****­**

This work is dedicated to my mother for reminding me that all accomplishments require a small, first step and also to my father for inspiring me to not only reach for the stars, but the galaxies beyond our imagination.

“There is no tool for development more effective than the education of girls. No other policy is as likely to raise economic productivity, lower infant and maternal mortality, improve nutrition and promote health”

 UN Secretary General Kofi Annan UNICEF 2008 Girls Education Campaigns

Table of Contents

[Prologue 6](#_Toc449486311)

[Chapter I- Constructing MHM as a Question Instead of a Goal 9](#_Toc449486312)

[Introduction 9](#_Toc449486313)

[Theoretical Framework 13](#_Toc449486314)

[Methodology and Study Design 13](#_Toc449486315)

[Chapter II: Discourses as the Framework for Technical Intervention 15](#_Toc449486316)

[The Discourse of Development 16](#_Toc449486317)

[Feminism and Development from Inside the Third World 21](#_Toc449486318)

[Interventions and Technicians 25](#_Toc449486319)

[Summary of the Literature 28](#_Toc449486320)

[Chapter III: The History of MHM as an Issue of Development Disourse 29](#_Toc449486321)

[Menstrual Hygiene Management in the West 29](#_Toc449486322)

[MHM and Development as a Discourse 31](#_Toc449486323)

[The People 32](#_Toc449486324)

[The Definitions of Adequate Menstrual Hygiene Management 34](#_Toc449486325)

[The Qualitative Evidence of MHM 35](#_Toc449486326)

[The Quantitative Evidence of MHM 39](#_Toc449486327)

[Chapter IV: Case Study in Lahore, Pakistan 45](#_Toc449486328)

[Chapter V: The Critique of MHM as a Discourse and Intervention Strategy 55](#_Toc449486329)

[Chapter VI: Reflections from the Other Side 61](#_Toc449486330)

[Appendix 62](#_Toc449486331)

[Works Cited 65](#_Toc449486332)

#

# Prologue

 As a student of Global Studies, I have grappled with the difficult nature of assumptions. Assumptions can exist on a scale of possible harm- some can exist as passing ignorance and others can sometimes lead to structures of oppression like institutional racism. Academia has frequently and historically been a architect of many assumptions by perpetuating ideas that lack empirical evidence or ethical foundations. A great example of this oversight is the underlying assumptions of Orientalism, through which a few white men created and shaped scholarship on the Middle East and the Muslim world based on their expectations instead of in dialogue with the subject[[1]](#footnote-1). While some assumptions do come from harmless ignorance, I believe it is the duty of researchers to take a step back and reflect on their preconceptions. We should ask ourselves why a particular approach is relevant to the topic of interest, and why we chose this topic to begin with? What assumptions are we making and bringing to this research? Are our assumptions based on evidence?

 These are the questions I began asking myself half way through the first draft of my honors thesis, when the results of my fieldwork were not matching with the established literature. My initial research assessed possible obstacles to the introduction of menstrual health management (MHM) education in Pakistani schools. My thesis was based on the research of Tazeen Ali of Aga Khan University of Karachi, Pakistan. Ali found that government schoolgirls were more knowledgeable and had fewer misconceptions about menstruation than their peers in private school. The literature on MHM suggests that proper MHM education and resources are important in the enrollment of young girls in the developing world. I was inspired to research this topic, especially since finding out possible obstacles in MHM education may decrease the disparities in continued female enrollment in school. Thus, in June 2015, I went into the field to interview administrators in Lahore, Pakistan to find out why this disparity in MHM education existed.

 I returned home to Chapel Hill, NC and began to transcribe my interviews. Slowly, I uncovered that most administrators **did not** believe that MHM issues were critical obstacles in the retention of female students. Instead, they took our interviews as opportunities to discuss the issues they experienced as educators, which included illiterate parents, the need for students to work at home, and also families who could not afford the money and time to send their girls to school.

 I had to take a step back from my research. If these administrators did not believe that MHM was an issue, were these participants an exception to the literature? Were the administrators wrong? Or was there another underlying variable complicating the matter? Moreover, I began to ask, were these MHM interventions within the literature including the perspectives of these administrators relating to female enrollment? Why do we even believe that MHM is an issue? What evidence is there that it is such a dominant cause/obstacle to continued female education?

 In the fall of 2015, I returned to the literature to find answers to my questions and to assess my own assumptions. Interestingly in July of 2015, while I was in the field, the London School of Hygiene and Tropical Medicine and the University of Oxford completed two major reviews on the effect of MHM interventions and significance of the research relating to school enrollment[[2]](#footnote-2). Both reviews found that there **was not** a statistically significant relationship between MHM programs and increased or maintained enrollment of female students[[3]](#footnote-3). Previous research, which was founded on feminist, qualitative methodologies, established that MHM was an issue young girls experienced[[4]](#footnote-4). This previous research was funded and organized with the help of organizations like WASH and the Rockefeller Foundation and private sector players like Proctor and Gamble[[5]](#footnote-5). Young girls in Tanzania, India, and Uganda cited the lack of functional absorbents (like pads), locked toilets, and supportive female teachers as limiting their ability to go to school[[6]](#footnote-6). However, interventions providing them these resources has not lead to statistically significant improvements to female enrollment[[7]](#footnote-7).

 In 2013, Marni Sommer, a key scholar in the MHM field, published an article in the American Journal of Public Health calling for greater quantitative research to find evidence that these interventions have enhanced female participation and performance in school[[8]](#footnote-8). Sommer published another article two years later calling for greater quantitative research on effective MHM intervention strategies[[9]](#footnote-9). In her view, there had not been significant quantitative research to prove the connection between MHM and school enrollment or decreased educational disparity.

As a result of my own discoveries while going over my interviews, and the recent questions raised by these publications, I decided to switch the topic of my thesis. I believe a better question to ask the field of MHM is why we believe increasing access to MHM technologies (in form of absorbants) and MHM education will lead to greater educational attainment of girls in the “developing world?” I think this is a moment for feminists, anthropologists, and policy makers to take a step back and reflect on why the issue of MHM has been assumed to be so central in female empowerment/development. We need to decide how we “develop” the developing world, and when we are making assumptions about their needs based on our own desires, values, and experiences.

# Chapter I- Constructing MHM as a Question Instead of a Goal

## Introduction

 Around the world, menstrual hygiene management (MHM) is a set of practices that have been developed by women and girls in a variety of ways to allow females to adapt and cope with their menses[[10]](#footnote-10). These strategies are shaped by the personal preferences of women, influences from culture and tradition, and also the knowledge about the social and biological systems relating to menstruation[[11]](#footnote-11). Most issues with inadequate MHM arise in female populations that are displaced or experience movement away from the home- which is the center of most MHM related interventions. Examples of these female populations include refugee women and schoolgirls, two groups that must adapt in these new environments (like a refugee camp or a school with facilities for men) to cope with their menstruation. These two populations and their MHM issues have been the focus of interventions and research as both non-government organizations and policy makers try to provide resources and infrastructure to meet their needs[[12]](#footnote-12).

 The MHM of schoolgirls has been a topic of interest in the past ten years due to mostly feminist, qualitative research suggesting that MHM is a limiting factor in school enrollment[[13]](#footnote-13). Western academics have found that there are three major requirements for menstruating girls to be successful at school. Firstly, they need access to absorbents, which include homemade MHM technologies from rags or, more commonly, manufactured disposables. Secondly, they need locked toilets and sinks to clean themselves during the day. Thirdly, they need guidance and support from female teachers[[14]](#footnote-14).

 Multiple organizations, including Water, Sanitation, and Hygiene (WASH) initiatives and the Rockefeller Foundation, and even governments like India have made accessibility of low-cost menstrual management technology and safe, functional toilets a strategy to increase school enrollment in girls after menarche[[15]](#footnote-15). However, there is limited evidence that alleviating MHM issues will influence school enrollment in the developing world[[16]](#footnote-16). Multiple reviews of research and evaluations of interventions show that there is not a statistically significant correlation between access to MHM technology, MHM education, or MHM toilet facilities and school retention[[17]](#footnote-17). These reviews concluded that projects and research aimed at increasing MHM knowledge did positively influence subject populations in terms of education and social outlook regarding menses management[[18]](#footnote-18), but greater research is needed to quantitatively assess the correlation between poor MHM on school enrollment[[19]](#footnote-19). Thus, there needed to be evidence to suggest that having adequate MHM would lead to decreases in school absenteeism within female children.

There has been over ten years of research dedicated to qualitatively understanding issues of MHM and MHM interventions in the developing world. A major figure in the field is Marni Sommer, who originally published work in 2006 about the impact MHM interventions had on the education of Tanzanian girls. In 2013, Marni Sommer published an article in the American Journal of Public Health calling for greater quantitative research to find evidence that these interventions have enhanced female participation and performance in school[[20]](#footnote-20). Two years later, Sommer wrote another article calling for greater quantitative research on effective MHM intervention strategies[[21]](#footnote-21). Without this evidence, in Sommer’s view, effective interventions cannot take place, and these projects cannot gain funding for more research and interventions[[22]](#footnote-22). Nonetheless, development non-governmental organizations, governments, private companies, and journalists believe that there is a connection between MHM and school enrollment- leading to greater money for and awareness about these programs from the grey literature primarily coming from Africa[[23]](#footnote-23).

If we cannot quantitatively determine the impact of MHM and school enrollment, why have we continued to assume that MHM is a major obstacle in the education of girls in the developing world? While many studies have mentioned that there are many structural issues that hinder female school enrollment, why have we focused on technical obstacles over combating structural issues that have arguably a greater influence on gender disparities?

**Research Question: What are the principle agents that would focus on menstrual hygiene management as a key obstacle to female enrollment and educational achievement, over and above more structural/systemic issues like patriarchy, illiteracy, etc.?**

This paper will provide an analysis on the frameworks and foundations that allow certain health and social issues, like MHM, to gain traction and precedence in development discourse[[24]](#footnote-24). Specifically, certain ideas become suitable topics for research and intervention because certain cultural assumptions and constructions of the developing world remain uncontested, like the West’s commonly held beliefs of the East as being poor, backward, and irrational[[25]](#footnote-25). My hypothesis is that development discourse and feminist development theory provided the frameworks that created MHM as an issue and a discourse. Through analyzing the MHM literature and the principal authors of the movement, I will provide evidence of the assumptions within MHM as a discourse that frames adequate MHM as necessary and sufficient to maintain girls’ school enrollment. I will also provide a case study from my field work in Lahore, Pakistan, where I found evidence that even when needs regarding adequate MHM are met- girls continue to miss school.

The purpose of my research is not to invalidate the MHM needs of girls around the world. If girls, mothers, and teachers state that schoolgirls need absorbents, functional toilets, and privacy so that they can handle their menstruation- that is completely valid, and they should be provided these resources. However, I want to deconstruct the idea that MHM interventions is a global, universal solution to the disparities within primary and secondary education between boys and girls in many parts of the world[[26]](#footnote-26). We must be critical of the assumptions and values we ascribe to access to MHM that are either based on Western ideas or an unproven relationship to improved school enrollment. By understanding these assumptions and values, we will be better able to understand what girls really need for them to attend school, if obtaining an education is what they desire.

Chapter one will continue by discussing the theoretical framework and methodology of this research. Chapter two, the literature review, will discuss current texts on development discourse, post-development theory, feminist development theory, and issues relating to interventions and technical assistance. Chapter three will analyze the assumptions and framing values of current MHM literature and reviews of completed interventions around the world. Chapter four is focused on the research I generated from my field work in Lahore, Pakistan and how MHM access has influenced the enrollment of girls in both government and private schools. Chapter five will be a reflection on my findings and implications for further research. In chapter six, I will conclude with my own thoughts and ideas about my growth as a researcher in the Western context.

## Theoretical Framework

Multiple authors, including Edward Said, Arturo Escobar, and Chandra Mohanty, have used the work of Michel Foucalt to describe the ability of discourse to shape our conceptions of social reality[[27]](#footnote-27). As described by Escobar, critically analyzing the “mechanisms” of discourse created by institutions (like governments, academics, and organizations) aids our understanding of how certain ideas hold greater stake than others. Thus, to comprehend the role and power of discourse, one must first understand how discourse is an inherently constructed concept that then shapes our ideas about the world around us. These ideas are then implemented, producing institutions and further conceptions that perpetuate the realities hypothesized by discourse.

I will utilize Escobar’s framework for development discourse, which creates the intellectual framework for development interventions[[28]](#footnote-28). Particularly, I will deconstruct the assumptions and lenses within discourses of MHM to understand the literature and interventions that it produced. Like Escobar and Mohanty, I want to show how the discourses of development and Western feminism have constructed the Third World and the needs of the Third World woman from an outside context.

## Methodology and Study Design

 To analyze and critique the assumptions within MHM literature and interventions, I will first detail the origins and current status of MHM discourse. I will utilize Chandra Mohanty’s methods to deconstruct the Orientalizing assumptions within this literature, which often conflates the local with the global and also the experiences of girls from different cultural contexts. Mohanty critiques the “ethnocentric universalism” apparent in Western feminist discourse in her work “Under Western Eyes,” which she believes defines all women in the Third World as experiencing shared oppression, powerlessness, and object status[[29]](#footnote-29). I will detail examples of this ethnocentric universalism within MHM literature in chapter three, which has reduced the issue of girls’ enrollment to inadequate MHM.

 For chapter four, I will detail my findings from speaking to administrators of low to middle income government and private schools in Lahore, Pakistan. This income bracket was selected to remain similar to the population pools studied in Tazeen Ali’s MHM related research, which was also conducted in Pakistan[[30]](#footnote-30). Within the interview pool, five government schools and five public schools were interviewed in the Baghbanpura, Charar Pindh, and Bhatta Chowk neighborhoods of Lahore. The government schools and private schools needed to cater to low to low-middle income populations to align with the study population within Tazeen Ali’s research. Schools were assessed mainly through the tuition level, average level of education of the parents, and also the typical occupations of the parents. On average, the parents of the students had less than a high school education and the highest tuition was Rs 200. The average income bracket monthly was Rs. 9,000-10,000. The students mainly came from Punjabi and Urdu speaking backgrounds and lived within proximity of the school.

Before the interviews, administrators were given a recruitment form detailing the nature of the study and types of questions for the interview written in both English and Urdu. Written consent was received and also subjects were asked for their preferred language for the interview (English or Urdu). All subjects were female principles or head teachers, as they would have greater knowledge of how menstrual hygiene was managed at their schools. The interviews were conducted in private rooms, usually within the school of the subject. Interviews were recorded via a recording device and then later transcribed.

 Institutional ethical exemption was received from the University of North Carolina at Chapel Hill. All materials were provided in the two working languages of the country, English and Urdu. Subjects often switched between languages depending on what they felt most comfortable. Confidentiality was maintained by numbering participants and numbering the voice recordings. The principle investigator interviewed all the subjects, transcribed the interviews, and analyzed the data.

# Chapter II: Discourses as the Framework for Technical Intervention

To understand the discourses behind “adequate” menstrual hygiene management (MHM) as a development goal[[31]](#footnote-31), it is important to understand the literature surrounding the constructions of development, feminism, and intervention strategies. MHM is a fascinating topic because I believe it is a product of all three subjects. As detailed earlier, MHM researchers have described the need for adequate MHM as an obstacle to development because it can possibly limit a girl’s access to education. From a feminist perspective, the taboos that surround menstruation can limit a woman’s ability to gain independence and space outside the home[[32]](#footnote-32). MHM interventions, whether through education or through access to absorbents, can then arise as products of these discourses as ways to develop and possibly empower women.

In this chapter, I will discuss the relevant literature encompassing the discourses of development, feminism and intervention strategies. I will analyze the discourse relating to critiques of development from Arturo Escobar and Wolfgang Sachs and also critiques of Western feminism from Chandra Mohanty. The section on Western feminism will also include a short history of the Western feminist discourses that specifically related to MHM. The critiques of both development and Western feminism are important because they describe how certain intervention programs can become ineffective or unsuccessful due to the fundamental Orientalist biases within both discourses.

### The Discourse of Development

The concept of development as a necessary goal for “undeveloped” nations arose through the foreign policy efforts of Harry Truman after World War II to gain political and economic influence in the recently independent European colonies[[33]](#footnote-33). Development and the process of becoming developed is modeled after the economic and social growth trajectory of the United States. This idea is contestable because it suggests that all of humanity must follow a singular path towards economic success[[34]](#footnote-34). By defining development in terms of the history and economic journey of Western powers, development can become a mission towards the greater Westernization of the world. Wolfgang Sachs, a critic of development discourse, states that the ideological spread of development also dispersed a “Western perception of reality” that is now internalized across the globe[[35]](#footnote-35). Also, it suggests that the quickly progressing countries share greater characteristics with Western, developed powers- as compared to their counterparts that are lagging behind[[36]](#footnote-36).

This discourse of development, which describes development as synonymous to Westernization, has been critiqued by many scholars because it spreads an ahistorical and unrealistic narrative of how countries can become developed. This assumption ignores the fact that many developed countries gained economic strength through the exploitation of natural resources and labor from the colonized (and now defined as “undeveloped) regions of the world[[37]](#footnote-37). However, these ideas of development were quickly espoused by institutions, like the United States government and the United Nations, to help countries overcome the undignified and miserable conditions of the undeveloped world. In the words of Wolfgang Sachs, the development project “allows any intervention to be sanctified in the name of a higher goal”[[38]](#footnote-38), which is the civilizing mission towards Westernization.

This internalized “Western perception of reality” described by Sachs can be considered as a major reason why development projects may become unsuccessful in the non-Western world. Countries across the world implemented development projects, however the human condition did not improve over time as guaranteed by policy makers[[39]](#footnote-39). Instead of critically analyzing the frameworks of development discourse, the blame was ascribed to a homogenous Third World culture, which victimizes itself through its own stubbornness, laziness, and superstitions[[40]](#footnote-40). Experts believed that intervention projects did not work because these countries did not have the Western values of hard work and efficiency. This Third World culture became the reason why two-thirds of the world’s population was unable to progress, develop, and become more Westernized, and thus new interventions are produced to remove these cultural characters, possibly through the demands for universal education[[41]](#footnote-41).

Gilbert Rist further details the history and ideological forces that shaped the discourse of development, and like Sachs, starts the narrative with the United States President Truman, the United Nations, and the World Bank. An important aspect of development discourse that he highlights is the economic goals of development researchers and technicians. The United Nations Conference on Trade and Development (UNCATD) created the Declaration on the Establishment of a New International Economic Order (NIEO), which along with other reports, tried to establish methods to combat global poverty. Later in 1972, the President of the World Bank, Robert McNamara refocused development discourse in terms of the “basic needs approach,” which included targets like nutrition, housing, health, literacy, and employment[[42]](#footnote-42). This helped create a priority list for the urgent necessities conducive to a dignified life for the world’s poor. However, Rist states that these requirements for development were designed so that the poor could become integrated into the world, neoliberal economic system by increasing the productivity, skill levels, and health of the poorer classes[[43]](#footnote-43).

Later conceptions of development created by international organizations continued to describe development in terms of economics and also the “stages” as described earlier by Sachs. A newer initiative by the United Nations Development Program (UNDP) established the term “human development” to describe a more holistic progression towards the betterment of the developing world. Rist argues that this new conception updated and rehabilitated the concept of development from its past failures and also provided a more universalist and humanist mission for interventions in poor countries[[44]](#footnote-44). The concept of human development and its later initiatives created the “human development indicator” that removed GDP as the measurement for development and instead utilized income, life expectancy, and level of education as variables. This reorganization helped account for many previous inconsistencies, like how some countries with high GDP were still undeveloped and vise versa[[45]](#footnote-45).

Another component of the human development initiative was the “managerial” aspect of funds allocation and prioritization of social needs, which include sanitation, health, and education. Rist argues that this method, using the UNDP prescriptions for funds allocation, made it possible to “judge development investment by its efficiency and no longer by its volume.[[46]](#footnote-46)” These prescriptions were an important innovation because this led to questions as to how “development cooperation” money would be allocated to what projects. Thus, institutions had to decide what problems to address with the aid allocated, which eventually led to the reduction of “…‘development’ to what can be done through international cooperation, whereas the scale of the problems is far too great for that.[[47]](#footnote-47)”

Finally, in 2000, the Millennium Development Goals (MDG) were adopted by the member states of the United Nations to halve poverty and hunger by 2015 through initiatives to promote universal education, gender equality, health care access, environmental protection, and greater global partnerships[[48]](#footnote-48). Once again, Rist argues that this plan attempted to deconstruct the complexity of poverty through concrete objectives without understanding the “systematic linkages,” that for example, could achieve one goal but limit another. Rist’s reasoning could also apply to the health issues addressed by the MDG. What is unfortunate is that even now, these goals have not been met[[49]](#footnote-49).

 These discourses of development, which have been constructed and reconstructed since World War II, are critically analyzed by Arturo Escobar within the framework of Foucauldian discourse analysis, which deliver power to technical actors like the United Nations or the World Bank to define and implement development. Escobar, like Sachs and Rist, highlights the objects of these discourses, whether from Truman’s doctrine, UNDP prescriptions, or the Millennium Development Goals, ultimately created a power relationship between the expert and the Third World people[[50]](#footnote-50). The expert could analyze and critique the housing, agricultural practices, households, health care and education systems, and geography of the Third World to identify and study problems and obstacles. Escobar details the extensive journey of a development problem as a circuitous journey:

“Economists, demographers, educators, and experts in agriculture, public health, and nutrition elaborated their theories, made their assessments and observations, and designed their programs from these institutional sites. …Development proceeded by creating ‘abnormalities’ (such as the illiterate, the ‘underdeveloped,’ the ‘malnourished’, ‘small farmers’, or ‘landless peasants’), which it would later treat and reform… As time went by, new problems were progressively and selectively incorporated: once a problem was incorporated into the discourse, it had to be categorized and further specified… these refined specifications did not seek so much to illuminate possible solutions as to give ‘problems’ a visible reality amenable to particular treatments[[51]](#footnote-51).”

As I will detail in later chapters, the concept of inadequate MHM as a development obstacle was constructed through a similar framework as described by Escobar. The MHM problem was first identified through ethnographic field work, then defined as both a sanitation and education issue, and, finally, was allegedly alleviated through interventions providing access to education and menstrual pads. While Sachs, Rist, and Escobar do not explicitly mention MHM, their reasoning and critique of development discourse relates to the creation MHM as a discourse.

### Feminism and Development from Inside the Third World

One major critique of development during the 1970s and 1980s was its neglect of the needs of women in the developing world[[52]](#footnote-52). Statistical evidence that suggested that women and children made up the majority of the world’s poor allowed the “women’s issue” to reach the forefront in development discourse, ultimately leading to the UN declaring 1975 to be the International Women’s Year and the subsequent decade to be dedicated to improved the lives of women[[53]](#footnote-53). Multiple conferences with experts in all fields then came together to define women’s issues and disaggregate their needs from the needs of men. However, as described by Domitila Barrios de Chungara, the issues of poor women in the Global South, like access to clean water and issues to economic and political exploitation, were often in opposition to the general Western feminist concerns of sexual politics and gender oppression, like the rights of prostitutes, lesbians, and the dismantling of the patriarchy[[54]](#footnote-54).

These seemingly diverse agendas are best understood through the four chronological transition of feminist development perspectives: Women in Development (WID), Women and Development (WAD), Gender in Development (GID), and the post-colonial/post-structuralist critique of feminist development theory. In this section, I will briefly articulate the main components of these perspectives, especially in terms of how they relate to the constructions of MHM as a product of feminist development theory.

 Women in Development (WID) was the first perspective by theorists to engage the need for a feminist perspective within development discourse. The major point of WID was to bring women’s issues to the development stage, using the statistics on women’s poverty as previously mentioned[[55]](#footnote-55). The goal of WID was to integrate women’s needs into the policymaking process and also to educate women on their “new roles” within their developing country, however these “new roles” were founded on the values and ideas of gender in Western society. Programs within the WID perspective thusly functioned as if women in the developing world were primarily housewives, when in fact there are many female-headed households and in many societies, women are the primary food producers and traders[[56]](#footnote-56). Therefore, WID was more concerned with integrating women into the Western constructs of economic productivity, while ignoring the societal and gender constructs within each country.

Women and Development (WAD) arose as a critique of WID to deconstruct the capitalist notions of the WID theorists. WAD theorists believe that women are “already integrated within the development process” and therefore already part of the economic system. Scholars within WAD believe that this integration has led to the structural oppression of women through the exploitation of women-workers and the inherent patriarchal structures within modernization.

Gender in Development (GAD) theorists provided the intersectional perspective to the identities of women in the developing world and also highlighted how the links between gender and class could influence their access and relationship to development[[57]](#footnote-57). This perspective attempts to partner First and Third World feminists for the “empowerment of women[[58]](#footnote-58)” that contextualizes the needs of women based on class, ethnic, religious, geographic, and social lenses. The agenda was formulated using a “basic rights” approach and also wanted to galvanize poor women in implementing and creating policies[[59]](#footnote-59).

The post-structuralist and post-development theorists have worked to dismantle the constructions of development and the Third World woman apparent within the aforementioned feminist development theories. Both Arturo Escobar and Chandra Mohanty have made efforts to deconstruct these discourses and subjectivities based on the truncated assumptions about the helplessness and victimization of poor women in the developing world. While perspectives like GAD have attempted to contextualize the narratives and needs for these women, the scholar Uma Narayan adds that this was merely a transition from “universal” generalization to a “culture specific” generalization, which reduced “Indian women,” “African women,” “Muslim women,” and “Western women” through cultural essentialism. Thus, Narayan argues that this frequently leads to the “practice of blaming culture” for the problems and violence against these women[[60]](#footnote-60).

Arguably, the most influential writers on the deconstruction of the Third World woman is Chandra Mohanty. In 1984, Mohanty published an article on the construction of the Third World Woman of Western feminisms, which she defines as predominately white, middle class brand of the global North/ West geographies[[61]](#footnote-61). This scholarship has often been influenced by a “universal sisterhood” in which women should unite in a common struggle against a universalized patriarchy. Western feminist scholarship has been challenged by Third World scholars, especially in terms of the construction of the Third World woman that must be saved. Third World women are described as an entire population of women as “ignorant, poor, uneducated, tradition-bound, domestic, family-oriented, and victimized [[62]](#footnote-62).” This construct is ahistorical and fails to contextualize the lived realities of all women, similar to the reductive frameworks of WID and WAD feminist perspective. Mohanty laid the framework for Narayan by describing the geographic power dynamics of this feminist discourse because these women were identified by their geographic location in the East instead of the West, where women have more control of their bodies and freedom[[63]](#footnote-63).

It thus becomes the feminist scholar’s mission (from WID, WAD, or GAD) to find solutions for the plight of the oppressed Third World Woman or any other cultural identifier. Development is considered the “all time equalizer,” usually defined in terms of greater economic progress[[64]](#footnote-64). These ideas are based on the universal assumption that men are the oppressive exploiters and women are the oppressed victims that must be saved by Western development. Mohanty argues that this framework cannot dismantle oppression, as it assumes that these women are static victims without choice or agency. Also, this framework assumes that these poor women can gain greater power through greater access to the economic, capitalist system[[65]](#footnote-65). It also ignores the broader structural issues like globalization, warfare, and history that contribute to the lived realities of women which are greatly influenced by the interaction with the West.

Mohanty states that to understand a woman, one is required us to understand her gender identity through her local political, environmental, religious, social, and economic context. Most importantly, Mohanty argues that the fundamental aspect of the reality of the Third World woman is the “simultaneity of oppressions,” that is ignored by feminist scholarship. These oppressions are complex and stem from colonial and political hegemonies and also from their social marginalization[[66]](#footnote-66). Thus, labelling all women in the Third World as oppressed is reductive and ineffective in providing nuanced information about the realities of these women, which are more complex than simply being victims of the structures working against them. This also relates to the development process of non-Western women, because the prevailing feminist development theories often believe that once a women participates in development, she will automatically gain the autonomy and freedoms of their Western counterparts[[67]](#footnote-67).

In terms to framing Mohanty and Narayan within the discourses of MHM, I believe that their works can describe the power dynamics and assumptions of Western experts. These experts subsequently determine the needs of women within their essentialized and reductive cultural categories. As I will describe in the next chapter, the literature on MHM and education in the developing world frames the issue as a non-Western plight. Thus, it is imperative that we deconstruct the assumptions around MHM to see whether these assumptions could be the reason why MHM interventions have not been successful in increasing school enrollment.

### Interventions and Technicians

 As described earlier during the discussion on Escobar’s description on the formulation of development problems, Escobar states that a development problem is first formulated by theorists and experts that then create intervention programs to solve these problems. Escobar describes development as a “top-down, ethnocentric and technocratic approach, which treated people and cultures as abstract concepts, statistical figures to be moved up and down in the charts of ‘progress’[[68]](#footnote-68).” So far, we have discussed the theory aspect of development, which creates the “ethnocentric” and abstract conception of people in the developing world through the works of Escobar and Mohanty. In this section, I will discuss the literature linking the development project to the technical solutions of interventions, as described by Escobar and Ferguson.

 In Escobar’s view, the mission of the development project is not cultural transformation but instead finding technical solutions for the complexities of social life. Escobar states that “these professionals sought to devise mechanisms and procedures to make societies fit a pre-existing model that embodied the structures and functions of modernity.[[69]](#footnote-69)” This idea of technical solutions for complex problems then requires statistical results. This quantitative data not only enumerates the needs of individuals (for example, the number of girls in a particular district who do not have access to sanitary pads) but also seeks to measure the success of the technical intervention[[70]](#footnote-70).

 In *The Anti-Politics Machine*, James Ferguson analyzes the intervention/ practitioner aspect of the development process as a product of the development discourse. Like Escobar, Ferguson argues that the bureaucrats are shaped by the languages and assumptions of the development world which then generates the delivery of intervention[[71]](#footnote-71). These theories and assumptions can come from scholarship, like feminist development academia as mentioned earlier. Ferguson describes “the anti-politics machine” as the “development project” that is initially described as apolitical but ultimately influences the political climate of treated area. Most importantly, the anti-politics machine of development reduces issues like poverty to technical problems. By this reasoning, technical solutions are then generated by hired experts who then create “intentional blueprints of development” which can then be transplanted and standardized for multiple geographic contexts[[72]](#footnote-72).

One of the most important aspects of Ferguson’s work is the importance of defining the successes and failures of the development project. In his case study in Lesotho studying the Thaba-Tseka Project, Ferguson analyzes how, when, and in what way this intervention project failed in its goal to boost agricultural production in the region. Ferguson states that the reason the project was unsuccessful because Lesotho could not be defined by the parameters of the experts:

In a situation in which “failure” is the norm, there is no reason to think that Thaba-Tseka was an especially badly run or poorly thought out project. Since, as we have seen, Lesotho is **not** the **“traditional,”** isolated, **“peasant”** society the “development” problematic makes it out to be, it is not surprising that all the various attempts to “transform” it and “bring it into the 20th century” characteristically “fail,” and end up as more or less mitigated disasters[[73]](#footnote-73).

Ferguson argues it is not what development projects achieve, but their side effects that need to be critically analyzed. In this way, even development projects that fail on their own terms are continued in other areas and defined as successes because they achieve their intended “instrumental effects[[74]](#footnote-74).” He states that in the context of Lesotho, the intended side effect was to expand the “exercise of bureaucratic state power[[75]](#footnote-75)” or any other type of “political deployment.[[76]](#footnote-76)”

 Ferguson maintains that the Lesotho case is an “extreme” which has “the effect of exaggerating many ‘development’ phenomena.[[77]](#footnote-77)” For how could all development projects that fail have an ulterior, political agenda? However, Ferguson states that “the gap between plans attempted and results achieved” needs to be analyzed even in “typical” cases[[78]](#footnote-78). This is especially since in the minds of the experts tend to prescribe the need for “more development projects” instead of attempting to understand how and why development projects were unsuccessful in the first place[[79]](#footnote-79).

 Ferguson’s work is influential because it connects the failure of a development project to the false assumptions of institutional planners and experts[[80]](#footnote-80). He recommends the involvement of “social actors” to combat the very real social problems that development projects attempt to solve through technical actors[[81]](#footnote-81). However, because these social issues require transformation instead of silver bullets, “developers” like governments and international intervention organizations only accept advice on “how to ‘do development’ better’” because they know major social change and also the identification of social problems are beyond their scope of power or interest[[82]](#footnote-82). Thusly, silver bullet/technical strategies continue to be the norm because those are the solutions actively sought by governments and by agencies.

### Summary of the Literature

 The issues and failures of MHM as a development project can be analyzed by the post-structuralist and post-developmental frameworks of Escobar, Mohanty, and Ferguson. The discourses that formulated MHM as a possible development obstacle have possible foundations in the “basic needs” discourses of Robert McNamara and also the feminist development theories of “Women in Development” and “Gender and Development.” These theoretical foundations, which have been critiqued by Escobar and Mohanty, can then be seen in the construction of the MHM intervention programs. The measures for success and failure of an international program can be analyzed using Ferguson’s views on interventions and the silver bullet approach to development.

 In the next chapter, I will detail how the literature on MHM as a development project used development and feminist theories to define MHM as a development project as similarly described by Escobar and Mohanty. In chapter four, I will move beyond the theory and framing of MHM to discuss how MHM relates to the on the ground experiences of young women, using my own field research in Pakistan. Through the elaboration of the assumptions of the literature, I hope to define the deceptive realities of development and feminist discourse, which simplify and de-contextualize the realities of women in the developing world, as principle agents that created the MHM problem as a development issue for young school girls across the world.

# Chapter III: The History of MHM as an Issue of Development Disourse

## Menstrual Hygiene Management in the West

 The topic of menstruation entered the realm of feminist discourse during the Women’s Health Movement of the mid 20th century in the United States[[83]](#footnote-83). This movement focused on dismantling the “andocentric objectivity” of the medical field and creating new frameworks for women to define and interact with their bodies. Menstruation became a prime issue within this movement because many believed that menses was a source of “untapped female power and woman-centered identification.” They wanted to combat the stigma of menstruation that devalued women in the workforce and at home, for menstruation was “seen as dirty, a sign of sin and its existence reinforced women’s inferior position in male dominated society” and “a biological disadvantage to women, making them emotional, unreasoning and unreliable workers[[84]](#footnote-84).” Another movement was provided by the spiritual feminists wanted to focus on empowerment through menses, marking menarche as a somewhat sacred rite of passage and a celebration of womanhood. The less “spiritual feminists” focused on the consumer aspects of menstruation, particularly after the toxic shock syndrome outbreak that was linked to tampon use[[85]](#footnote-85).

 However, definitions and values associated with menstruation today continued even after the reevaluation by these feminist reformers. American girls still associate their menstruation with “hygiene, not fertility,” particularly in terms of their brand loyalty to particular products guaranteed to provide them “protection” from their menstrual blood[[86]](#footnote-86). Though menstrual activists want to focus on the spiritual experience of menstruation, it has remained common to predominately associate menses with modern sanitary practicality and hygiene. Popular belief on MHM promotes to the use of technologies like pads or tampons as “marker(s) of modernity, class privilege, and respectability in Western context.[[87]](#footnote-87)”

 These Western views, which focus on the hygienic aspect of menstruation, stand in contrast to non-Western views of menses. In the eyes of writer Chris Bobel, the most popular Western scholarship relating to menstruation is focuses on the East’s “bizarre customs, their menstrual huts, (and) their menarche rituals.[[88]](#footnote-88)” This scholarship focuses the impact of menarche, the monthly management of menses, and the relationship between negative associations with the body and future health. Many scholars believe that women in the East are disadvantaged by their menstruation because of cultural taboos, ignorance of medical knowledge about menses, and the lack of access to modern absorbents[[89]](#footnote-89).

Another issue scholars raise is the lack of “awareness” and positive perspectives on menstruation in non-Western women[[90]](#footnote-90). What is most important to note is that even with the technical advancements in the West, both Western and non-Western women see menstruation in a non-positive or negative light[[91]](#footnote-91). Even girls that receive education about menstruation prior to menarche in the West still exhibit fear and negative associations with their menses, thus it is possible to conclude that “positive body awareness” has not been achieved through greater access to MHM education or MHM technology. This was particularly exhibited in a study in Spain, in which girls received MHM training about menses but still exhibited negative beliefs about menstruation through socialization from older women, media, and religion[[92]](#footnote-92).

 It can be argued that our understanding of menstruation and its negative associations has been perpetuated by the $17 billion feminine care industry, which produces tampons, liners, and wipes. In the United States, Proctor and Gamble (manufacturers of the brand Always), Kimberly- Clark, Playtex, and Johnson & Johnson remain the top companies in the production of these MHM technologies but have also perpetuated menstrual taboos specifically about “protection” and have even created products to mask the natural odor of menstrual blood using chemicals. These companies have experienced major growth in the past years due to their entrance into emerging markets in the developing world, even as more women have moved towards reusable and environmentally conscious menstrual management products in the Global North.[[93]](#footnote-93)

 These histories and values have shaped Western understandings of menstruation- which is focused on hygiene, increased productivity, and empowerment against patriarchal medical systems and companies. Western women’s MHM has been mainly focused on the hygienic, consumer aspect of menstrual management instead of the progression into womanhood and future fertility. Also, Western women still have negative associations with their menarche and menstruation, even with the ability to effectively manage menses using Western absorbent technologies.

## MHM and Development as a Discourse

 To understand the conceptual framework that created menstrual hygiene management as a development issue, I will use tMarni Sommer’s work “Comfortably, Safely, and Without Shame: Defining Menstrual Hygiene as a Public Health Issue.” This article, published in the American Journal of Public Health, recounts the history, major stakeholders, and current MHM research. Most importantly, it attempts to “explore the conceptual frames and the news (sic) frames that are being used to shape the perceptions of menstrual hygiene management as an issue of social justice within the context of public health[[94]](#footnote-94).”

I chose this article as the major feature of this chapter because it provides the more obvious examples of how Sommer and her colleagues have defined and framed the issue of menstrual management, as compared to her own field research and those of others. Also, due to its recent publishing, this article aligns well with the date of my field research. Thus the views within the article are the most current in relation to the status of MHM discourse. I will also use Sommer’s other articles and the systematic reviews of MHM interventions to create a full picture of the current status of MHM.

 Overall, it seems that the use of words like “dignity” and “body awareness” as ways to validate the need for MHM interventions in the developing world show that these MHM experts are influenced by Western feminist attitudes of menstruation. Also, issues like hygiene, psychosocial outcomes, and educational attainment are considered major reasons as to why MHM interventions are needed, however evidence from the West suggest that similar interventions in the developed world have not produced substantial, positive results. This brings us to question why we continue to invest in MHM interventions, when none of produced high quality research result.

### The People

 Though Marni Sommer wrote the 2015 article “Comfortable, Safely and without Shame,” but she does not credit her instrumental impact in promoting MHM as a public health issue. She instead cites the Rockefeller Foundation which conducted research on the “menstrual challenges girls were facing in classrooms and school environments” in Uganda, Kenya, and Zimbabwe in 2001[[95]](#footnote-95). Other local non-governmental organizations, like the Forum for African Women Educationalists, advocated for the MHM needs for schoolgirls by reducing the tax on imported absorbents. In these early period, Sommer states there was little interest in MHM even though there was an “emergence of evidence about MHM-related challenges faced by girls in low to middle income countries.” Sommer states MHM became more visible only after WASH policymakers hosted an Oxford Roundtable to discuss the implications of inadequate MHM for schoolgirls[[96]](#footnote-96).

 Sommer’s own research in both Tanzania and Ghana has been instrumental in creating the connection between MHM and schoolgirls. In a recently conducted an interview with National Public Radio, Sommer described being a “trail blazer” in the research regarding MHM in the developing world. Her dissertation on MHM was inspired by her work in the Peace Corp where she noticed gender disparities in enrollment in schools.

“A lot of girls were disappearing from school around puberty… I started looking at the literature trying to understand why we still have this gap in schooling between girls and boys in lower-income regions.[[97]](#footnote-97)”

Sommer believed an “obvious” reason to the disparity was a technical aspect of female puberty, menarche, and how schools were not equipped to assist girls in managing their menstruations[[98]](#footnote-98). What is notable about this statement is that it does not initially seem that Sommer started her research or questioning based on ethnographic literature or interviews. She subsequently conducted field research in 2009[[99]](#footnote-99) and 2010[[100]](#footnote-100) in Tanzania and Ghana respectively, and qualitatively showed that girls struggled with their MHM while at school. Since then, Sommer has continued to write about the issue of MHM in relation to school girls, first in Africa and now across the world.

### The Definitions of Adequate Menstrual Hygiene Management

The term “menstrual hygiene management” was allegedly created at the Oxford Roundtable on the issue hosted by UNICEF in 2005[[101]](#footnote-101). Sommer describes adequate menstrual hygiene management as:

*Women and adolescent girls are using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of their menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of their used menstrual management materials[[102]](#footnote-102).*

Specifically, in the school environment, having access to absorbents, a clean lockable toilet, supportive female teachers, and a place to dispose of the used materials are key components that girls have cited as an issue relating to MHM[[103]](#footnote-103).

 In terms of overarching definitions, Sommer has defined MHM in schools as a political[[104]](#footnote-104), sanitation (WASH)[[105]](#footnote-105), feminist[[106]](#footnote-106), and a human rights issue[[107]](#footnote-107). She has written in education, water and sanitation, and public health journals about MHM, expanding it as both an interdisciplinary and global problem. Through her work in Ghana[[108]](#footnote-108) and Tanzania[[109]](#footnote-109) and also the contributions of others in Kenya[[110]](#footnote-110), MHM became seen as an education problem because qualitative research suggests that girls have issues handling their menses. MHM was a sanitation issue in her view because poor MHM was linked to limited access to proper toilets and the hygiene/ infectious disease aspect of unsanitary absorbents and inadequate washing[[111]](#footnote-111). Sommer states that the feminist perspective comes from the fear, shame, and embarrassment that all women experience in relation to their menses, and through this, women can come together globally to improve the MHM of others. The human rights violation aspect seems at first seems the most tenuous. Sommer cites the United Nations’ handbook on human rights to water and sanitation as identifying the “challenges girls and women were facing with inadequate water, sanitation, and materials” as a human rights issue. The handbook does mention menstrual hygiene management as a component to human rights, but within the rights to sanitation, the handbook requires in terms of facilities to dispose of used absorbants and also “enable menstrual hygiene management,” which could possibly include washing and drying areas for fabric suiting[[112]](#footnote-112).

 Overall, the two main arguments as to why MHM is considered an issue in schools, as defined by Sommer, is “basic human rights and dignity of girls” and the “ongoing barriers to effective MHM (that) may contribute to negative health and education outcomes for girls.[[113]](#footnote-113)” As we discuss the research created by Sommer and her peers, these definitions can be contested in terms of their Western assumptions and inadequate evidence to suggest the elevation of MHM as a key issue in relation to the education of girls in chapter five.

### The Qualitative Evidence of MHM

 Sommer’s states that the initial research relating to MHM was grounded on “participatory and feminist methodologies rather than the traditionally accepted gold standard of randomized control trials in public health…[[114]](#footnote-114)” It was through articles published out of Africa like from the Rockefeller Foundation and the Forum for African Women Educationalists that helped solidify MHM as an issue for young girls. Another paper of note was Sowmyaa Bharadwaj’s “Menstrual Hygiene and Management in Developing Countries: Taking Stock,” which was published in 2004 through the development consulting company, Junction Social. This report details many interventions conducted at the time relating to menstrual hygiene research or management, however it is not a peer reviewed source nor does it have adequate references for the results of these studies and interventions.

Most of the points in Bharadwaj’s article relate to the sanitation and environmental aspect of MHM technology disposal and also the informal, anecdotal evidence that suggests that MHM is an issue in the developing world. However, there is no evidence provided to substantiate the claims that in Uganda “the biggest number of school dropouts are girls, because of inconveniences during their menstruation periods” or in Kenya “girls are staying longer in school… after a sustained set of activities around hygiene (including menstrual issues) and sanitation.[[115]](#footnote-115)” Bharadwaj’s article is important because it is commonly cited in the works reviewed by both Sumpter and Hennegan’s systematic reviews and is also cited in Sommer’s research.

 In 2010, Sommer completed a comparative study in Tanzania to assess the obstacles faced by young girls in Kilimanjaro to “explore and document girls’ present-day experiences of menses and schooling.[[116]](#footnote-116)” The interest in developing greater knowledge on these matters was based on reports from non-governmental organizations and women’s education groups about the stigmatization girls could experience due to leakage or staining and also the impact of missing school days due to menses. Most notably in the introduction, Sommer compares the experiences of Western school girls and those in Sub-Saharan Africa in terms of the ability to “pass” and evade stigmatization due to their menstruation. Western girls, in Sommer’s view,

“have access to factual puberty information, adequate numbers of toilets, abundant supply of clean water, privacy, affordable sanitary materials and undergarments for managing menses, pain medication, and female teachers and/or school nurses who are understanding and supportive of girls’ menstrual-related complaints.[[117]](#footnote-117)”

Sommer does point out that not all Western girls have an easy experience with puberty and menses. However, she suggests that the experience of non-Western women is worse, especially since there is literature that suggests “perceived” increases in drop out rates for girls after puberty[[118]](#footnote-118). However, this literature does not suggest that this is specifically due to issues relating to menses.

Thus, Sommer frames how MHM could be an obstacle for women in two ways. Firstly, MHM could be an issue for girls due to the immense pressure and social stigma they experience to conceal blood and staining, which is exacerbated to the lack of privacy and infrastructure (like proper toilets, running water, sanitary pads). Secondly, the statistics and reports by the Population Council suggest that puberty is a pivotal time for reductions in female school enrollment, which could be caused by the onset of menses[[119]](#footnote-119). Sommer states that many girls voiced frustration over managing their menses while traveling to and from school and also while at school because of the lack of accessible and private bathrooms and the constant pressure of concealing their menses. This goes back to the previously mentioned framing of MHM- as both a human dignity issue and also an issue of education and health.

Subsequently after Sommer’s work, there has been continued scholarship on MHM in different countries within the developing world, focusing on the how MHM impacts the daily lives of girls. In Sommer’s article “Overcoming the Taboo,” she cites the findings from studies in India[[120]](#footnote-120), Tanzania[[121]](#footnote-121), Kenya[[122]](#footnote-122), Uganda[[123]](#footnote-123), Nepal[[124]](#footnote-124), and Ethiopia[[125]](#footnote-125) that describe the difficulties schoolgirls have in managing their menses. The majority of these works cite Sommer’s work, Bharadwaj’s work, or both. They also utilize similar frameworks as Sommer’s in terms of focusing on the lack of knowledge and fear girls have about menses, cultural and religious taboos, and the issues of hygiene as it relates to attending school. These studies mainly focused on continued qualitative evidence that girls within these diverse geographic locations and small samples have issues with their menses.

In terms of creating the MHM discourse, the qualitative research helped form the idea of inadequate MHM as being a possible obstacle for women in their day to day lives. Women in the countries and contexts studied described issues relating to menstrual management, leading us to include that MHM management could be issue for intervention by development agents. As Sommer’s states in her 2015 article, the early reports about women having these issues became popular and easily understood in the West. Western absorbent companies like Proctor & Gamble, and Johnson & Johnson began to work in countries like Kenya, Nepal, and Ethiopia to provide supplies and also fund research and practioners to study the link between MHM and schoolgirls[[126]](#footnote-126). This not only expanded resources for girls in these regions but also increased market share and brand visibility in these parts of the world. Also, many companies allegedly experienced higher rates of job satisfaction from “giving back” to underprivileged girls and women. Thus, these public-private partnerships served multiple interests- researchers were able to receive funds for their efforts and supplies were provided for further interventions.

### The Quantitative Evidence of MHM

 While there is quantitative evidence to suggest that girls have issues with MHM in relation to maintaining hygiene and educational attainment, interventions that provide Western absorbents and Western style MHM education have not been proven fruitful in decreasing school absenteeism, improving psychosocial outcomes, or improved hygiene[[127]](#footnote-127).

***Hygiene and MHM***

 In terms of hygiene, many MHM interventions have focused on incidence of reproductive tract infections and bacterial vaginosis in subjects with poor MHM (which includes using unsanitary absorbents and inadequate washing). Based on the research quality assessments by Sumpter, there is not strong research to suggest that poor MHM can cause RTIs within the study populations in India[[128]](#footnote-128), Pakistan[[129]](#footnote-129), Egypt[[130]](#footnote-130), Iran[[131]](#footnote-131), Turkey[[132]](#footnote-132), Gambia[[133]](#footnote-133), and China[[134]](#footnote-134). High quality research relating to bacterial vaginosis and MHM was also inconclusive. Thus, though there was “an initial indication” that inadequate MHM could lead to these diseases, the strength and route of infection have not been conclusively researched[[135]](#footnote-135).

 The issue with hygiene in non-Western MHM reflects the assumptions of Western women in relation to their own management of menses. As described earlier by Bobel, women in the United States are focused on products that maintain their hygiene and protection during their menstruation. Protection is a key component in Western MHM, as women must be able to conceal their menses and reduce staining. However, our idea that the non-Western methods of MHM management, using fabric suiting, is bad for the health of women needs to be examined. The hygiene intervention projects reviewed by Sumpter were highly variable in terms of what they studied in relation to menstrual hygiene. Some tested for self reported white discharge using different methods of MHM, for example some studies evaluated incidence of discharge in women using sanitary pads or reusable clothes, while another study focused on the incidence of discharge in samples that boiled their reusable clothes versus washing with soap only. Some studies event focused on secondary infertility due to using unwashed rags. Thus, it is obvious that there has not an academic movement to systemize and define the “hygiene” aspect of MHM, whether that includes single use absorbents or reusable absorbents. Hygiene could be defined as a distinction between Western products over traditional cloth suiting, but this is still up for debate.

Though there has not been expansive research on comparing cotton based “suiting” and the typical synthetic rayon/ plastic based products in commercially made absorbents, there have been studies that have indicated that the synthetic fibers in Western products have a greater ability to absorb blood that then create environments for toxin production[[136]](#footnote-136). This was the major cause of the toxic shock syndrome epidemic in the United States in the 1980s[[137]](#footnote-137). Current recommendations and movements in the United States in relation to healthier alternatives to the synthetic absorbents include reusable cloth pads (suiting) and menstrual cups. It has also been shown that the cloth pads, made in a particular fashion, can be more absorbing potential than synthetics[[138]](#footnote-138).

Also, it is important to note that the vagina produces mucous to clean itself and maintain a pH to kill harmful microorganisms, thus if the perineal is exposed to pathogens, it can usually fight off bacteria on its own[[139]](#footnote-139). Thus, there is not much evidence to suggest that the current MHM practices adopted in the developing world- which include using reusable pads, may negatively impact the health of women.

***Psychosocial Outcomes and MHM***

 The psychosocial aspect of MHM has also not been properly defined within the literature. Sommer describes that “body awareness” about menarche and menstruation can improve a girl’s relationship to her body. To alleviate this situation, Sommer states that not only hardware interventions like pads are needed because they alone cannot “empower girls who lack information about their bodies”. Education is also needed to improve “body awareness, knowledge, and understanding of reproductive health[[140]](#footnote-140).” For that type of knowledge “is critical if girls are to feel comfortable and confident about coping with the normal developmental changes they are experiencing, and attain a sense of positive body awareness.[[141]](#footnote-141)” However, the current research on MHM education is less about the psychological wellbeing and relationship to the body. Instead, most MHM education is linked to improving the biological knowledge and management of menses. The term “dignity” is also brought up often by Sommer often, which could possibly relate to the shame girls experience in general in relation to their menstruation.

 It was difficult to assess where Kirk and Sommer’s conceptions of “positive body awareness” came from. A reference was not provided for their definition of this term or its possible benefits. However, it seems body awareness is most likely the ability to understand one’s body on one’s own terms. This is similar to the Western feminist conception of “body literacy,” which arose during the Women’s Health movement. Body literacy, in Bobel’s view, had the potential for cultural resistance through women feeling more empowered to make their own decisions on their health and also rely less on male definitions of menstruation. These definitions could relate to cultural taboos, which have perpetuated feelings of dread and shame for menses[[142]](#footnote-142).

A systematic review by Sumpter states that there have not been conclusive results of positive psychosocial outcomes after the MHM education intervention[[143]](#footnote-143). Hennegan reports similar findings and that most results from these interventions had not been randomized nor compared to baseline controls[[144]](#footnote-144). What is important about the psychosocial facet of the MHM discourse is that there has not been significant research to suggest that feeling unprepared for menarche produces negative psychological outcomes. In actuality, most women throughout the world have negative associations with their menstruation and menarche[[145]](#footnote-145). Bobel also recounts the annoyance and cynicism of women in the United States when they hear about “spiritual feminists” who celebrate their menses in positive ways with rituals and song. Even girls who have mothers that want to celebrate their menarche often continue to have negative associations with their menses because of external socialization- from media and general society- that perpetuate negative feelings about menstruation[[146]](#footnote-146). Thus, it is possible, that even with education about “body awareness” and positive feelings of menstruation would be unsuccessful because society continues to socialize women and girls to rue and be ashamed of their menses.

***Educational Attainment and MHM***

 Arguably since 2013, Sommer has been vouching for greater quantitative research on the education outcomes of MHM intervention to “elevate” the issue to the global scale. Positive education outcomes in her opinion are “enhanced girl’s participation, self-efficacy, performance, and school attendance.[[147]](#footnote-147)” She states that there has been difficulties in generating substantial research because of poor school recordkeeping, variability in self reporting, and variability in girls’ menstrual cycles.

 The systematic reviews by Sumpter and Hennegan also validate these findings, as both reviews did not find quality research that was able to find a link between inadequate MHM and increased education attainment. Most interventions failed in terms of low sample size, non-randomization, biases within data collection. Both reviews stated that there was not currently conclusive evidence to suggest that adequate MHM was able to reduce school absenteeism and/or improve educational attainment.

Two studies that were not evaluated by Sumpter and Hennegan were those conducted by Oster and Thorton in Nepal and Grant in Malawi in relation to school absenteeism. Oster studied school absenteeism and provisioning of a menstrual cup in a randomized study in Nepal. The researchers found in Nepal that girls were significantly likely to miss school during their period, but that would only account for 0.4 days missed in a 180-day school year[[148]](#footnote-148). Thus, there were other contributing factors that influenced school absenteeism within their Nepalese study population. Grant’s study in Malawi concluded that though female students reported missing at least one day of school during their periods, and statistical analysis suggests that absenteeism relating to menstruation accounts for only a small proportion of the absenteeism (2.3% of total school days missed). Also, Grant’s research in Malawi concluded that there was not a statistically significant gender difference in absenteeism[[149]](#footnote-149).

This brings up two issues about the relationship between educational attainment and MHM. First, why must there has to be a statistically significant difference in absenteeism between girls and boys to suggest that menstrual management is a limiting factor in the educational progress of girls? In Sommer’s initial research in Tanzania, she used Barbara Mensch’s research on differences in enrollment and also her own beliefs about girls not coming to school on there being a difference between girls and boys. Barbara Mensch’s work that both boys and girls do experience a drop in enrollment during adolescence, however she does not apply statistical test to see if there is a significant difference between enrollment. Thus, though Grant showed that there were is not a gender difference in absenteeism, we should consider differentials in absenteeism within female populations to better understand the different needs of girls. Secondly, why should absenteeism be the variable that measures the impact of menses on a girl’s education? It is possible that there are other variables that indicate a girl’s ability to manage her menses, like distraction at school or anxiety about staining.

***Implications***

 If MHM interventions have not shown to impact the health, educational attainment, and psychosocial awareness of their study populations, what is the purpose of MHM? Why have scholars like Sommer remained within this field, pushing for greater research and funding for MHM? Should we continue on with this type of research? These would be the major questions to ask Sommer and her colleagues to understand the true nature of MHM discourse.

Though I do not have the answers to those questions, I believe my field research in Pakistan can shed light on the on the ground realities of women trying to maintain the female enrollment in their schools. The administrators I interviewed were candid and open about the difficulties they experienced every day in terms of encouraging girls to go to school. While my research in Pakistan must be considered within its specific context, I believe the words of these administrators may encourage greater discussion on how we frame the needs of schoolgirls in order to improve their educational outcomes.

# Chapter IV: Case Study in Lahore, Pakistan

As I mentioned in the prologue, the research I conducted while in Lahore, Pakistan was based on my assumption that inadequate MHM was prevalent in Lahore, Pakistan[[150]](#footnote-150) and also that interventions relating to increased absorbent access or MHM would result in positive results relating to less school days missed[[151]](#footnote-151). My original question was based on the research of Tazeen Ali, who found that government school girls tended to be more knowledgeable about hygienic MHM than private school girls in Karachi, Pakistan. I wanted to explore why that is, and what obstacles existed in providing MHM education within these schools. Thus, my interview questions, overall, relate more to assessing the MHM education provided at the schools than the on the ground realities of the girls and administrators. Luckily, questions 13-16 were included in the study, which assessed how the administrators viewed MHM and how well their schoolgirls managed their menses during the day.

 In this chapter, I will first provide a brief introduction to the Pakistani education system in terms of gender disparities and needs of the students. Then, after relaying background information on the schools studied, I will discuss my findings using quotes from the administrators and my own observations during my interviews.

**Background on the Pakistani Education System**

 In terms of organization, the educational institutions within Pakistan are diverse based on public/private, secular/religious, and low/high income. Within the public schools, control is divided based on federally funded and provincially funded schools. Even within these groups, the public schools are divided based on the price of tuition. The best public schools, based on quality of facilities and teachers, are the most expensive and thus exclude children of the impoverished classes. Lower-income public schools are notoriously poor quality, enough that low/lower-middle class families would prefer to spend a little more money to send their children to the lower rung private schools.

Overall, schools are sex-segregated and experience issues in providing education of equal quality to both sexes[[152]](#footnote-152). The Pakistan Bureau of Statistics collects data on enrollment of schoolchildren in all the districts of the country. Specifically, for girls, there was a downward trend for the enrollment of both boys and girls. In 2014-2015, there was a significant drop from primary school enrollment to middle school, with 10.3 million boys and 8.1 million girls enrolled in primary school and then only 3.7 million boys and 2.8 million girls enrolled in middle school. Overall, the enrollment of girls drops more significantly for girls after primary school, and boys outnumber girls in school at all education levels. There is no data available that measures changes in enrollment at the school class level, for example from fourth to fifth grade. However, from the data present, it is obvious that there are large gender disparities in education enrollment in Pakistan, with 12.8 million girls currently out of school as compared to 11.2 million boys[[153]](#footnote-153).

**Background on the Schools in the Research Study**

 There was little difficulty in finding and approving schools and administrators that fit the criteria for the study. Almost all the schools surveyed, public and private, had a female administrator or head teacher present. Because it was summer vacation, there was an issue for scheduling certain interviews during the day. However, eventually the number of individuals in both public and private schools were obtained for the study within a span of two weeks.

 The public schools, also known as government schools, in this study are funded by the government of Punjab. The monthly tuition fee is Rs. 50 (approximately $0.56) but there is leniency granted to children who cannot afford this amount. The teachers are required to have a background in education and can receive tenure quickly after initial employment. Depending on the current political climate, the government schools are inspected by officials, but this occurs rarely. However, there is a standardized quality in education within these schools and also facilities.

 From cursory examination of public and private schools, they have obvious structural and organizational difference. For one, the public schools tended to be located in major commercial areas, alongside mechanics shops, produce stands, and other general stores in the center of the neighborhood. This makes logistical sense, as parents could easily drop of their children on their way to work. Also, the public schools were larger, with more space for play within the walls of the school. The public schools were almost always sex-segregated, only one public school in the study had co-educational classrooms until the fifth grade.

 The private schools within the study were usually co-educational, with tuition fees around Rs. 500. Because they are catering to a lower income bracket, they are very lenient with their fees. The private schools greatly varied in terms of the quality of their facilities and education. Many of the private schools had been old homes, and not many of these schools had space for children to play. Children receive more variable education within these schools because there is not a standard requirement of education for the teachers. Some teachers have only finished high school, while others have associate’s or bachelor’s degrees. These teachers also do not usually receive tenure, and the schools have a high teacher turnover rate. These schools were often found in tiny alleys branching off from the main road amongst private residences. Many teachers interviewed stated that families often prefer these types of private schools because then girls do not have to travel far from home, even if the tuition is high. Also, because these schools are often close to wealthier neighborhoods, mothers that are housekeepers can drop off their children and work in that neighborhood. Private schools can also easily receive private donations and funds, which are often necessary because not enough funds come through tuition alone.

 In terms of maintaining the anonymity of the schools, government schools were labeled 1 (A-E) while private schools were labeled 2 (A-E). Responses were organized by their associated questions. All interview questions are available within the appendix.

**Major Findings**

***Does your school provide menstrual health education to female students?***

 As Tazeen Ali stated in her research on menstrual health education in Pakistan that government schoolgirls were possibly more knowledgeable about menstruation because external organizations have easier access into government schools. From my findings, none of the schools provided MHM as part of the curriculum. However schools that had MHM education programs were provided either through the Always company, as an informal lecture, or on an individual basis.

 In the five government school administrators interviewed, three schools (1A, 1D, 1E) provided menstrual health education through companies like Always (absorbent company) or Veet (hair removal cream company). Administrator (1B) knew about the education provided by Always, however she believed the reason why the educators did not come to her school was because it was too far away:

*“They (Always educators) do (come) in most government institutions. They may preferably do that in the high secondary schools. From grades 6-10, mostly…maybe the vicinity, my school may not be approachable to these people.”*

The other government school administrator, 1C, had not heard of this program and also believed that such a program would have to be preapproved through the government of Punjab. However, the administrator (1E) stated that the Always program did have such clearance from the government:

*“The Always folks come once a year, they have permission from the government, from the district officer. They give awareness to the girls from grades 6-10, and they give a training during the session on cleanliness and health. District of education officer gives a letter (to approve the program), it is all written down. They tell the children what are the issues about using suiting like what are the problems associated with using the fabric. The fabric is not clean and it can have germs- so they tell the girls that if you need to use the fabric, you must clean it properly.”*

Further research will need to be conducted to understand whether Always does have clearance to enter these government schools. However, it seems that the Always educators do come into many government schools and provide education about using pads to girls in the 6th to 10th grade. One administrator (1C) was skeptical of the education provided by Always, stating that they were more focused on having girls purchase their absorbents over continued use of suiting, like homemade pads:

*“The Always folks talk about how to properly use the pads, but they also discuss health. They talk about “ginsii” (sexual/reproductive tract) diseases, like fungus and such. However, they do not discuss suiting, they are more focused on selling their products.”*

The Always educators did not come to any of the private schools in this study. Out of the five schools, two schools did provide some MHM education that was designed by the subjects (2A and 2C). However, these two were exceptional examples, because the administrators were the ones that had taken the initiative and designed these informal programs. Administrator 2A had created this program on her own for both her teachers and her students, focusing on removing the stigmas of menses and encouraging quality diets during periods. Administrator 2C and her husband were the owners of their small school, and she was very passionate about educating her girls so that they feel comfortable in class:

 *I provide the education myself. I tell them how they should handle things. I tell them that if you have pain, then you should not bathe extraordinarily (meaning excessively). They often use heavily filled (hot) water bottles (for the pain) … This is not a formal class. The 6-10th grade students are gathered to discuss these matters. It’s not once a year, but maybe every three months, to discuss why and what is happening. If you feel embarrassed, put these things (pads or suiting) in your bags and then take them out in the washroom… I just focus on pads. Because you know if you use the suiting, then you can get disturbed when sitting down or getting up, walking around, and adjusting yourself. That’s why pads are good. But lots of girls use the fabric [suiting]. They use them, get them dirty, and then clean and reuse them. I tell them they can get germs, and then I tell them how to properly use even those because they don’t know. Which is a problem because they wear white clothes [uniform].*

For the other private school administrators, they either did not know that this type of information was needed in a group setting (2D, 2E) or believed that parents would discourage such information (2B). Thus, it can be generally stated that most government schools (3/5) have companies like Always providing MHM education to 6th -10th grade students. Private schools either have their own informal programs or do not have any form of MHM education.

***Do you think it is important for girls to learn about menstrual hygiene? How does the school manage/ help menstruating students?***

Both government and private school administrators believed that information about MHM was important (1A-E, 2A-E) and that they provided this information to help students in an individual setting.

*“We provide small amounts of [MHM] information, when necessary. When a girl comes to us, we provide her the information individually…This kind of information is important for girls. Their mothers, sisters, and other people do not guide them, in my opinion. I haven’t thought that it is the school’s responsibility to provide it…They [students] aren’t shy about it. It’s not a problem in terms of communication with the teachers (Administrator 2B).”*

Most schools also provide pads and underwear to its students, all except 2D and 2E, who send the girls home if they have issues managing their menstruation. The schools that did provide these materials (1A-E, 2A-C) either had girls buy or replace the supplies when they used them.

*“We have first aid type settings… which has pads. They [the girls] replace them. We buy them, the next day the girls replace them (Administrator 1C).”*

*“First time girls, we provide materials through the ma’am in charge (Administrator 2A).”*

*“Teachers are able to guide them, provide them materials [absorbents and underwear]. They encourage the girls to handle it here and use the washroom here [instead of going home to change their clothes] (Administrator 2C).”*

*“We have a teacher in charge, when there is an emergency and a girl has her period [in school], we have the supplies for her. When we run out, we get more (Administrator 1E).”*

Thus, most girls in both government and private schools have access to female teachers that provide information and also emergency absorbents in case their menses starts during the school day. These are two out of the three requirements of Sommer’s definitions of adequate MHM. The other factor, accessible toilets, has also been met by these schools since the majority of them are gender-segregated. Thus there should be minimal fear, stigma for girls going into washrooms to change their pads since there are no men or boys in the vicinity.

***Do you think students have difficulty managing menstruation while at school? Do you think that students drop out because of difficulty managing menstruation/ ridicule/ family pressure?***

The most fascinating findings from the interviews was that administrators believed their students were able to manage their menses well even within this urban and predominately poor population. All the administrators believed that students may initially experience difficulty, but overtime, they learn to manage their menses and come to school.

*“In the beginning of course [they may miss school], when they are used to it, they [come] regular(ly), with the passage of time they gain knowledge (Administrator 1A).”*

*“If it is the first time, then they do have difficulty. But with routine, they don’t (Administrator 1C).”*

 *“Most girls are confident, the girls who do not have confidence may miss school. Majority of the kids are confident though. They tell the teachers that they have this problem [menses]… The kids who are confident at home tend to be confident at school (Administrator 1E).”*

*“Starting…sometimes their clothes get dirty. They have difficulty at first, but later they’re fine (Administrator 2B).”*

*“No, why should they [not manage their menses]? Not here at least. Sometimes, when it’s a girl’s first time- then it is a good thing she stays at home. Because, you know, the girl doesn’t know how to handle it, how to sit and how to stand (Administrator 2C).”*

What is most notable is that majority of these girls do not regularly use pads due to its expense, and use suiting to manage their menses. Thus, for this group of students living in urban Pakistan, it is possible that they are able to manage their menses using suiting and not miss much school. In terms of whether students drop out due to poor MHM management, the administrators were very clear that their students dropped out due to other issues, like the value parents place on the education of their daughters.

*“This [menstrual issue] is not such a serious problem, that they have to drop school (Administrator 1A).”*

*“No, we haven’t had this type of experience. This is not the reason for the drop out. There are multiple, sometimes the parents to not want their daughters to study up to a higher level. They believe that eighth or tenth grade is enough. And sometimes they don’t afford to send them to school. They have young brothers and sisters and they’re mothers are also working (Administrator 1C).”*

*“Sometimes there are some “nonsense” parents, that say, now there is no reason for you to go to school. They [parents] have no love of studying/ education. There is no importance for education here (Administrator 2C).”*

**Conclusions**

 From the opinions of these administrators, it seems that MHM is not a significant issue in terms of the educational attainment of their schoolgirls. Except for menarche and initial menses, the administrators believe that girls are “confident” enough to handle their menstruation and gain knowledge from their teachers on a one-on-one basis. In terms of formal education, neither government nor private schools provide information about MHM within the school curriculum. However, many government schools allow the feminine absorbent company, Always, to provide education about products and hygienic management of menses.

 It seems that girls have access to absorbents (either sanitary pads or suiting), toilets, and helpful teachers to manage their menses. From the MHM discourse, this may seem strange and abnormal, considering that these girls come from very poor families and from a country that has not recognized MHM as a critical issue for female education attainment. Also, what seems most important is the fact that the administrators cited other issues that limit the educational potential of girls in their schools. There major concern was the fact that many parents do not value the greater educational attainment of their daughters. This is can also be exacerbated by girls having many siblings, especially male siblings, that may also need to be education. Another issue is the fact that girls often have to help their families and work at home- which can add to their work day besides attending school and completing homework.

 I believe the interviews of these administrators shed light on some of the assumptions of MHM as a discourse. Firstly, do we need to have MHM to be recognized as a human rights issue, hygiene issue, or educational issue for girls to manage their menses? In this study, girls and teachers were able to handle MHM outside of the home without great intervention from “experts” like the Always company. In fact, the majority of the schools in this study had not been intervened by Always, but all of the school administrators stated that their girls could handle their menses. One critique for this is that the administrators may be biased in determining the needs of their students, believing that they are providing the best teaching and care. However, I believe they would have been biased if they had said that their students did not drop out at all. But the teachers were very candid in describing what they believed were the issues in that aspect.

 Secondly, I believe my field research unveiled some of the social problems associated with educational attainment for girls. The idea that parental values and patriarchal limits to girls hinder the education of girls is not new and is still one of the major reasons why there is still gender inequality in education[[154]](#footnote-154). If we already know that these complex social issues determine a girl’s ability to gain an education- why is MHM discourse so focused on menses as being a limiting factor for educational attainment and consequently development? In the next chapter, I highlight my thoughts on how the elevation of MHM as a development issue as compared to the structural and social issues that limit female education.

# Chapter V: The Critique of MHM as a Discourse and Intervention Strategy

***Universality of MHM as an Issue?***

As described earlier, Mohanty argues against the concept of universal sisterhood and share oppression because it has historically reduced the involvement and needs of women of color and other minority women. In terms of development discourse, the Gender and Development framework had attempted to contextualize the needs of women within this “sisterhood” through grounding issues within culture-specific narratives. However, Uma Narayan critiques this because perspective operated as if the “Indian woman,” “Muslim women,” and “African women” were still objects unable to act in their societies.

Sommer, unfortunately, also describes the issue of MHM in terms of universals and generalizations. She believes that the reason MHM is important to development discourse because it goes beyond the narratives of young girls in the developing world. Women all across the world experience the shame and stigma of menstruation. She states that:

For feminists drawn to the issue of MHM, bodily self-management may have been perceived as a common concern that can be shared and acted upon collectively, less controversial than other topics in adolescent sexual and reproductive health and one that allowed feminists, whose approaches to other issues may not have aligned, to find an area of common ground[[155]](#footnote-155).

At the end of this quote, Sommer interestingly cites Chandra Mohanty’s “Under Western Eyes,” as if Mohanty’s approaches may have only aligned with MHM over other sexual health issues because of MHM’s universality. I believe that Chandra Mohanty would probably disagree with Sommer’s assumptions and belief that Mohanty would promote MHM as a universal issue of women, especially considering its reductive and essentializing framework.

This “universality of the experience of menstruation” can be contested by the very feminists that Sommer cites. As described in the earlier section about Western constructions of menstruation, both Western and Eastern women experience the shame and embarrassment of menarche and menses. However, Western women, currently and historically, associate access to menstruation in terms of hygiene, increased productivity, and empowerment against the patriarchy. This is in contrast to non-Western women, who scholars state are limited in achieving these three values because cultural taboos that limit the geography and psychosocial progress of women in the developing world.

From my own field research with administrators, it is possible that through the dismantling of these cultural taboos that girls and women can become prepared to overcome the practical difficulties of menstrual management and other gender-related barriers in order to participate fully in the public realm.[[156]](#footnote-156)” Sommer and Kirk state that the lack of proper sanitary protection could make it “physically impossible” for the girl to enter the public realm due to these issues[[157]](#footnote-157).” However, in studies relating to gender geographies in Pakistan, the fears of women entering the public sphere have more to do with patriarchal requirements limiting women in general than specifically due to their menstruation[[158]](#footnote-158). This issue of “impossibility” also seems reductive, as if using basic fabric materials over Western absorbent technologies have completely crippled women to leaving their homes.

Another aspect of the taboos is the negative associations with menses that can limit a girl’s educational attainment. However, as described earlier about the reviews of research, there has not been high quality research to show that MHM hardware and software interventions have improved education attainment and psychosocial outcomes[[159]](#footnote-159). Thus, we would need further elaboration on the the goals of these psychosocial outcomes to learn how they could improve the lives of women in the developing world.

These values associated with “adequate” Western-style MHM may not be universal. While all women may experience cramps, bleeding, and stains, each individual woman navigates these issues using values inherited from her mother, her family, and her culture. Even if these values were taught in education programs, it begs the question as to why girls would need positive body awareness or more technologically advanced suiting? Thus, the concept of “universality of menstruation” may only assist women in developing countries through the donations and discussions on the plight of non-Western woman’s menses, but not through actual education outcomes. But the idea that the menstrual needs of Western women, which include high quality absorbents, education about their bodies, and the removal of taboos, has currently not shown to improve the lives of non-Western women

***MHM as a Global Issue?***

 MHM has already been deemed a human rights issue by the United Nations in terms of

access to absorbents, lockable toilets, and education relating to proper management of menses[[160]](#footnote-160). It became described as a global advocacy issue by citing the needs of women and girls from a variety of countries[[161]](#footnote-161). It is difficult to contest whether women and girls who menstruate need all three of those requirements, but there are currently limited definitions of what is considered adequate absorbents and adequate education. It is possible that the traditional forms of absorbents used by women around the world are capable of handling the needs of women. There have been arguments that these “unsanitary” absorbents, commonly called suiting, cloth, or rags, could lead to negative health outcomes. However, as described in chapter three, there has not been sufficient evidence that these traditional methods elicit hygienic issues. Another issue is the concept of educating girls about menses to have them learn the biology of menses and remove taboos associated with it. However, as also described in chapter three, these types of educational programs have produced minimal results in even Western contexts, which are deemed to have less stigma and taboos associated with menses.

 I believe that we can complicate MHM as a global issue as it relates to educational attainment. As described in chapter three, there has not been evidence to suggest that providing adequate MHM would subsequently lead to greater educational attainment for girls in the developing world. The MHM discourse believed this because the qualitative research that was focused on understanding issues of menstruation for schoolgirls, who cited that they had difficulty in managing their menses.

 There is thus a tenuous link between inadequate MHM and educational attainment. In Sommer’s research in 2010, it was her hypothesis that “collision” occurs between the needs of adolescent girls and their school environments, which was best exampled by menstruation. She wanted to bring the topic of menses to the forefront as a possible cause for dropping out, however, her interviews with students did not suggest this. She assumed that “the insufficient school water and sanitation facilities, and the unaffordability of sanitary materials in the marketplace…may push girls who are already struggling with their academics or pressures from home to decide to stop attending school.[[162]](#footnote-162)”

 This “may” is a hypothesis, an assumption, that created a whole discourse relating to MHM. Sommer’s 2010 article is countlessly cited by herself and by her colleagues as evidence for inadequate MHM and absenteeism. However, I believe that the majority of the issues highlighted by the girls in her interviews seem to be focused on dangers in traveling alone, expectations of marriage, and the lack of support they experience in general, not just about menses.

 The other issues brought up by these girls are broadly structural and social issues, and it would be difficult for experts or interventions to address them. It is possible that the reason why the MHM discourse was focused on MHM and school attainment because the other issues relating to universal gender education (like increased household responsibilities, family preference for educating sons, marriage pressures, premarital pregnancy, and safety against violence[[163]](#footnote-163)) cannot be solved by technical approaches.

***Technical Solution to Social Problems?***

 Escobar described the issues of development discourse as experts creating issues and needs for people in the developing world. These needs can then be addressed using technical solutions and further categorized and understood within Western frameworks of reality. In terms of MHM, the Western frameworks were based on the Western Women’s Health Movement that was focused on the empowerment of women through education about their bodies and dispelling of taboos associated with menstruation. The creation of the issue of MHM was developed by field researchers studying the MHM status of schoolgirls in the developing world. While it is possible that these schoolgirls want and need better absorbents or education to better handle their menses outside the home, will the provisioning of these “needs” solve the issue of educational attainment? Why was that considered a solution to begin with?

 I argue that it is not difficult for the MHM discourses to assign the MHM problem to the issue of educational attainment because it seems like a technical, easy solution to a broad, complex social problem that is gender inequality in education. This idea reduces the needs and problems of these schoolgirls to their inability to manage their menses. It is true that this new generation of girls who attend school are facing new issues that their mothers and grandmothers did not face, which was managing their menses outside of their home. But there are far greater problems with girls traveling outside of their homes for education and employment besides their menstrual management. As stated by the very girls Sommer’s studied, traveling alone later in the afternoon and being abused by their classmates were larger problems.

It seems initially strange that menses would be the problem selected out of the hat of possible interventions and global advocacy campaigns. What furthers the strangeness is that the assumption of the relationship between menstruation and education was not founded on substantial qualitative evidence. It was based on a few observations based on Western perceptions of reality. Then, subsequent discourse when outside the original study population in Tanzania to places like Pakistan, India, Zimbabwe, and Gambia to find other poor schoolgirls in the developing world to understand their menstrual needs.

Sommer has not addressed studies like Oster & Thorton or Grant that have shown that there was not a significant link between menses and school absenteeism. It is possible that these two studies could be considered the actual failure of MHM as an intervention issue for education in the developing world. However, instead of taking a step back and attempting to reformulate the question, the discourse of MHM are only pushing for more research. Even if there is not substantial evidence to suggest the correlation between MHM and education, Sommer has written a report each year since 2013 calling for more research, particularly quantitative research. But it is very possible that even if high quality, randomized research with a sufficient sample size was conducted, there still may not be a correlation between menstruation and absenteeism, because of the complex variables associated with a girl’s decision to go to school. By not recognizing these variables, Sommer is doing a disservice to the girls by reducing the complexity of their problems to technical issues, and not those of poverty and patriarchy.

# Chapter VI: Reflections from the Other Side

 The hardest part of admitting that you are wrong is realizing how and why you came up with the false conclusions. I truly feel that the reason why I believed that there was a link between menstrual hygiene management and education was because I was not closely reading the results from the field data and the findings of the intervention programs. I was clouded by my Western feminist assumptions that menstrual hygiene was a source of empowerment against the patriarchy, thus proper MHM would be a way for my sisters in the developing world to also gain agency and empowerment. Luckily, coming across the systematic reviews of Sumpter and Hennegan helped me realize my mistake. I was able to look at Sommer’s articles with fresh eyes and able to focus on her assumptions and logic for accuracy instead of whether they aligned with my morals. I would like to believe that there is a universal sisterhood, where we all can come together and share our menses stories. However, the realities and issues of schoolgirls my own age will always be difficult for me to comprehend, because I do not share the same geographical, cultural, linguistic, historical, and political context. By reducing my sister in Tanzania to her ability to manage her menses, I have removed my ability to truly understand and possibly assist her.

 I believe my research was actually an opportunity for me to explore my own beliefs and assumptions about development and female empowerment. As students, we all want to find new ways to make the world a better, more caring place. But we tend to focus on minuscule differences between our world and the other, often ignoring the role colonization and imperialism had in exacerbating these differences. In this process, we make people in the developing world subject-less entities that live within these unchanging, primitive contexts, as compared to ever-changing digital world. It will take a lifetime to remove these types of assumptions from my worldview, but I hope my research has allowed me to start in the right direction.

# Appendix

1. Interview Questions

|  |  |
| --- | --- |
| Questions | Notes |
| 1. Does your school provide menstrual health education to female students?کیا آپکے سکول میں ماہواری کے باڑے میں پروگرام ہے؟ | If yes, proceed to question twoIf yes, proceed to question eight |
| School does provide menstrual education… |
| 2. Is the menstrual education program provided facilitated by the school or a NGO?یا سکول پروگرام پیش کرتا ہے؟ NGO کیا | If the school provides the program, proceed to question fourIf a NGO provides the program, proceed to question three |
| 3. Which NGO provides the menstrual education?پروگرام پیش کرتا ہے؟ NGO کونسا |  |
| 4. At what grade level is this education provided? کونسی کلاس میں یہ پروگرام پیش ہوتا ہے؟ |  |
| 5. Is parental permission requested before a student can participate in the program?کیا آپکا سکول والیدین سے اجازت لیتا ہے پروگرام سے پہلے؟ |  |
| 6. Is group discussion encouraged during these session(s)?کیا پروگرام میں بچےآسانی سے حیض کے باڑے بات کر سکتے ہیں؟ |  |
| 7. How do you think the menstrual education could be improved?آپکے خیال میں یہ پروگرام کیسے بہتر ہو سکتا ہے؟ |  |
| School does not provide menstrual education… |
| 9. What do you feel is the most important reasons why your school does not provide menstrual education? (possibilities- not polite [social conservatism], religion, ignorance, financial issues)آپکے خیال میں آپکا سکول کیؤں نہیں ماہواری کا پروگرام پیش کرتا ہے؟ |  |
| 10. Do you feel parents discourage menstrual health/ puberty from being discussed in schools?آپکے خیال میں والیدین اس طرح کے پروگرام نیہں پسند کرتےہیں؟ |  |
| General Questions |
| 11. Do you think it is the job of schools to provide health education to students?کیا آپکے خیال میں صحت کی تعلیم سکولوں کی ذمہ داری ہے؟ |  |
| 12. Do you think it would be easier if the government required health education for the students?کیا آپ کو لگتا ہے کہ حکومت کا ملوث ہو نااہم ہے اس جیسے پروگراموں کی کامیابی کے لیٔے؟ |  |
| 13. Do you think it is important for girls to learn about menstrual hygiene? کیا آپ کو لگتا ہے کہ ماہواری کی تعلیم لرکیوں کہ لیے اہم ہے؟ |  |
| 14. How does the school manage/help menstruating students?آپ کا سکول لرکیوں کو کیسے مدد کر تاہے جب انکو ماہواری ہو جاتا ہے؟ |  |
| 15. Do you think students have difficulty managing menstruation while at school?کیا آپ کو لگتا ہے کہ لرکیاں آسانی سے ماہواری کا انتظام کر سکتی ہیں؟ |  |
| 10. Do you think that students drop out because of difficulty managing menstruation/ ridicule/ family pressure?کیا آپ کو لگتا ہے کہ آس کی وجہ سے لرکیؤں کی پرہاہ ی میں روکاوٹ ہو جاتی ے؟ |  |

# Works Cited

Aizenman, Nurith. 2015. *People Are Finally Talking About the Thing Nobody Wants to Talk About.* June 19. Accessed February 2016. http://www.npr.org/sections/goatsandsoda/2015/06/16/414724767/people-are-finally-talking-about-the-thing-nobody-wants-to-talk-about.

Alba, Anneli. n.d. "Forward." In *Theoretical Perspectives on Gender and Development*, by M. Patricia Connelly, and V. Eudine Barriteau Jane L. Parpat. Ottawa, ON: International Development Research Center.

Ali, Tazeen. 2007. "Are unhygienic practices during the menstrual, partum, and postpartum periods risk factors for secondary infertility?" *Journal of Health, Population, Nutrition* 25: 189-194.

Ali, Tazeen Saeed, and Syeda Naghma Rizvi. 2010. "Menstrual knowledge and practices of female adolescents in urban Karachi, Pakistan." *Journal of Adolescence* 33 (4): 531-541.

Alif Ailaan. n.d. "Pakistan Education Statistics 2014-2015 Fact Sheet."

Bendera, S. n.d. "Education of Girls in Tanzania." In *Gender, education, and development: beyond access to empowerment*, by C. Hedward & S. Bunwaree, 117-132. London: Zedd Books Ltd.

Bharadwaj, Sowmyaa. 2004. "Menstural Hygiene and Management in Developing Countries: Taking Stock." Junction Social- Social Development Consultants.

Bhatti, Lubna. 2002. "Health Seeking Behavior of Karachi Women with Reproductive Tract Infections." *Social Science & Medicine* 54 (1): 105-117.

Bobel, Chris. 2010. *New Blood: Third Wave Feminism and the Politics of Menstruation.* New Brunswick, New Jersey: Rutgers University Press.

Borowski, Ann Modro. 2011. *Are American women turning to reusable and greener menstrual products due to health and environmental pollution concerns?* Rochester Institute of Technology, Environmental, Health and Safety Management, Ann Arbor: Masters Abstracts International.

Bulut, A. 1997. "Contraceptive choice and reproductive morbidity in Istanbul." *Stud Fam Plann* 28: 35-43.

Crofts, T. 2010. "Menstrual Hygiene in Ugandan schools: an investigation of low-cost sanitary pads." *Journal of Water Sanitation Hygiene Development* 2 (1): 50-58.

Demba, E. 2005. "Bacterial vaginosis, vaginal flora patterns, and vaginal hygiene practices in patients presenting with vaginal discharge syndrome in the Gambia, West Africa." *BMC Infectious Disease* 5.

Escobar, Arturo. 1995. *Encountering Development: the Making and Unmaking of the Third World.* Princeton, New Jersey: Princeton University Press.

Escobar, Arturo. n.d. "The Making and Unmaking of the Third World Through Development." In *The Post-Development Reader*, by Majid Rahnema with Victoria Bawtree. London: Zed Books.

Esteva, Gustavo. 1992. "Development." In *The Development Dictionary: A Guide to Knowledge as Power*, by Wolfgang Sachs. London: Zed Books.

—. 2008. *Escaping Education: Living as Learning Within Grassroots Cultures (Second Edition).* Peter Lang Publishing Inc.

Fakhri, M. 2012. "Promoting menstrual health among Persian adolescent girls from low socioeconomic backgrounds: a quasi-experimental study." *BMC Public Health* 12.

Fehr, AE. n.d. "Stress, Menstruation, and School Attendance: effects of water access among adolescent girls in South Gondor, Ethiopia [master's thesis]."

Ferguson, James. 1994. "The Anti-Politics Machine- "Development" and Bureaucratic Power in Lesotho." *The Ecologist* 24 (5): 176-181.

Ferguson, James. 1990. *The Anti-Politics Machine.* Cambridge: Cambridge University Press.

Grant, Monica, Cynthia Lloyd , and Barbara Mensch. n.d. "Menstruation and School Absenteeism: Evidence from Rural Malawi." *Comparative Education Review* 57 (2).

Gray, Miranda. 1994. *Red Moon: Understanding and Using the Gifts of the Menstrual Cycle.* Element Books Ltf.

Halvorson, Sarah. n.d. *Growing up in Gilgit: Exploring the Nature of Childhood in Northern Pakistan.*

Hennegan, Julie, and Paul Montgomery. 2015. "Do Menstruation Management Interventions Improve Education and Psychosocial Outcomes for Women and Girls in Low and Middle Income Countries? A Systematic Review." *Centre for Evidence-Based Interventions* 1-21.

Kirk, Jackie, and Marni Sommer. 2005. "Menstruation and Body Awareness: linking girls' health and girls' education."

Lloyd, Cynthia. n.d. "New Lessons: The Power of Educating Adolescent Girls." Report, Population Council, 23-56.

Mahon, T, and M Fernandes. 2010. "Menstrual Hygiene in South Asia: a neglected issue for WASH programs." *Gender Development* 18 (1): 99-113.

McMahon, S, P Winch, and B Caruso. 2011. "The girl with her period is the one to hang her head: reflections on menstrual management among schoolgirls in rural Kenya." *Journal of Adolescence* 11 (7).

Mensch, Barbara, and J Bruce. 1998. "The uncharted passage: Girls' adolescence in the Developing World." Population Council, New York.

Mohanty, Chandra Talpade. 1991. "Introduction." In *Third World Women and the Politics of Feminism*, by Chandra Talpade Mohanty, Anne Russo and Lourdes Torres. Bloomington: Indiana University Press.

Mohanty, Chandra Talpade. 1984. "Under Western Eyes: Feminist Scholarshop and Colonial Discourses." *boundary 2* (Duke University Press) 12/13 (1): 333-358.

Morrison, L. 2005. "Bacterial vaginosis in relation to menstrual cycle, mentrual protection method, and sexual intercourse in rural Gambian women." *Sexually Transmitted Infections* 81: 242-247.

Narayan, K. 2001. "Puberty Rituals, Reproductive KNowledge, and Health of Adolescent Schoolgirls in South Asia." *Asia Pacific Population Journal* 16: 225-238.

Naseem, M. n.d. *Education and Gendered Citizenship in Pakistan.* New York: Palgrave Macmillan.

Oster, E, and R Thornton. 2011. "Menstruation, sanitary products, and school attendance: Evidence from randomized evaluation." *American Economic Journal: Applied Economics* 3 (1): 91-100.

Rist, Gilbert. 2014. *The History of Development: From Western Origins to Global Faith.* Fourth. London: Zed Books.

Sachs, Wolfgang. 1992. "Introduction." In *The Development Dictionary: A Guide to Knowledge as Power*, by Wolfgang Sachs. London: Zed Books Ltd.

Said, Edward W. 1994. *Orientalism.* New York: Vintage Books.

Schech, Susanne, and Jane Haggis. 2000. *Culture and Development: A Critical Introduction.* Oxford: Blackwell Publishers Ltd.

Singh, MM. 2001. "Effectivenes of sndromic approach in managemnt of reproductive tract infections in women." *Indian Journal of Medical Sciences* 55: 209-214.

Sommer, Marni. 2012. "The gendered nature of schooling in Ghana: hurdles to girls' menstrual management in school." *Journal of Culture nd African Women Studies* 20: 63-79.

Sommer, Marni. 2010. "Where the education system and women's bodies collide: the social and health impact of girls' experiences of menstruation and schooling in Tanzania." *Journal of Adolescence* 33: 521-529.

Sommer, Marni, and Murat Sahin. 2013. “Overcoming the Taboo: Advancing the Global Agenda for Menstrual Hygiene Management for Schoolgirls.” *American Journal of Public Health* 103 (9): 1556-1559.

Sommer, Marni, Bethany Caruso, and Murat Sahin. 2016. "A Time for Global Action: Addressing Girls Menstrual Hygiene Management Needs in Schools." *PlOS in Medicine: Health in Action.*

Sommer, Marni, Jennifer Hirsch, Constance Nathanson, and Richard Parker. 2015. “Comfortably, Safely, and Without Shame: Defining Menstrual Hygiene Management as a Public Health Issue.” *American Journal of Public Health* 105 (7): 1302-1311.

Sumpter, Colin, and Belen Torondel. 2013. “A Systematic Review of the Health and Social Effects of Menstrual Hygiene Management.” *PLOS ONE* 8 (4): 1-15.

Thuren, Britt-Marie. 1994. "Opening doors and getting rid of shame. Experiences of first menstruation in Valencia, Spain." *Women's Studies International Forum* 17 (2-3): 217-228.

United Nations Human Rights . 2014. *(Introduction) Realizing the Human Rights to Water and Sanitation.* Geneva: United Nations Human Rights.

Uskul, Ayse. 2004. "Women's Menarche Stories from a Multicultural Sample." *Social Science and Medicine* 59: 667-679.

Wasserheit, Judith. 1989. "Reproductive Tract Infections in a Family Planning Population in Rural Bangladesh." *Studies in Family Planning* 20 (2): 69-80.

Wendee, Nicole. 2012. "A Question for Women's Health: Chemicals in Feminine Hygiene Products and Personal Lubricants." *Environmental Health Perspectives* 122 (3): A70.

Young, Kate. 1993. *Planning Development with Women: Making a World of Difference.* New York: St. Martin's Press.

Younis, N. 24. "A community study of gynecological and related morbidities in rural Egypt." *Stud Fam Plann* 175-186.

1. Said, Edward W. 1994. *Orientalism.* New York: Vintage Books. [↑](#footnote-ref-1)
2. Hennegan and Montgomery 2015 and Sumpter and Torondel 2013. [↑](#footnote-ref-2)
3. Sumpter 2013 and Hennegan 2015. [↑](#footnote-ref-3)
4. Sommer, Hirsch, et al. 2015. [↑](#footnote-ref-4)
5. Ibid, 1305. [↑](#footnote-ref-5)
6. Sommer and Sahin, Overcoming the Taboo: Advancing the Global Agenda for Menstrual Hygiene Management for Schoolgirls 2013. [↑](#footnote-ref-6)
7. Sumpter 2013. [↑](#footnote-ref-7)
8. Sommer 2013. [↑](#footnote-ref-8)
9. Sommer 2015. [↑](#footnote-ref-9)
10. Sumpter 2013, 1 [↑](#footnote-ref-10)
11. Ibid. [↑](#footnote-ref-11)
12. United Nations Human Rights 2014. [↑](#footnote-ref-12)
13. Sommer, Hirsch, et al. 2015 [↑](#footnote-ref-13)
14. Kirk and Sommer 2005. [↑](#footnote-ref-14)
15. Sommer, Hirsch, et al. 2015. [↑](#footnote-ref-15)
16. Sumpter 2013 and Hennegan 2015. [↑](#footnote-ref-16)
17. Ibid. [↑](#footnote-ref-17)
18. Hennegan 2015. [↑](#footnote-ref-18)
19. Sommer 2015. [↑](#footnote-ref-19)
20. Sommer 2013. [↑](#footnote-ref-20)
21. Sommer 2015. [↑](#footnote-ref-21)
22. Sommer, Caruso and Sahin, 2016. [↑](#footnote-ref-22)
23. Sommer 2013 and Sommer 2015. [↑](#footnote-ref-23)
24. Within the theoretical framework section, I will define the term discourse using Foucault’s discourse analysis as described by Arturo Escobar, Edward Said, and Gilbert Rist. [↑](#footnote-ref-24)
25. Said 1994. [↑](#footnote-ref-25)
26. Mensch and Bruce 1998. [↑](#footnote-ref-26)
27. Escobar 1995, 5. [↑](#footnote-ref-27)
28. Ibid 11-13. [↑](#footnote-ref-28)
29. Mohanty 1984, 336-338. [↑](#footnote-ref-29)
30. Ali and Rizvi 2010. [↑](#footnote-ref-30)
31. In chapter three, I discuss the requirements and issues within the definition of “adequate” MHM. [↑](#footnote-ref-31)
32. Grant, Lloyd and Mensch n.d.. [↑](#footnote-ref-32)
33. Sachs 1992, 1 [↑](#footnote-ref-33)
34. Ibid, 3. [↑](#footnote-ref-34)
35. Ibid, 5. [↑](#footnote-ref-35)
36. Ibid, 4. [↑](#footnote-ref-36)
37. Esteva 1992, 11. [↑](#footnote-ref-37)
38. Sachs 1992, 4-5. [↑](#footnote-ref-38)
39. Escobar 1995, 5. [↑](#footnote-ref-39)
40. Ibid, 8. [↑](#footnote-ref-40)
41. Esteva 2008. [↑](#footnote-ref-41)
42. Rist 2014, 163. [↑](#footnote-ref-42)
43. Ibid. [↑](#footnote-ref-43)
44. Ibid 205. [↑](#footnote-ref-44)
45. Ibid 206. [↑](#footnote-ref-45)
46. Ibid 208. [↑](#footnote-ref-46)
47. Ibid. [↑](#footnote-ref-47)
48. Ibid 226. [↑](#footnote-ref-48)
49. Ibid 236-238. [↑](#footnote-ref-49)
50. Escobar, The Making and Unmaking of the Third World Through Development n.d., 86-87. [↑](#footnote-ref-50)
51. Ibid 88. [↑](#footnote-ref-51)
52. Alba n.d., v. [↑](#footnote-ref-52)
53. Schech and Haggis 2000, 87 [↑](#footnote-ref-53)
54. Ibid, 88. [↑](#footnote-ref-54)
55. Ibid, 90. [↑](#footnote-ref-55)
56. Ibid, 91. [↑](#footnote-ref-56)
57. Ibid, 95. [↑](#footnote-ref-57)
58. Ibid, 96. [↑](#footnote-ref-58)
59. Ibid, 97. [↑](#footnote-ref-59)
60. Ibid, 102. [↑](#footnote-ref-60)
61. Mohanty 1991, 3. [↑](#footnote-ref-61)
62. Mohanty 1984, 337. [↑](#footnote-ref-62)
63. Ibid. [↑](#footnote-ref-63)
64. Ibid, 343. [↑](#footnote-ref-64)
65. Ibid, 344. [↑](#footnote-ref-65)
66. Mohanty 1991, 10. [↑](#footnote-ref-66)
67. Schech and Haggis 2000, 105. [↑](#footnote-ref-67)
68. Escobar, The Making and Unmaking of the Third World Through Development n.d., 91. [↑](#footnote-ref-68)
69. Ibid. [↑](#footnote-ref-69)
70. Young 1993, 108 & 149. [↑](#footnote-ref-70)
71. Ferguson 1990, 18. [↑](#footnote-ref-71)
72. Ibid, 256. [↑](#footnote-ref-72)
73. Ibid, 254. [↑](#footnote-ref-73)
74. Ibid, 254-256. [↑](#footnote-ref-74)
75. Ibid, 255. [↑](#footnote-ref-75)
76. Ibid, 256. [↑](#footnote-ref-76)
77. Ibid, 257. [↑](#footnote-ref-77)
78. Ibid, 257. [↑](#footnote-ref-78)
79. Ibid, 259-260. [↑](#footnote-ref-79)
80. Ferguson 1994, 178. [↑](#footnote-ref-80)
81. Ibid, 181. [↑](#footnote-ref-81)
82. Ibid. [↑](#footnote-ref-82)
83. Bobel 2010, 4-5. [↑](#footnote-ref-83)
84. Gray 1994. [↑](#footnote-ref-84)
85. Ibid, 8. [↑](#footnote-ref-85)
86. Ibid, 33. [↑](#footnote-ref-86)
87. Ibid, 33. [↑](#footnote-ref-87)
88. Ibid, 30. [↑](#footnote-ref-88)
89. Ibid, 31. [↑](#footnote-ref-89)
90. Kirk and Sommer 2005. [↑](#footnote-ref-90)
91. Uskul 2004. [↑](#footnote-ref-91)
92. Thuren 1994. [↑](#footnote-ref-92)
93. Bobel 2010, 107. [↑](#footnote-ref-93)
94. Sommer, Hirsch, et al. 2015, 1302. [↑](#footnote-ref-94)
95. Ibid, 1303. [↑](#footnote-ref-95)
96. Ibid, 1304. [↑](#footnote-ref-96)
97. Aizenman 2015 [↑](#footnote-ref-97)
98. Aizenman 2015 [↑](#footnote-ref-98)
99. Sommer, Where the education system and women's bodies collide: the social and health impact of girls' experiences of menstruation and schooling in Tanzania, 2010 [↑](#footnote-ref-99)
100. Sommer 2012. [↑](#footnote-ref-100)
101. Sommer, Hirsch, et al. 2015, 1305. [↑](#footnote-ref-101)
102. Sommer and Sahin 2013, 1557. [↑](#footnote-ref-102)
103. Kirk and Sommer 2005. [↑](#footnote-ref-103)
104. Sommer, Hirsch, et al. 2015, 1307. [↑](#footnote-ref-104)
105. Ibid, 1303. [↑](#footnote-ref-105)
106. Ibid, 1307. [↑](#footnote-ref-106)
107. Ibid, 1307. [↑](#footnote-ref-107)
108. Sommer 2012. [↑](#footnote-ref-108)
109. Sommer 2010. [↑](#footnote-ref-109)
110. McMahon, Winch and Caruso 2011. [↑](#footnote-ref-110)
111. Sommer, Hirsch, et al. 2015, 1305. [↑](#footnote-ref-111)
112. United Nations Human Rights 2014, 34. [↑](#footnote-ref-112)
113. Sommer, Caruso and Sahin, 2016, 3. [↑](#footnote-ref-113)
114. Sommer, Hirsch, et al. 2015, 1305. [↑](#footnote-ref-114)
115. Bharadwaj 2004 2-3, 12. [↑](#footnote-ref-115)
116. Sommer 2010, 522. [↑](#footnote-ref-116)
117. Ibid 522. [↑](#footnote-ref-117)
118. Mensch and Bruce 1998. [↑](#footnote-ref-118)
119. Ibid. [↑](#footnote-ref-119)
120. Mahon and Fernandes 2010. [↑](#footnote-ref-120)
121. Sommer 2010. [↑](#footnote-ref-121)
122. McMahon, Winch and Caruso 2011. [↑](#footnote-ref-122)
123. Crofts 2010. [↑](#footnote-ref-123)
124. Mahon and Fernandes 2010. [↑](#footnote-ref-124)
125. Fehr 2011. [↑](#footnote-ref-125)
126. Sommer, Hirsch, et al. 2015, 1305. [↑](#footnote-ref-126)
127. Hennegan and Montgomery 2015 and Sumpter and Torondel 2013. [↑](#footnote-ref-127)
128. Narayan 2001 and Singh 2001. [↑](#footnote-ref-128)
129. T. Ali 2007. [↑](#footnote-ref-129)
130. Younis n.d. [↑](#footnote-ref-130)
131. Fakhri 2012. [↑](#footnote-ref-131)
132. Bulut 1997. [↑](#footnote-ref-132)
133. Morison 2005 and Demba 2005. [↑](#footnote-ref-133)
134. Xia 2004 [↑](#footnote-ref-134)
135. Sumpter and Torondel 2013, 13. [↑](#footnote-ref-135)
136. Wendee 2012. [↑](#footnote-ref-136)
137. Borowski 2011, 12-13. [↑](#footnote-ref-137)
138. Ibid. [↑](#footnote-ref-138)
139. Ibid. [↑](#footnote-ref-139)
140. Wendee 2012, 10-11. [↑](#footnote-ref-140)
141. Wendee 2012, 11. [↑](#footnote-ref-141)
142. Bobel 2010, 82-84. [↑](#footnote-ref-142)
143. Sumpter and Torondel 2013, 13. [↑](#footnote-ref-143)
144. Hennegan and Montgomery 2015, 15. [↑](#footnote-ref-144)
145. Thuren 1994. [↑](#footnote-ref-145)
146. Bobel 2010, [↑](#footnote-ref-146)
147. Sommer and Sahin 2013, 1558. [↑](#footnote-ref-147)
148. Oster and Thornton 2011. [↑](#footnote-ref-148)
149. Grant, Lloyd and Mensch n.d. [↑](#footnote-ref-149)
150. Ali and Rizvi 2010. [↑](#footnote-ref-150)
151. Sommer 2013, 1558. [↑](#footnote-ref-151)
152. Naseem 2010. [↑](#footnote-ref-152)
153. Alif Ailaan n.d. [↑](#footnote-ref-153)
154. Alif Ailaan n.d. [↑](#footnote-ref-154)
155. Ibid, 1307. [↑](#footnote-ref-155)
156. Ibid. [↑](#footnote-ref-156)
157. Ibid 4. [↑](#footnote-ref-157)
158. Halvorson n.d. [↑](#footnote-ref-158)
159. Hennegan and Montgomery 2015, 15. [↑](#footnote-ref-159)
160. United Nations Human Rights 2014. [↑](#footnote-ref-160)
161. Sommer, Hirsch, et al. 2015, 1308. [↑](#footnote-ref-161)
162. Sommer 2010, 526. [↑](#footnote-ref-162)
163. Sommer 2010, 523. [↑](#footnote-ref-163)