that other factors related to the nonmarital sexual behavior of young Maldivian men—namely, intentions, environmental constraints and enablers, habits, and salience of the behavior—are important factors that explain the low HIV prevalence in Maldives, despite the low HIV knowledge. Furthermore, I contributed new knowledge and in-depth understanding of the risk and risk-reduction factors in the nonmarital sexual behavior of young Maldivian men that have direct bearing on HIV transmission and prevention among the study population.

This new knowledge and in-depth understanding of the nonmarital sexual behavior of Maldivian male youth has profound potential for positive social change agenda about HIV prevention. Since the discovery of HIV in 1984, the virus has infected over 75 million people and has led to the death of over 35 million people (WHO, 2016a). The high HIV-related morbidity and mortality rates, coupled with reduced quality of life

and loss of economic productivity among communities with high HIV prevalence, are good reasons for public policy actors to be concerned about this disease. Because risky behaviors are the leading cause of HIV transmission, positive behavioral change is the best option to improve HIV prevention and protection (Fisher & Fisher, 1992; Masatu et al., 2009; Letamo & Mokgathe, 2013). The new knowledge and in-depth understanding of the risky behaviors that contribute to HIV transmission among Maldivian male youth contributed by this study are of paramount relevance and importance to the introduction of positive social change at individual, family, organizational, and societal levels. At the individual level, my findings explained a range of behavioral transformation young men should consider for enhancing individual protection against HIV transmission. For example, young men should consistently use condoms when engaged in nonmarital sex, should carefully select their sexual partners, and should avoid concurrent multiple sexual partnerships. At the family level, my findings emphasized the role of closer parental engagement and frank discussion of issues of sexuality in enhancing HIV protection among adolescents. I also uncovered young men's growing disregard of social values and norms that discourage nonmarital sex. For public health authorities and public policy practitioners, I listed nine key predictors of unsafe nonmarital behavior among young Maldivian men. I concluded that the disclosed risky social behaviors could alter the current low HIV prevalence Maldives is enjoying and recommended behavior changes to protect Maldivian male youth from contracting HIV. The goals of the social behavior changes that I advocate through this study are to save human lives from being lost to HIV

and to improve the quality and enjoyment of life for young people and the society at large.

The fact that I was able to adequately fulfill the purpose of the study and answer the research questions attests to the adequacy and suitability of the research design and the selection of the theoretical foundation. The use of a qualitative research method allowed the participants to freely express their personal experiences using their own words, confirming the views of Gregory and McKie (1996) about qualitative research methods. The successful application of a qualitative case study approach also confirmed the argument of Corbin and Strauss (2008) that this approach is most helpful when the purpose of the study is to understand rather than measure a social phenomenon and to discover variables, rather than testing them. Moreover, the selection of a qualitative case study approach allowed me to apply a constructivist paradigm whereby I was able to see truth as relevant and dependent on the perspective of the participants (Stake, 1995; Yin, 2003). The use of a purposeful sample of information-rich participants, as M. Q. Patton (1990) defined, coupled with the indirect questions (i.e., talking about the behavior of peers rather than the behavior of the participants), allowed me to learn a great deal about the sensitive nonmarital sexual behavior of Maldivian male youth from a small but well-informed group of voluntary participants. Finally, the ability of the RAA/IBM (Fishbein & Ajzen, 2011) as a theoretical foundation to explain the low HIV prevalence in Maldives despite the low HIV knowledge confirmed the relevance and applicability of the RAA/IBM to the study of the predictors and determinants of sexual behavior pertinent to HIV transmission.

The findings of this study have specific implications for public policy practitioners concerned with the prevention of HIV transmission. First, policy practitioners must realize that the current low HIV prevalence rate is mainly due to long-standing social values and norms that discouraged nonmarital sex. These protective social values and norms are fast eroding. A culture of viewing nonmarital sex as a cool behavior is emerging among young Maldivian men. Second, the current low HIV prevalence rate in Maldives is at risk of unfavorable change unless the predominant risky sexual behavior among young men is changed. Third, policy practitioners should design behavior change interventions among young men to restore the eroding protective social values and norms, and to promote the replacement of risky sexual practices with safe sex practices. Life skills education that is delivered by trained teachers, parents, and peers, coupled with improved access to condoms, are essential interventions that have produced good results in many other countries (Holmes et al., 2004; Reynolds et al., 2013; Malunguzaa et al., 2010; Weller & Davis-Beaty, 2002) and could prevent the spread of HIV in Maldives.

### **Conclusion**

In this study, I explained why HIV prevalence is low while HIV knowledge is low among young Maldivian male youth. The low HIV prevalence rate in Maldives is largely attributable to long-standing protective cultural values and norms that discourage nonmarital sex and MSM. These social values and norms and the social/parental pressure on young people to comply with them have reduced the risks of HIV transmission. I also revealed the fact that there is a growing disregard for, and emancipation from, these social values and norms among Maldivian male youth. Without the swift introduction of



well-planned positive behavioral change interventions such as the promotion of safe sex and addressing the widespread HIV misperceptions, the low HIV prevalence status Maldives is enjoying currently could change soon.

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### Appendix A: List of Potential Interview Open Questions

Good morning (afternoon/evening). My name is Mohamed Elmunir Safieldin.

Thank you for accepting to participate in this interview. This interview is part of doctorate research on the sexual behavior of Maldivian male youth. This study aims to understand the factors that influence the sexual behavior of young Maldivian men. I will not ask any personal questions, and you are not expected to talk about your sexual behavior. We will talk about what you know of the sexual behavior of people of your age, your peers. Your participation in this interview is fully optional. You can opt out of this interview any moment you don't feel comfortable. The final report of this study will describe and discuss the aggregate data and findings and will not include the name of any participant.

Tape recording instructions:

If it is ok with you, I wish to tape-record our conversation so that I can have an attentive conversation with you.

The consent form:

Before we start, please take a few minutes to read and sign this consent form which is intended to inform of you of the nature of the research, your rights as a participant, and the measures I am taking to fully protect your identity and rights.

Now that you have read and signed the consent form, let us start the interview if you are ready.

Personal Note for the Researcher:

The questions below and the order in which they are listed are not rigid.

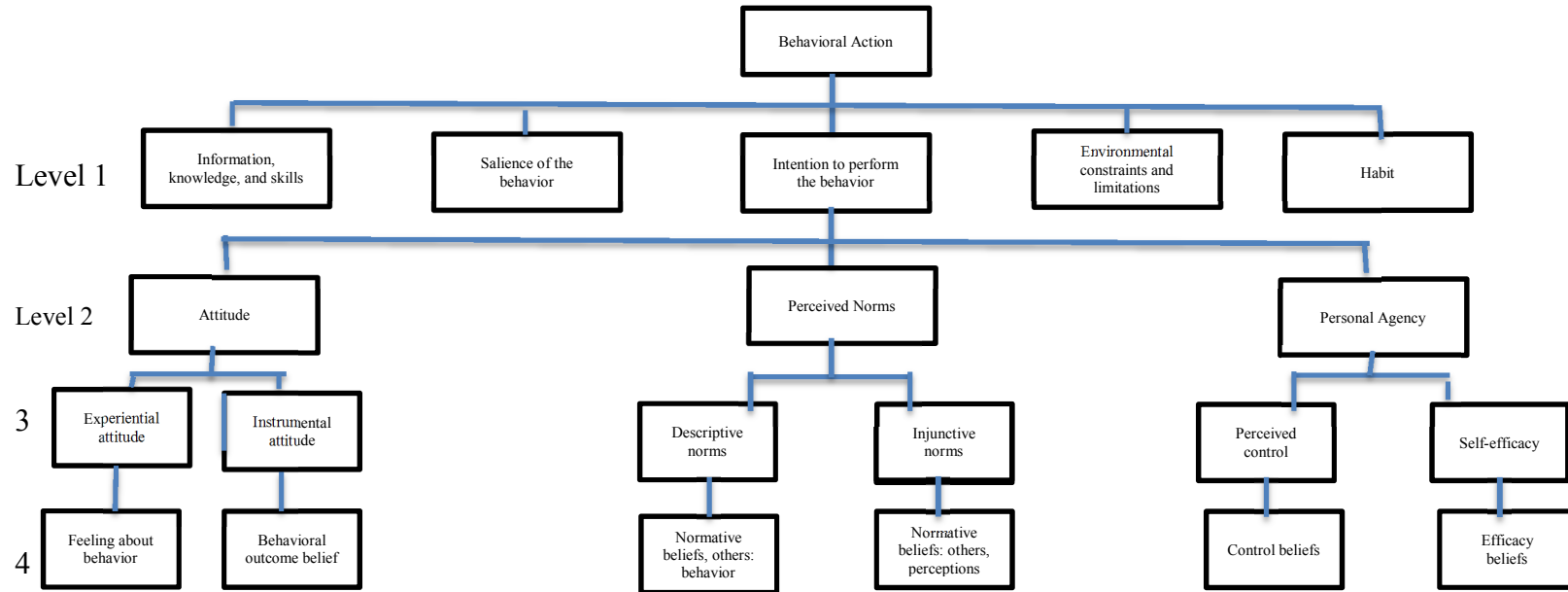
Focus on creating a conversation using these potential questions. The flow of the conversation should guide the follow-up questions and the order in which questions are asked to stimulate a conversation.

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- 1- What intention/s usually stand behind the engagement of a young man in nonmarital sex with girl?
- 2- When a young man is presented with an importunity for nonmarital sex with a girl, but he restrains himself from such an action, what is likely to prompt such a decision?
- 3- What would be the strongest reason for a young man to avoid engagement in sex with another man?
- 4- Other than the fear of contracting HIV, what would influence the decision of your peer young men not to engage in nonmarital sex with a woman or in sex with another man?
- 5- How important is the level of HIV-awareness in shaping the sexual behavior of young people? What other factors contribute to shaping the sexual behavior of young males?
- 6- How important are culture and religion in influencing the sexual behavior of a young man?
- 7- Are there specific factors in the social environment around young men that influence their sexual behavior?

- 8- To what extent do young men feel that their sexual behavior must follow social norms and the expectations of their elders?
- 9- To what extent do young men feel they have full control over their sexual behavior?
- 10- To what extent do young men feel that they must act the same way as their peers?
- 11- If a young man is engaged in a nonmarital sexual relation, would he feel ashamed of such a behavior? Would he feel proud about it? Or would he feel it is just normal?
- 12- In your view, does a young man's engagement in a nonmarital sexual relation impacts (negatively or positively) his self-respect/self-esteem?

Appendix B: Schematic Presentation of the IBM Constructs



Appendix C: Public Announcement for the Recruitment of Study Participants

**Take Part in Understanding What Protects Young People from HIV/AIDS**

The spread of the sexually transmitted infections (STIs) including the human immunodeficiency virus (HIV) which causes the acquired immune deficiency syndrome (AIDS) is a global concern. Worldwide more than 75 million people are infected with the virus, and over 35 million people lost their lives as a result of HIV infections. In 2015 alone, 2.1 million people became newly infected with HIV. HIV/AIDS is a disease that has no cure. Hence, people need to protect themselves from the virus. The HIV epidemic is a major threat to public health and economic productivity.

An in-depth understanding of the factors that influence the sexual behavior of youth is of paramount importance to the question of how to protect young people from HIV/AIDS and other STIs.

Mr. Mohamed Elmunir A. Safieldin is carrying out an academic study of the sexual behavior among Maldivian male youth and would like to invite male undergraduate students (20 to 24 years) to voluntarily participate in short interviews. The identity of the participating students is fully protected, and no names will be quoted. If you are interested to participate or learn more about this study, please contact me.