



**An Exploration of Young Women's Menstrual Experiences in the African Context: A
Scoping Review**

Lorelle Pillay

215003220

Supervisor: Dr Sachet Valjee

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Master of Social Science (Clinical Psychology)

Department of Psychology

School of Applied Human Sciences

College of Humanities

University of KwaZulu Natal, Howard College

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Declaration

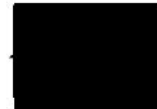
I, Lorelle Pillay (Student number 215003220), hereby declare that this dissertation has been composed solely by myself and all sources of aid utilised were as per the allowance of the university, for this particular study.

This dissertation has not been submitted previously for assessment to another institution for another qualification.

All sources used for review have been acknowledged and referenced.

Date: 3 October 2023

Signature:



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Abstract

Introduction: Limited research has been conducted on menstrual experiences and the impact of menstrual experiences on young women in the African context. Growing bodies of research show that young women experience menstruation negatively due to lack of knowledge and adequate resources within low- and middle-income countries. The research that currently exists around the topic of menstruation is mostly quantitative and the in-depth narratives of young women's menstrual experiences are only minutely explored. It was found that socio-cultural beliefs and practices play a role in influencing certain negative menstrual experiences and perceptions of menstruation. This study aims to examine and map the impact of menstrual experiences on young women in Africa as well as the socio-cultural influences on menstrual experiences. **Method and analysis:** This study was conducted by means of a scoping review. Data was extracted from multiple databases on EBSCOHost. The process of data extraction was presented in the form of a PRISMA Flow diagram. A total of 15 articles were included in the present study. **Results and Discussion:** It was found that young women's experiences of menstruation in Africa have mostly been negative and that these experiences were attributed to a lack of adequate water, sanitation and hygiene facilities in their respective environments, the misinformation about menstruation and menstruating females portrayed by cultural norms and the lack of education around menstruation and menstrual processes. The major themes identified from the thematic analysis were 1) The impact of menstrual experiences amongst young women in Africa and 2) The socio-cultural influences on menstrual experiences. The sub-themes identified in relation to the impact of menstrual experiences included 1) Attendance, 2) Mental distress, and 3) Lack of sanitary facilities. The sub-themes identified in relation to socio-cultural influences on menstrual experiences included 1) Lack of menstrual knowledge, and 2) Concealment. **Conclusion and recommendations:** Two overarching themes were identified during the process of analysis and were divided into a total of 5 sub-

themes. There exists a need for future research to focus on intervention, exploring qualitative research and expanding research in different countries within the African context.

Keywords: Young women, menstrual experiences, socio-cultural influences, cultural beliefs
Africa

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Chapter 1: Introduction and background

Menarche may be defined as the first menstrual period that is experienced by a female during the phase of puberty (Ameade & Garti, 2016). This is a period in which young females are beginning to learn about their bodies and attempt to find ways of adjusting to society as they enter a new phase in their lives (Ameade & Garti, 2016). A study that was conducted in South Africa examined the knowledge that female students have regarding menstruation and the practices that they follow whilst menstruating. In this study, it was discovered that topics relating to sex are generally discussed openly on media platforms, however, topics regarding sex and menstruation were very rarely spoken about amongst family members in South Africa (Ramathuba, 2015). The study discovered that due to this, many female students did not have much knowledge about menstruation or menarche (Ramathuba, 2015). In addition to this, family members confirmed concealing information regarding menstruation, prior to the onset of their daughters' cycles (Ramathuba, 2015).

The lack of knowledge about menstruation and concealment of talk around the topic contributed towards high rates of teenage pregnancy as females engaged in sexual relations without adequate knowledge of what sexual relations may lead to (Ramathuba, 2015). The lack of knowledge regarding menstruation has also led to young adolescent females often feeling embarrassed and isolated during their menstrual periods as they have not internalized that it is a normal biological process, but rather that it is something shameful and impure (Jackson & Falmagne, 2013).

The above highlights the need to conduct a scoping review that will identify the cultural influences such as concealment of the topic (which has led to a lack of knowledge around the topic), that has contributed towards young women going through life changing experiences, i.e. teenage pregnancy, at a young age. It also highlights the need to learn more about aspects

that influence and shape different types of menstrual experiences as this will help to get a better understanding on how to improve the experiences of young menstruating females within the African context.

1.1 Aims and objectives of this study

The aim of this study was to gain an understanding of the information that currently exists regarding the impact of and sociocultural influences on experiences of menstruation amongst the youth in Africa. The aim was also to understand what is currently known to be required by the youth in Africa in order to improve menstrual experiences and the impact of these experiences on the youth in Africa.

The objectives for this study were:

- To examine and map the impact of menstrual experiences of young women in the African context.
- To examine and map the role of sociocultural and contextual influences in young women's experiences of menstruation in Africa.
- To examine and map the interventions that have been recommended to assist young women in their experience of menstruation in the African context.
- To identify existing gaps in the current literature regarding menstrual experiences and sociocultural influences on menstrual experiences.

Chapter 2: Literature review

2.1 Introduction

Growing bodies of research indicate that girls in lower-middle income countries face challenges regarding the management of their menstrual health and this has a negative impact on both their physical and mental health, as well as their social and occupational lives (Mason et al., 2013; Kemigisha et al., 2020). This section highlights the different types of challenges that are associated with young females experiencing menstruation globally. This section also highlights the different sociocultural influences that lead to either positive or negative menstrual experiences. Studies conducted in different parts of the world have been reviewed and common themes have been identified and presented below. Due to the very limited amount of research conducted on menstrual experiences and influences on menstrual experiences, this chapter draws on information extracted from studies in much earlier years as well as the information available in current times. This adds to the importance and relevance of the present study.

2.2 Menstruation as a taboo topic

A study that was conducted in the United States of America identified that young adolescent females viewed menstruation as a taboo topic (White, 2012). It was identified in the study that there was a cultural stigma that was associated with menstruation and that this stigma resulted in concealment of the topic of menstruation amongst young females (White, 2012). It becomes evident that concealment of talk around the topic of menstruation contributes largely towards the lack of knowledge regarding menstrual processes (Garg & Anand, 2015). It is also noted that concealment around the topic of menstruation maintains the taboo nature of the topic (Ramathuba, 2015). A study conducted in the Western Cape in South Africa, revealed similar information. The study was conducted to explore the perceptions that female students have of

menstruation. It was found that female students were ashamed and embarrassed of their menstruation and resorted to concealing information regarding their menstrual experiences (Ismail et al., 2016). From this study, it was apparent that culture and religion played an important role in the way that female students perceive menstruation and how they feel about themselves during their menstrual cycles. This was also found to be true for young menstruating women within the Indian context (Garg & Anand, 2015).

2.3 Menstrual Vernacular and narratives: A global perspective

2.3.1 Europe (Ireland, Poland, France and America)

Menstruation as a taboo topic has also been identified in countries such as Ireland and Poland (Joffe, 2015). A study conducted on the vernacular of menstruation highlights that countries such as Ireland and Poland, that are more conservative in nature, also conceal talk around the topic of menstruation (Joffe, 2015). According to Joffe (2015), people in these countries use words such as “aunt”, “flowers”, and “in season” when referring to a female that is menstruating. The avoidance of literal words used to describe and explain menstruation displays the avoidance of acknowledging menstruation as a normal biological process that females may engage in without feeling ashamed (Jackson & Falmagne, 2013).

In contrast to the above, menstruation has been identified as an openly discussed and acknowledged state of being in countries such as America and France (Joffe, 2015). Many people have stepped out of previous concealment behaviours and now embrace menstruation as part and parcel of being human and experiencing normal life processes (Joffe, 2015). According to Joffe (2015), people within America now use over 90 different terms (including menstruation), to refer to the process of menstruation. Drawing from studies reviewed in America above, it is evident that menstruation is experienced differently in different parts of America as highlighted by the terminology used to explain and talk about the menstrual

process. Females living in lower income areas refrain from using the literal terminology when referring to menstruation and seem to experience more negative outcomes during menstrual periods (Joffe, 2015). Females living in higher income areas are more literal in their usage of terminology pertaining to menstrual processes and seem to experience menstruation more positively than those living in lower income areas (White, 2012).

2.3.2 Central Europe (Spain and Austria)

Tracking menstrual cycles via menstrual tracking mobile applications amongst females have become a popular way of knowing when to expect a period in order to exercise more control over the process and plan activities accordingly (Levy1 & Romo-Avilés, 2019). In a study conducted across Spain and Austria, it was found that females use menstrual tracking apps to ensure that their menstrual cycles have been regular and to know the date on which they should expect their period to begin, to prepare themselves before experiencing their menstrual cycles by means of purchasing menstrual toiletries, becoming familiar with their own bodies, verifying different sensations associated with menstrual cycles, informing their healthcare professionals about the details of their menstrual cycles, tracking their overall health, becoming aware of contraception and pregnancies, as well as tracking changes in their menstrual cycles (Levyl & Romo-Avilés, 2019). Having access to these apps have provided the public health community with access to more education around the topic of menstruation in order to improve the health literacy females have regarding the menstrual process ((Levyl & Romo-Avilés, 2019). The usage of these apps in these countries have also led to negative outcomes. It was found that usage of menstrual tracking apps have led to a decrease in reliance on medical professional advice when it comes to menstrual processes (Levyl & Romo-Avilés, 2019). The increase in health literacy facilitated by these apps have either led to positive outcomes, where females feel in control and calmer knowing that their bodies are functioning the way they should, or they lead to negative outcomes, where females feel distressed and that their bodies

are not functioning the way that they should (Levyl & Romo-Avilés, 2019). Despite the outcome, it is evident that access to education around the topic of menstruation in both Spain and Austria was also limited and a need to make it more accessible was acknowledged (Levyl & Romo-Avilés, 2019).

2.3.3 Asia (India and Lebanon)

Similar to the above-mentioned countries, the provision of education around the topic of menstruation in countries such as India, is scarce (Garg & Anand, 2015). The scarcity in the provision of education around the topic of menstruation has been attributed to social and cultural influences such as religious beliefs and historical myths relating to the exiting of blood from the female body (Garg & Anand, 2015). According to Garg and Anand (2015), menstruation is considered to be an impure and filthy experience, which they regard as one of the myths about menstruation. In the Indian context, acts of purification amongst Hindu women are in order before they return to daily life activities, such as entering a prayer room, following the end of their menstrual period for the month (Garg & Anand, 2015). It is believed that whilst a woman is menstruating, her blood is impure and thus she should not come before God in this impure state as it is a sign of disrespect (Garg & Anand, 2015). It was also noted that menstruating women are prohibited from cooking food during their menstrual cycle in order to avoid contamination as it is believed that due to the believed impure nature of the blood, if a menstruating woman touches the food, the impure blood enters the contents of the food and poisons it (Garg & Anand, 2015). The blood that leaves the body during this period has been associated with danger, shame and it is believed that it has properties of evil possession when used over a male (Garg & Anand, 2015). These sort of myths and taboos have resulted in a decline in overall emotional well-being amongst menstruating young females in India (Garg & Anand, 2015). It was found that absenteeism rates increase around the time that Indian females experience their menstrual periods at school and that this is due to feeling ashamed or

uncomfortable, which are experiences that stem from beliefs about their menstruation being shameful and impure. It was also found that young adolescent females become so embarrassed during their menstrual periods that they often tend to wake up earlier than everyone else within their households to go outside and wash their underwear and menstrual cloths to avoid anyone seeing them and identifying that they are on their menstrual periods (Shahe et al., 2013). Not only do these young adolescent females have to conceal talk about the fact that they do menstruate, but they also have to conceal and hide the practices that display that they are on their menstrual periods, even within the family setting.

According to Esimai and Esan (2010), Dysmenorrhea is a common yet less understood phenomenon that occurs during the process of menstruation and may be defined as the experience of unusually painful menstrual periods. It includes pain and cramping around the lower abdomen area and is associated with headaches, diarrhoea, dizziness, nausea, anxiety and depression (Santina et al., 2012). Studies on Dysmenorrhea and menstrual experiences amongst adolescent Lebanese women are scarce (Santina et al., 2012). This condition has led to higher absenteeism rates amongst the adolescent females living in Lebanon and having this condition has contributed towards negative experiences during menstrual cycles and is also associated with mood changes with further influence absenteeism rates amongst these menstruating females (Santina et al., 2012). In addition to this and similar to other low- or middle-income countries, menstruation amongst Lebanese people is viewed as negative, shameful and dirty (Santina et al., 2012). These views have contributed towards young females developing negative perceptions about themselves and becoming insecure about their bodies before menarche which is before they even begin menstruating (Santina et al., 2012). It may also be inferred that the sociocultural beliefs and phenomenon associated with menstruation in Lebanon contributes towards females' negative experiences during menstruation as they view

themselves as shameful. The influence of sociocultural beliefs on the outcomes of menstrual experiences is quite evident (Santina et al., 2012).

2.4 Absenteeism during menstruation

It is noted that young adolescents, particularly those living in rural areas, refrain from attending school during their menstrual periods (Bodat et al., 2013). Females experiencing conditions such as Dysmenorrhea tend to refrain from attending school due to the symptoms associated with the condition such as abdominal pain, nausea, dizziness and headaches (Santina et al., 2012). Menorrhagia, which refers to excessively heavy menstrual bleeding, also contributes towards increased absenteeism rates amongst menstruating female adolescents (Nooh, 2014). It was found that other reasons for increased absenteeism rates amongst menstruating female adolescents include the lack of proper facilities at school required to manage the menstruation and a lack of financial aid to purchase hygiene supplies (Bodat et al., 2013). There exists a lack of resources within the Indian school environment that would otherwise provide a more positive experience during this time (Garg & Anand, 2015). It is noted that resources such as toilets are more accessible and available for men and recommendations have been made for the provision of more toiletries and education around the topic of menstruation in India, have been made (Garg & Anand, 2015).

The lack of facilities and means of attaining sanitary products appropriate for managing menstruation results in barriers towards practising proper hygiene during the period of menstruation (Bodat et al., 2013). This places further discomfort on females living in lower income areas during their menstrual periods and becomes understandable as to why they choose to remain absent and avoid the discomfort and added shame associated with menstruating. Absenteeism in this context also leads to missed opportunities in the classroom setting as they would not have been present when certain material is being taught (Chinyama et al., 2019).

2.5 Religious and cultural influences

Studies that refer to religious and cultural influences on menstrual experiences have similar conclusions. These include that menstrual experiences were influenced by religion and culture and that these influences resulted in either positive or negative experiences (Ismail et al., 2016; Ramathuba, 2015). According to Ismail et al. (2016), in a study conducted in South Africa, females from different African cultures viewed the exiting of blood from the body as either pure or impure. It was reported that some females viewed menstruation as a pure process and that the blood removed impurities from their body, which left their bodies clean (Ismail et al., 2016). In contrast to this, some women reported that the exiting of blood from the body was a sin and that it was a symbol of a missed opportunity to have a baby (Ismail et al., 2016). From a study conducted in Kenya, it was apparent that the main focus that parents placed on menstruation was that their daughters were then physically capable of falling pregnant (Mason et al., 2013). Their menstruation displayed their transition into womanhood, where they are no longer children and were capable of bearing children. Young women were constantly reminded that they were able to fall pregnant and that they needed to be careful and stay away from men to avoid this from happening (Mason et al., 2013). This highlights that there is a cultural burden placed specifically on females to be concerned about the possibility of falling pregnant as a consequence of having a sexual relationship with men. The above indicates that the relationship between culture and menstrual experiences varies across contexts. The present study will attempt to map and synthesise what has been researched regarding young women's experiences in Africa.

It was found that adolescent females residing within the Eastern Mediterranean Region are inadequately prepared for menstruation and the reason for this was attributed to a reluctance of family members and teachers to initiate talk around the topic of menstruation due to it being a taboo topic within that region (DeJong & El-Khoury, 2006). Cultural beliefs regarding

menstruation as a shameful period in one's life was found to result in Jordanian female adolescents becoming embarrassed and suffering in silence during their menstrual periods (Jarrah & Kamel, 2012). There exists a cultural belief that young females should not be educated about menstruation prior to the actual experience of menarche as the topic of menstruation is too sensitive to be spoken about (Jarrah & Kamel, 2012). This is so as talking about menstruation may lead to the introduction of other taboo topics such as sex and reproduction which family members and teachers are uncomfortable with discussing (Jarrah & Kamel, 2012). Reasons such as those mentioned above have kept young females from learning about menstruation as a natural biological process that they will one day go through and has left them in a state of confusion and shame for experiencing something that they were not taught about or introduced to. This means that they are expected to learn how to manage menstruation not just on their own but also very quickly as they have limited knowledge as to why they go through menstrual periods and how to properly care for themselves during this time so that they do not experience other uncomfortable conditions such as infections associated with improper care.

2.6 Hygiene practices

Many South African female students come from disadvantaged and poor backgrounds (Padmanabhanunni & Fennie, 2017). It has been noted that females that come from these disadvantaged backgrounds lacked access and finances to proper menstrual hygiene resources (Padmanabhanunni & Fenni, 2017). This means that young women face difficulty in accessing materials to manage their menstruation in this context, which could have been a contributing factor towards having negative menstrual experiences, as mentioned earlier. A further objective of this scoping review would be to identify difficulties experienced by young women regarding access to hygiene resources. The purpose of which is to inform future research into identifying appropriate intervention strategies to facilitate positive menstrual experiences.

In many cases, young women relate the period of menstruation with uncleanliness (Ismail et al., 2016; Jackson & Falmagne, 2013). The studies that were reviewed that indicated this outcome, have mentioned that some young women try to “wash away the menstruation” with the use of cleaning antiseptics and soap (Ismail et al., 2016). It is possible that these practices may have been encouraged by both cultural influences and contextual factors that caused young women to feel the need to exercise these behaviours. It is also noted that feelings of embarrassment were higher in females at the point of menarche and attempts to “wash away” the menstruation were common amongst this age group due to unfamiliarity and lack of knowledge regarding the topic of menstruation (Ismail et al., 2016). It was found that there exists a lack of sanitation facilities within school environments that prevent young adolescent females from attending to their menstrual hygiene on a regular basis (Shah et al., 2013). Schools lack adequate toilets and young adolescent females then find it difficult to change sanitary pads or wash themselves during their menstrual periods, which then lead to hygiene problems such as infections (Shah et al., 2013). Due to the lack of adequate cleaning and sanitary supplies, young adolescent females also refrain from participating in any physical activities during their menstrual periods as they are afraid that the cloths they use during their menstrual periods would not be sufficient to hold all the blood that may exit whilst engaging in high intensity physical activities (Shah et al., 2013).

If we are able to map out what cultural and contextual factors impact on young women’s menstrual experiences, we will be able to create an opportunity for future research to be conducted on the interventions that may be implemented to accommodate positive menstrual experiences that take culture and context into consideration. In other words, if contextual factors are improved according to the needs of young women (that are influenced by their cultural backgrounds), then positive menstrual experiences may be influenced.

2.7 Menstruation as a medical problem

Studies reviewed on menstruation within the university context seem to be mostly quantitative (Ameade & Garti, 2016; Nooh, 2015). It is noted that from these studies, menstruation is described as a biological process where menstruation is medicalised. According to Conrad and Barker (2010), medicalisation may be defined as referring to human problems or human experiences as purely medical problems. As mentioned above, menstruation is associated with medical conditions such as Dysmenorrhea (Santina, 2012). However, focusing on just the biological implications of menstruation, tends to overlook the underlying social and cultural factors that may better explain why certain females negative experiences of menstruation and why other females have more positive experiences during menstruation. Different women come from different material contexts and thus attach different meanings that are driven by culture or religion, and these different meanings impact on their experiences of menstruation. This is important as understanding the different experiences and why they occur in different circumstances will provide pathways in understanding how to better menstrual experiences within low- and middle-income countries in Africa for young women who mostly have a more difficult time in adjusting to the process of menstruation.

2.8 Menstruation in the context of a patriarchal society

Much has been discussed regarding the concealment of menstruation amongst females. Jackson and Falmagne (2013) have in their study on menstrual experiences in the United States of America, confirmed that females feel the need to conceal their menstrual experiences and discourses regarding menstruation specifically from men. After the occurrence of menarche, females are expected to change parts of themselves in order to fit into a patriarchal society where men should be exposed to certain socially acceptable and appropriate appearances and behaviours of females (Jackson & Falmagne, 2013). This displays that females are expected to

separate themselves from their bodies and their experiences and focus more on meeting social expectations after menarche. This places further burdens on young females entering the period of menarche as they are now required to figure out new identities in order to cope with the demands of living within a patriarchal society wherein menstruation is considered to be filthy (Jackson & Falmagne, 2013).

2.9 Interventions to negative menstrual experiences

Older studies, dating back to 2005 and 2008 also display the lack of attention paid to menstrual challenges faced by younger women. These studies highlight that menstrual challenges in different parts of the world have been similar and interventions have not been adequately carried out since then. Knowledge on menstruation has been found to be informally passed down from mothers to adolescent girls (Deo & Ghattargi, 2005). It was found that mothers living in lower-income countries tend to lack menstrual health literacy and therefore rely on historical and mythical knowledge of the menstrual process (Deo & Ghattargi, 2005; Jarrah & Kamel, 2012). It was also found that this information is passed down to adolescent girls who then continue the cycle of misinformed information provision regarding the menstrual process (Deo & Ghattargi, 2005). According to Dasgupta and Sarkar (2008), the lack of menstrual health and hygiene literacy has led to young female adolescents experiencing negative outcomes during their menstrual periods as the lack of knowledge on how to properly care for themselves during their menstrual periods leads to infections and discomfort. It was also found that there exists a lack in adequate provision of privacy to facilitate menstrual hygiene care within the school environment, and that this contributes further towards absenteeism rates (Dasgupta & Sarkar, 2008).

The need for intervention and adequate research within lower-income countries and amongst menstruating young adolescent females has been identified (Shah et al., 2013). It was found

that prior to an intervention conducted in Gujarat, young adolescent females would use cloths instead of sanitary pads to absorb the blood during their menstrual periods, and they would ignore medical problems associated with being on their menstrual periods (Shah et al., 2013). In order to make the experiences of young adolescent females more manageable and pleasant, the intervention conducted included the provision of sanitary pads for 3 months, the provision on falalin cloths for 3 months, medical care was provided for females experiencing menstrual-related medical problems and education regarding puberty, menstrual health and hygiene, and fertility (Shah et al., 2013). The participants in this study found that using the falalin cloths led to no abrasions left on their inner thighs, as they would experience this with using other types of cloths during their menstrual periods. They found that sanitary pads were useful and allowed them to engage in physical activity, however, they were concerned about the cost of these pads after the study would be over and reported that they would continue using the sanitary pads if they were sold at a lower price by the Indian government (Shah et al., 2013).

To address the problem of the provision of misinformed facts regarding menstruation, the researchers of the study also provided this community of females with proper education and scientific facts regarding menstruation and how to adequately care for themselves during their menstrual periods in order to avoid medical and hygiene problems. The education provided resulted in young adolescent females learning how to manage their menstruation better and how to practice hygiene in a better manner, as they were previously unaware of how to care for themselves adequately during their menstrual periods (Shah et al., 2013). This resulted in them exercising better control over their menstrual periods and were able to plan ahead in preparation for their menstrual periods which seemed to decrease discomfort overall (Shah et al., 2013).

2.10 Study Rationale

It is noted that knowledge regarding health and proper health practices in low- and middle-income countries, such as in Africa, is limited (Mason et al., 2013; Kemigisha et al., 2020). According to Santina et al. (2012), young women at the stage of menarche and just after the stage of menarche, experience menstruation negatively due to social, cultural and religious reasons, as well as due to a lack of knowledge regarding normal menstrual processes. These negative experiences hinder their ability to concentrate in academic and occupational settings, to remain unaware of medical conditions pertaining to menstruation and to suffer in silence on a daily basis whilst menstruating (Belayneh & Mekuriaw, 2019; Cherenack & Sikkema, 2021). Studies conducted within African countries seem to all conclude that the overall experience of menstruation faced by young women, is negative.

It is proposed that mapping out the information on different menstrual experiences within the low-middle income African context would be useful for the benefit of young African women who have limited knowledge on normal menstrual processes and how to care for themselves during this period. It is important to understand exactly what experiences young women face during their menstrual periods, as well as the sociocultural beliefs and behaviours that influence these experiences. It is also important to identify what recommendations previous researchers have made in order to navigate ways of improving the conditions that influence negative menstrual experiences within the African context. As mentioned earlier, there exists a lack of research conducted around menstrual experiences and mapping out the evidence that currently exists will also allow for the identification of what else there is to be known in order to guide future research that is currently required. This study will be conducted by using a scoping review as the methodological design. This will aid in mapping out the main concerns and challenges faced by young menstruating females in Africa and this will allow for the

implementation of new structures of change to be put in place to improve the lives of young menstruating females within this context.

2.11 Conclusion

This section has outlined the data collected on menstrual experiences and sociocultural influences on menstrual experiences in different continents around the world. The study rationale has outlined the purpose and importance of conducting the present study in order to improve the lives of young menstruating females living in the African context. The process of conducting the present study is outlined in the next chapter.

Chapter 3: Methodology

3.1 Introduction

This section will outline the specific procedures that were used to identify, select, map and analyse the information for this study. It includes the design of this study, the methods used to elicit and map information, which includes the inclusion and exclusion criteria used to select certain articles, as well as the data analysis methods used in order to draw conclusions about the information that was gathered. It also includes the research questions that were set out to be answered by the analysis of the data.

3.2 Research design

3.2.1 Scoping reviews vs Systematic reviews

This study was conducted in the form of a scoping review. Scoping reviews are relatively new approaches to research that have become increasingly popular in mapping out information that exists around a range of broad topics that are to be researched (Pham et al., 2014). Scoping reviews are generally suitable to conduct when the research topic in consideration has not been reviewed extensively (Levac & O'Brien, 2010). Scoping reviews are used to label bodies of research by outlining their relevance to contexts, sources and origins (Arksey & O'Malley, 2005). They are used to clarify working definitions as well as conceptual boundaries of a specific research topic (Levac & O'Brien, 2010). They are also useful in identifying existing gaps in current literature around specific topics (Arksey & O'Malley, 2005). According to Munn et al. (2018), scoping reviews may be conducted for the purpose of identifying the nature of information that is currently available and known about a specific topic, to clarify the main concepts and definitions used in the available literature regarding the topic of concern, to examine the research methods used in certain fields of research, to identify the key characteristics and factors that are related

to a specific concept, to identify and examine gaps in the literature regarding specific topics and lastly to be used as a precursor to systematic reviews. Scoping reviews are also useful in clarifying the relevance of certain inclusion criteria before proceeding on with systematic reviews (Munn et al., 2018).

Scoping reviews are often confused with systematic reviews (Pham et al., 2014). As mentioned earlier, scoping reviews are used to map out the information that currently exists on specific research topics. This process allows for existing gaps in the literature to be identified and prove to be useful in suggesting where future research should be conducted to identify information that is not yet known or minutely researched (Pham et al., 2014). This brings us to systematic reviews, which are often used as rationales for new research (Pham et al., 2014). Although both designs seek to appreciate primary data, systematic reviews are generally conducted to determine the effectiveness of treatment (Pham et al., 2014). Due to the resource intensive nature of systematic reviews, some researchers choose to conduct scoping reviews beforehand in order to learn more about the research topic (Pham et al., 2014). According to Munn et al. (2018), systematic reviews may be conducted for the purpose of unveiling international evidence regarding the topic in question, examining the usefulness of current practices, differences in practices as well as identifying the usefulness of new practices, identifying and informing areas for new research to be undertaken, examining interventions and conflicting results and to provide information that will guide decision making processes.

3.2.2 Rationale for conducting a scoping review

A scoping review, as mentioned earlier, may be defined as a review of literature that is used to map out dominant concepts and themes within a broad research area (Peters et al., 2015). There are various purposes of conducting a scoping review. These include identifying gaps in current

literature, mapping out knowledge, clearly defining concepts that currently exist in a research area, and to explore the way that research is conducted in a field of research (Peters et al., 2015). A scoping review may be used to further promote the conduction of a systematic review, which is an extensive search of existing literature that is utilised in addressing a structured research question (Majumder, 2015). The Joanna Briggs Institute suggests that the PCC mnemonic be used in generating an appropriate topic for the scoping review (Peters et al., 2015). The PCC mnemonic stands for population, concept and context (Peters et al., 2015). Applying this mnemonic to the title of a scoping review provides the reader with relevant information about the purpose of the review and how the study may be applicable to their needs (Peters et al., 2015). In other words, it is an important tool to use in order to concentrate the focus on who the study is intended for, what we are trying to study about this population, where we are studying this information and why it is relevant to the lives of those being studied. A scoping review is an appropriate approach to conduct this study as the aim is to map out the knowledge that currently exists on the topic in order to provide information that future researchers may use to guide studies on what interventions to undertake in order to influence positive menstrual experiences in the African context. This approach will allow us to understand the impact of young women's menstrual experiences and will allow us to know what knowledge exists around the roles that sociocultural and contextual factors play in young women's experiences in Africa. Conducting a scoping review will be useful in answering the research questions of this study. This would be beneficial to young women in Africa as it will yield information that may be useful in presenting the problems that young women in Africa face during their menstrual periods. Access to this information will allow for future research to be conducted on the solutions and interventions that have been implemented (and in future, that may be implemented), to solve the problems that young women in Africa face with regard to their menstrual periods.

3.2.3 Stages in conducting the scoping review

In order for a successful scoping review to be conducted, it is important that the overall aims, objectives and research questions are in line with the specific purposes that a scoping review is used to address (Sucharew & Macaluso, 2019). In order to answer the research questions and meet the objectives that are set out for this study, the Arksey and O'Malley scoping review framework will be used. This framework is comprised of 5 stages that are used in conducting the scoping review and reporting on the results of the scoping review study. These 5 stages include identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarising and reporting the results (Arksey & O'Malley, 2005). An article produced by Levac et al. (2010), further clarifies each step in the framework. These clarifications will be used as a guide in presenting the information under each step in this study.

3.2.3.1 Stage 1: Identifying the research question

According to Arksey and O'Malley (2005), the first step in the scoping review process is to identify the research question. This process involves clearly determining the research question that will guide the flow of the scoping review (Levac et al., 2010). It aids the researcher in determining the purpose of the study and what the researcher hopes to achieve by researching that particular focus area (Levac et al., 2010). The research questions for this study are:

- What is the impact of menstrual experiences among young women in the African context?
- What knowledge currently exists around the role that sociocultural and contextual factors play in young women's menstrual experiences in Africa?

- What interventions have been recommended to assist young women in their experience of menstruation in the African context?
- What gaps exist in the current literature regarding menstrual experiences and sociocultural influences on menstrual experiences?

3.2.3.2 Stage 2: Identifying relevant studies

This stage includes selecting articles that will be appropriate and suitable to the study and to answer the study's research questions (Levac et al., 2010). An appropriate method of conducting this process was followed in an article produced by Arksey and O'Malley. This method involved creating an inclusion and exclusion criteria to determine which articles would be best suited to answer the research questions for that study (Arksey & O'Malley, 2005). For this study, the inclusion criteria will be determined by using three criterion. This criterion includes population, concept and context (Peters et al., 2015). The criterion for this study will be applied as follows:

Population: Young women

Concept: Menstrual experiences

Context: Africa.

Google Scholar and EBSCOHost were used as the search engines to extract articles in the preliminary search phase. The search on Google Scholar yielded 19 200 article results. After a perusal of these articles, it was found that the search brought up articles that were mostly irrelevant to the study in terms of both the context and the concept. For this reason, EBSCOHost was used as the search engine for extracting data as the articles found on EBSCOHost were more refined to the topic in question. EBSCO Host was also used as this search engine provides multiple databases across which the search could be conducted and

seemed to provide more reliable results in terms of the appropriateness of the articles for the topic in question. The EBSCOHost databases that were used to identify relevant articles for this study include Academic search complete, APA PsycInfo, Health Source: Nursing Academic Edition, Health Source: Consumer Edition, MEDLINE with full text, Masterfile Premier, Alts Religion Database with AltaSerials, Newspaper source and Open Dissertations. Only articles that were accessible on these databases were used. The reference lists of the selected articles were also be screened in order to identify other possible useful articles that may be relevant to the study. The articles that did not meet the inclusion criterion have been excluded from the study.

3.2.3.2.1 Search Strategy

The search for records for this study was conducted on EBSCOHost. The search terms were generated through the application of the population, concept, context framework (Peters et al., 2015). The search terms that were used across all relevant databases on EBSCOHost are listed below:

(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)

The key search words that were used in the primary search are listed in the table below and were informed by the population, concept, context framework.

Table 1: Primary Key Words

Population	Concept	Context
Young women	Menstrual experiences	Africa
Scholars	Menstrual challenges	African context
High school students		

Table 2: Key words used and number of relevant records.

Database	Key word used	Yielded	Total relevant to the study
Academic Search Complete	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	1318	12
MEDLINE with Full Text	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND	534	2

	(Interventions OR Recommendations)		
Health Source: Nursing Academic Edition	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	80	0
MasterFile Premier	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	52	0
Alta Religion Database with AltaSerials	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR	13	0

	Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)		
Health Source: Consumer Edition	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	4	0
APA PsycInfo	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	3	1

Newspaper Source	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	1	0
Open Dissertations	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR African country) AND (Interventions OR Recommendations)	1	0
Other sources (Bibliographies)	(Young women OR Young females OR Adolescents OR Scholars OR High school students OR College students OR university students) AND (Menstrual experiences OR Menstrual problems OR Menstruation OR Menstrual habits OR Menstrual challenges) AND (Africa OR African context OR	6	2

	African country) AND (Interventions OR Recommendations)		
Total yielded		2012	15

The table below presents the inclusion and exclusion criteria used to assess the eligibility of the articles for the present study.

Table 3: Inclusion and exclusion criteria.

INCLUSION CRITERIA	EXCLUSION CRITERIA
Qualitative studies, Quantitative studies, scoping reviews, systematic reviews, mixed methods studies	Articles published in any language besides the English language.
Full text articles.	Abstracts, commentary papers, case studies
Articles published in the English language.	Publications that have been translated into English.
Articles that recruited young women as the study participants (Young women identified as between and including the ages of 15 and 34).	Studies that include females that have not yet experienced menarche or are currently menopausal.
Studies that have been conducted in the African context.	Studies that were conducted in any part of the world besides Africa.
Articles that have explored menstrual experiences.	-
Articles that have explored social and cultural influences on menstrual experiences.	-
Articles that suggest recommendations for future research and interventions regarding menstrual experiences.	-
Articles published between 2013 and 2023	Articles published before 2013

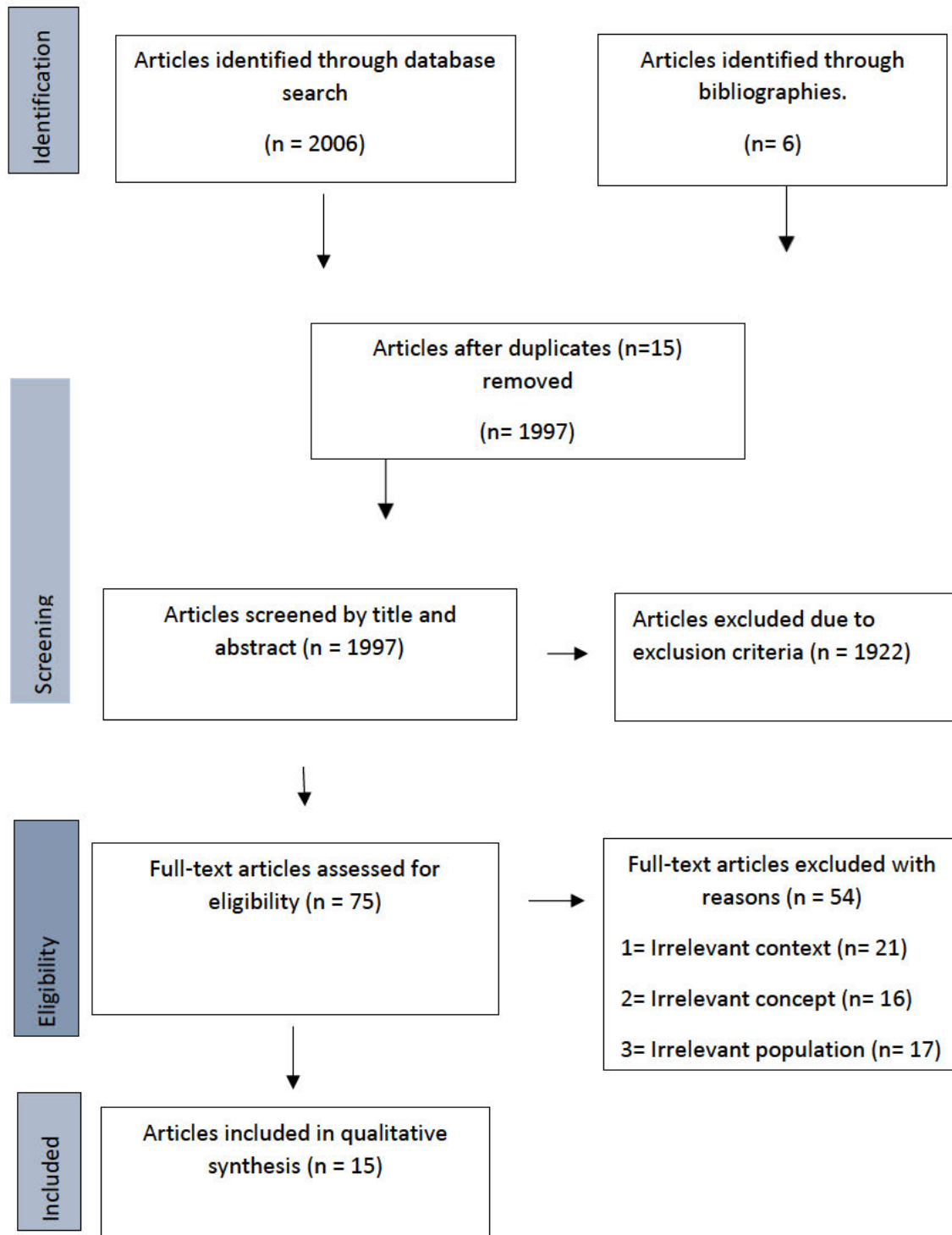
3.2.3.2.2 PRISMA-ScR flow diagram of the study selection process.

The flow chart presented below is termed the PRISMA Flow Diagram (Moher et al., 2009). This flow diagram is used to display the number of articles that were available and accessible during the search, the articles screened by title or abstracts and reviewed in full text, the articles included in the study and the articles that were excluded from the study with reasoning. The

PRISMA Flow Diagram is used to display this information in the final report of this study. The PRISMA diagram used in this study was obtained from “Preferred Reporting Items for Systematic Reviews Meta-Analyses-ScR (PRISMA-ScR extension for Scoping Reviews) flow diagram for the scoping review process” (Tricco et al., 2018).

The total number of articles identified through the multiple database search was 2006. After a perusal of the bibliographies provided within these studies, it was found that 6 of the references could be of use to the present study. After a perusal of the articles, it was found that 15 of the articles were duplicated and after removal of these articles, 1997 remained. The 1997 articles were then screened by titles and abstracts to assess for eligibility. Taking into consideration the inclusion and exclusion requirements for the present study, 1922 of the articles were irrelevant and were therefore excluded. There were 75 remaining articles after this exclusion. The 75 articles were then assessed for eligibility by reading through the full text. It was found that 54 of these articles were irrelevant to the study. 21 of these studies were conducted in areas out of Africa and therefore were irrelevant to the context in question for the present study. 19 of the studies did not discuss menstrual experiences and influences on menstrual experiences and therefore were irrelevant to the concept in question for the present study. 17 of the studies either included men in the study population or included females below the age of 14 or above the age of 35, which were irrelevant to the population in question for the present study. The remaining 15 articles were included in the study (See Figure 1. below).

Figure 1: The PRISMA diagram presented in the form of a flow chart.



PRISMA Diagram Obtained From: Preferred Reporting Items for Systematic Reviews Meta-Analyses-ScR

3.2.3.3 Stage 3: Study selection criteria

The initial search for this study was conducted on Google Scholar. A total of 19 600 articles were retrieved. After a perusal of the titles of these articles, it became apparent that most of the articles were irrelevant to the study due to irrelevant contexts, concepts and population ages. Another search was undertaken on EBSCOHost and it was found that the articles retrieved from this search were a lot more relevant and useful in order to answer the research questions for the present study. Taking into consideration the vast number of articles that were identified on Google Scholar, as well as due to the majority of the articles being of irrelevance to the study in question, EBSCOHost was the only search engine used in obtaining articles for the present study.

As highlighted by Arksey and O'Malley (2005), it is imperative that an inclusion and exclusion criteria be developed in order to assess the eligibility of the articles that will be used in the study. An inclusion and exclusion criteria were developed prior to the conducting of the searches on the search engine. The inclusion and exclusion criteria were based on the research questions that this study aimed to answer. They were also informed by the population, concept, context framework.

Endnote was used to export all the references that were identified through the search using the abovementioned search terms. All duplicated references were removed until only one copy of each reference remained. The articles that were retrieved were screened by titles and abstracts. The titles and abstracts that proved to be irrelevant to the study were excluded. The reasons for the articles being irrelevant were due to the studies being conducted in contexts outside of Africa, the study populations being outside of the required ages in question and due to the articles consisting of information apart from the main concept in question for the present study. The articles to be excluded were removed off Endnote once they were identified as irrelevant. Once these articles were excluded, the remaining articles were reviewed in full to assess their

eligibility to form part of the selected articles for analysis. The full articles that seemed to be irrelevant to the study were also removed from Endnote. A total of 15 articles remained and all seemed to fit the eligibility criteria for the present study. These 15 articles were reviewed and analysed to answer the research questions for the present study.

In order to improve the reliability of the results of this study, and in keeping with the requirements for conducting a scoping review, a second reviewer who was a postgraduate student, with adequate experience in conducting scoping reviews was appointed to ensure that the search that was conducted identified all possible articles that fit the eligibility criteria, with the search terms that were used. The second reviewer also went through the final list of articles to ensure that all the selected articles met the eligibility criteria for the present study.

Qualitative, quantitative, scoping reviews, systematic reviews as well as mixed methods studies were all considered for the present study as the purpose was to extract any relevant and all relevant data possible that may answer the research questions. Only full text articles were used to ensure that the information retrieved was understood in full and that the results of the study applied to the research aims for the present study. Only articles published in the English language were used as the researcher is English speaking and this would avoid any misinterpretations of cultural or religious explanations published. The aim of the study was to understand the lived experiences of young women as previous research indicated that menstrual challenges were faced amongst this population (Ramathuba, 2015). Therefore, only articles that recruited young women (as identified between the ages of 15 and 34 in South Africa) in the studies were used. The context in question was the African context and articles published elsewhere were excluded as those articles would not have been able to clearly define the menstrual challenges experienced by African women. It is known that sociocultural beliefs largely influence menstrual experiences in Africa (Jackson and Falmagne, 2013). Therefore, articles that touched on these influences were included in the present study. In order to

understand how African females could benefit from interventions to menstrual challenges, articles that identified recommendations for future research and action were included in the study. The purpose of which would be to map out what is clearly and commonly required in the African context. In order to keep the results of this study relevant to current times and to portray experiences that are recent in the African context, only articles published within the last 10 years (2013-2023) were used.

3.2.3.4 Stage 4: Charting the data

This stage involves identifying the key themes that arise in the final selection of articles (Arksey & O'Malley, 2005). Charting the data in a particular way and under specific categories enables the research to organise the data into themes and to identify the most pertinent data to extract in order to answer the research questions for the study (Levac et al., 2010). A narrative review approach was undertaken as suggested by Levac et al. (2010), where the data that was identified through the database search was charted according to author and publication year, the aims and objectives, the methodology, menstrual experiences and proposed recommendations. This approach has been found to make the data more understandable and clearer to readers (Levac et al., 2010). The second reviewer appointed for this study was also involved in this process. 5 articles each were charted according to the form below and this was done to ensure that the approach to data extraction was consistent with the aims and research questions for the present study.

In their article, Arksey and O'Malley present a "data charting form" that they have used to chart their data (Arksey & O'Malley, 2005). This form outlines the key information that should be used to chart the data. The form was used to chart the data for this study and is presented below.

Table 4: Data charting form headings

Author and publication year
Aims and objectives
Methodology
Menstrual experiences
Sociocultural influences
Recommendations

3.2.3.5 Stage 5: Collating, summarising and reporting the results.

This was the final stage in the scoping review process. It involved the analysis of the results, the reporting of the results with answering the research question in mind and presenting a discussion about what the findings of the study means, as well as what the results of the study means for future research on the topic (Levac et al., 2010). For the purpose of this study, thematic analysis was used to analyse the results. Thematic analysis refers to analysing, identifying and reporting patterns that are found within a data set (Braun & Clarke, 2006). It is a method of organizing data and describing it in a way such that it can be examined in detail (Braun & Clarke, 2006). The use of thematic analysis is useful in reporting the results of the study in a way that highlights the main themes and answers the research questions.

The 6 steps to conducting a thematic analysis was carried out in the present study (Braun & Clarke, 2006). The first step required the researcher to become familiar with the data (Braun & Clarke, 2006). At this stage, the included studies were read and re-read in order to identify and analyse patterns within the articles. The second step involved generating codes from the data set (Braun & Clarke, 2006). In this stage, the researcher picked out phrases and words that were common throughout all the included articles. The third step involved generating themes by

combining the codes found within the data (Braun & Clarke, 2006). At this stage, the researcher combined the phrases and words that appeared commonly throughout all the included articles in order to formulate themes. The fourth step involved reviewing and refining the themes (Braun & Clarke, 2006). At this stage, the researcher reviewed the themes to ensure that no themes are repeated and that each theme is distinct from another. Wherever this was not the case, the researcher further refined the themes such that each theme was distinctly different from the others. The fifth step involved defining and naming the themes (Braun & Clarke, 2006). At this stage, the researcher was able to explain each theme by using only a couple of sentences. Where complex themes arose, the researcher used sub-themes to arrange the information such that it does not appear too complex for the reader. The sixth and last step involved the researcher producing the report. At this stage, the researcher began to produce a report on what has been found after conducting the analysis. The researcher used extracts from the articles as evidence to support the findings/analysis. The analysis then led to the answering of the research questions (Braun & Clarke, 2006). The researcher will discuss this in the discussion section of the study.

3.2.4 Rigour

According to Levac et al. (2010), a good scoping review consists of information that is transparent and unbiased. It also goes further than just mapping and reporting findings in any manner (Leva et al., 2010). To improve the rigour for this study, the second reviewer was appointed to also conduct the search using the search terms to ensure that articles were not just selected for the primary researcher's own preferences. The inclusion and exclusion criteria were also developed together with the second reviewer to ensure that the primary researcher received guidance in this initial scoping review and that the study was conducted in a systematic and methodological sequence.

3.2.5 Maintaining trustworthiness of the study

To ensure the validity of the results of this study, the data was searched manually using the search terms provided in Chapter 3 (Methodology). To ensure the content validity of the study, the data was appropriately coded and references for the original data have been provided. The validity and reliability of the studies were ensured through proper and adequate assessment of the studies as well as appropriate coding, which was conducted together with a second reviewer. This study may be generalizable to different African contexts as the results are reflective of true narratives and experiences of young women in the African context.

3.2.6 Ethical considerations

Although this study is a scoping review of published articles, ethical production of the results will be ensured. The articles that have been used for this study will be referenced to ensure that credit is awarded to the relevant authors and that plagiarism is prevented. The researcher will ensure, as far as possible, that the information from the selected articles is presented and interpreted accurately, in a way that does not alter the meaning of what has been published.

3.2.7 Limitations of the methodology

Conducting a scoping review, although quite useful, may also comprise of certain limitations. Scoping reviews are time consuming and require the use of a team to conduct (Arksey and O'Malley, 2005). Researchers are required to rely on their own interpretations of the data and due to the nature of a scoping review, a final answer to a specific research question is unattainable. This is also because the analysis is ultimately a secondary analysis (Levac et al., 2010). The validity of the scoping review is at stake if the researcher is not completely rigorous in the process of conducting the scoping review and if useful data has not been extracted due to poor extraction sequences (Levac et al., 2010).

3.3 Conclusion

This chapter has explained the process in which the researcher retrieved the data for analysis for the present study. The key steps were outlined in a methodological and systematic manner to ensure good quality of the present scoping review. The analysis of the data and the results of the study will be discussed in the next chapter.

Chapter 4: Results and Discussion

4.1 Introduction

Growing bodies of research highlight the fact that knowledge of health and adequate health management practices within low- and middle-income countries is quite limited (Mason et al., 2013). Substantial evidence has been provided that display the influence that social and cultural factors (positive/negative) play in the experiences of menstruation among females in low-and middle-income countries (Ismail et al., 2016; Jackson & Falmagne, 2013; Loto et al., 2008). The purpose of this scoping review was to identify and understand the knowledge that currently exists around the different menstrual and menstrual health-related experiences faced by young menstruating females in the African context, the sociocultural forces that influence and drive these experiences, as well as the recommendations made by previous researchers to improve the lives and experiences of menstruating females within the African context. The objectives of this study were to 1) Examine and map the impact of menstrual experiences of young women in the African context, 2) To examine and map the role of sociocultural and contextual influences in young women's experiences of menstruation in Africa and 3) To examine and map the interventions have been recommended to assist young women in their experience of menstruation in the African context. This chapter will focus on presenting the results obtained from the scoping review.

The results of the study will also be discussed in this chapter. The themes identified during the data analysis process will be explained further and how they answer the research questions and meet the aim and objectives set out for this study will also be reported on. From a review of the articles, it is evident that most young females within the African context have negative experiences of menstruation and faced challenges associated with their ability to manage their experiences of menstruation. This will also be further expanded on in this chapter.

The table below displays the data chart form within which the data has been arranged. The data chart form organises the data according to their respective descriptive and descriptive statistical information and this will be used to inform the discussion for this study in the next chapter. A total of 15 studies identified through multiple database searching were selected for analysis for the present study. These studies were all conducted within the African context.

4.2 Data Charting

Table 5: Data charting form

Authors; Year	Title	Aims and Objectives	Methodology and Study Location	Menstrual Experiences	Sociocultural Influences	Recommendations
Belayneh, Z. & Mekuriaw, B. (2019)	“Knowledge and menstrual hygiene practice among adolescent schoolgirls in southern Ethiopia: a cross-sectional study.”	To assess the knowledge and menstrual hygiene practices of adolescent schoolgirls in Gedeo zone.	A quantitative, institutional based cross-sectional study conducted among females that attend Gedeo zone high schools. Data were collected using a structured and interviewer-administered questionnaires.	Females experienced dysmenorrhea and could not afford sanitary pads to absorb their heavy flow. Females felt that they lacked knowledge regarding menstruation and were unprepared for menarche.	Supernatural and traditional beliefs identified menstruation as taboo in nature and influenced females’ perceptions about their menstruation. Older females concealed talk around the topic of menstruation as it is viewed as a taboo topic by people in the Ethiopian culture.	There lies a need to design appropriate awareness programmes for female adolescents in schools to educate them further regarding menstruation and to help them better manage their menstruation.
Boosey, R., Prestwich, G., & Deave, T. (2014)	“Menstrual hygiene management amongst schoolgirls in	This study aimed to explore the extent to which	A mixed methods cross sectional study conducted via questionnaires	Females tended to remain absent from school during menstrual periods as there was a lack of private places to	Menstruation amongst females within the Rukungiri district is viewed as taboo. Due to this,	It is recommended that menstrual materials be provided to schools together with proper sanitation and disposal

	the Rukungiri district of Uganda and the impact on their education: a cross-sectional study.”	schoolgirls in the low-income setting of south-west Uganda were able to manage their menstrual hygiene effectively and whether or not this impacted on their education.	in 6 rural, government owned primary schools in south-west Uganda.	change their underwear. They were ashamed of staining their uniform with blood as they were unable to wash away the blood due to the lack of sanitary products and facilities at school. The girls who were present at school felt that they were unable to concentrate well in class.	girls felt that they could not discuss menstrual-related topics freely and openly and were guarded in matters concerning menstruation. This resulted in anxiety around others finding out that they may have their periods and influenced them to abstain from activities that may alert others that they are menstruating.	facilities. It is recommended that females are educated more on menstrual health management so that they do not feel the need to stay away from school during their menstrual cycles.
Cherenack, E. M., & Sikkema, K. J. (2021).	“Puberty- and Menstruation - Related Stressors Are Associated with Depression, Anxiety, and Reproductive Tract Infection	The aim of the study was to investigate the relationships between menstruation-related stressors,	A quantitative cross-sectional self-report survey was conducted amongst adolescent girls and young women in secondary	Females stressed about pubertal changes after menarche displayed more symptoms of depression and anxiety than those that were not. Most of these menstruating females reported having a reproductive tract	Socio-economic statuses of women in this region were low and influenced depression and anxiety symptoms due to the fact that it caused females to lack the ability to	Interventions to reduce menstrual-related stress are recommended. Mindfulness-based stress reduction techniques are suggested to address the menstrual health of the schoolgirls. Further

	Symptoms Among Adolescent Girls in Tanzania”	in mental health, and self-reported symptoms of reproductive tract infections.	school in Moshi, Tanzania.	in infection previously. Menstruating females reported high rates of suicidal ideation and self-harm. Reproductive tract infections may have been caused by lack of access to proper menstrual supplies. Absenteeism rates were higher amongst this population during menstrual periods.	manage their menstruation well.	research is recommended to explore cultural adaptations of stress-reduction to address the stressors faced by the schoolgirls.
Chinyama, J., Chipungu, J., Rudd, C., Mwale, M., Verstraete, L., Sikamo, C., Mutale, W., Chilengi, R., & Sharma, A. (2019)	“Menstrual hygiene management in rural schools of Zambia: a descriptive study of knowledge, experiences and challenges faced by schoolgirls.”	The aim of the study was to understand girls’ experiences of managing their menstruation and to further explore how the menstrual hygiene environment within schools may	An exploratory qualitative study conducted in 6 schools in Mumbwa and Rufunsa, Zambia. Data was collected via in-depth interviews and 6 focus group discussions.	Females displayed a lack of knowledge about menstruation and its physiological processes. The girls were unable to manage their menstruation well due to a lack of adequately functional absorbent materials and used old pieces of cloth instead, which filled up too quickly. The cloth left them with a bad odour that other people were	It is a social and cultural norm that females only learn about menstruation once they reach menarche and not before as it is assumed that they will not understand anything about menstruation until they reach menarche. Females are taught that they should not add salt to food when	It is recommended that some cultural practices and beliefs are changed to promote effective menstrual health management. Further education on how to manage menstruation effectively and adequately is required. WASH structures are required in schools to promote better menstrual management and to encourage girls

affect their attendance in school.

able to smell and realize that they were menstruating. The overflow of blood on the inner thighs caused friction burns as these girls walked to school. This resulted in increased rates of absenteeism during their periods. The schools did not provide these students with proper sanitary products such as soap, or basic resources to manage menstruation such as water facilities. Female students were forced to wait until home time to clean themselves up in their own toilets at home as the toilets at school had a bad odour. Absenteeism was also due to anxiety around messing their uniform. Females avoided

they are cooking whilst menstruating as this will cause a chronic cough in the person who eats the food they make. They are also told that being physically active will cause the menstruation to last for a longer period of time. They are told that using certain sanitary pads will cause them to get cancer. The girls were also told that if they dispose their used sanitary products in pit latrines at school, that witches and satanists would be able to use their blood to bewitch them. Concealment around experiencing a menstrual period

to attend school regularly instead of remaining absent during menstrual periods. A supportive environment needs to be created by teachers for menstruating females in school. Sanitary pads should be provided to schoolgirls.

interactions with others during their menstrual periods. Some students were encouraged by parents to be present at school whilst being on their periods.

was influenced by male pupils mocking females for being on their period, which maintained anxiety around menstruating. Girls are warned by their mothers that once they begin to interact with men sexually after menarche, that they will become pregnant.

<p>Crankshaw, T. L., Strauss, M., & Gumede, B. (2020).</p>	<p>“Menstrual health management and schooling experience amongst female learners in Gauteng, South Africa: a mixed method study”</p>	<p>The study was conducted to better understand the prevalence of access to modern sanitary products amongst female learners and to better</p>	<p>A mixed method study comprising of both quantitative and qualitative methods. The qualitative component was exploratory in nature and the quantitative component</p>	<p>Female students refrained from using tampons during their menstrual periods due to discomfort and fear of overuse. One in seven learners did not have enough sanitary products within the last 3 months. The female students felt anxious, shy and embarrassed during their periods as they feared that others</p>	<p>Female students refrained from using tampons due to cultural beliefs such as children losing their virginity when they use tampons. Mothers have told their children that if they have sex with a boy, that they would bleed. This resulted in frightening experiences of</p>	<p>There is a need for students to be educated accurately on menstrual health and sexual related health. School facilities need to be improved to accommodate menstruating females.</p>
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understand the range of needs and challenges that female learners face in managing their menstruation within the school setting. Data was collected via in depth interviews and focus group discussions. was used to assess the extent of the challenges faced by the female students. Data was collected in depth interviews and focus group discussions. around them could smell the odour of the blood on them. Dysmenorrhea was a common concern amongst this population. Pain was listed as another common challenge that led to absenteeism. The students felt that it was difficult to concentrate in class during their periods. Some teachers prohibited students from leaving the classroom to go to the bathroom and this led to further shame and anxiety. Being teased for being on their periods was a common experience that led to absenteeism during menstrual periods. Learners keep their soiled pads with them until they reach home due to inadequate sanitation at school. menarche as females worried that the blood was as a result of engaging in sex without knowledge of doing so. Concealing information as a matter of cultural boundaries has resulted in this.

<p>Edet, O. B., Bassey, P. E. M., Esienmoh, E. E., & Ndep, A. O. (2022).</p>	<p>“Missing school during period: perspectives of adolescent schoolgirls in Cross River State, Nigeria”</p>	<p>The study was conducted with the aim of assessing the factors associated with school absenteeism by both urban and rural school-going adolescent girls during menstrual periods.</p>	<p>A quantitative cross-sectional study using a self-administered questionnaire was conducted amongst 4 public and 3 private schools drawn from one urban and one rural Local Government Area of Cross River State.</p>	<p>Absenteeism was prevalent amongst girls during menstrual periods due to the fear of staining their uniform with blood, a lack of sanitary towels to use during periods due to unaffordability, fear of being teased by others for being on a period, and a lack of proper sanitary and disposal facilities at school.</p>	<p>Cultural stigmas were found to compel the girls to stay at home during their period as they influenced beliefs such as menstruation being unclean.</p>	<p>There lies a need for adequate sexuality education support and interventions to prevent stigmatisation and promote the self-esteem of menstruating females in schools. Schools need to be equipped with facilities to foster more positive menstrual experiences and provide supplies to manage menstruation better at schools.</p>
<p>Femi-Agboola, D., Sekoni, O., & Goodman, O. (2017).</p>	<p>“Dysmenorrhea and its effects on school absenteeism and school activities amongst adolescents in selected secondary schools in</p>	<p>The study aimed to determine the prevalence of dysmenorrhea and absenteeism amongst female students in Ibadan, and to determine its</p>	<p>A descriptive cross-sectional study conducted via semi-structured questionnaire and 5 focus group discussions amongst female senior</p>	<p>Most of the population experienced menstrual pain and dysmenorrhea that led to absenteeism and a decrease in class participation.</p>	<p>It is believed that reducing your sugar intake will stop the menstrual pain. It is also believed that menstrual pain is a natural experience that does not require medical attention as it is shameful to go to the hospital because of menstrual pain.</p>	<p>Easy access to health care needs to be provided such as access s to pain killers to reduce absenteeism rates. Education around dietary control and physical activity needs to be explored further as an option next to pharmacological aid.</p>

Ibadan, Nigeria.”	severity as well as preventative measures undertaken by the students.	as secondary students in Ibadan.	Dysmenorrhea is viewed as a part of the life of a woman that needs to be endured and experienced in silence.			
Kemigisha, E., Rai, M., Mlahagwa, W., Nyakato, V. N., & Ivanova, O. (2020).	“A qualitative study exploring menstruation experiences and practices among adolescent girls living in the Nakivale Refugee Settlement, Uganda”	The study aimed to address the existing knowledge gap by describing the context and highlighting challenges faced by adolescent refugee girls during migration and their stay at the refugee settlement in Uganda.	A qualitative study conducted via semi-structured interviews and focus group discussions amongst refugee girls in the Nakivale refugee settlement.	Girls felt unprepared for menarche and lacked education around menstrual processes. Menstruation made it difficult for girls to participate in physical activities as they lacked appropriate sanitary materials and feared staining their clothes with blood. Being teased by classmates resulted in absenteeism. Psychological effects of menstruating comprised of shock, fear, and embarrassment. Medical problems related to menstruation was off concern as there was a	It was believed that something had bitten the girls’ buttocks during their first menstrual experience. Menstruation is a feared and unspoken topic amongst many mothers and daughters. It is common practice amongst Somalian girls to speak to older peers about menstruation as they are often left to figure the process out on their own. The concealment of discussions	There is a need for adequate information and health centres for menstruating girls. Parents need to be involved in this process. Proper sanitation facilities as well as psychological counselling is required.

lack knowledge on who to seek help from. These problems included prolonged bleeding and discomfort during periods after previous genital circumcision. Insufficient sanitation facilities caused females to fear the possibility of acquiring an infection. regarding menstruation contributed towards further anxiety amongst this population.

<p>Kumbeni, M. T., Otupiri, E., & Ziba, F. A. (2020).</p>	<p>“Menstrual hygiene among adolescent girls in junior high schools in rural Northern Ghana”</p>	<p>The study aimed to investigate menstrual hygiene among the girls as well as assess relevant to self-care practices, and barriers to menstrual hygiene amongst school-going</p>	<p>A quantitative cross-sectional study conducted via a structured questionnaire with closed and open-ended questions amongst adolescent girls in junior high school in the Talensi district of Upper East</p>	<p>Females that had good menstrual health management practices burnt their soiled pads whilst females with poor menstrual health management practices threw their pads in open spaces. There was a lack of soap provided at the schools, so females were unable to clean themselves adequately. Absenteeism was common and related to poor menstrual hygiene management. The girls</p>	<p>The socioeconomic status of mothers contributed towards menstrual experiences. Girls with mothers that had poor educational backgrounds did not educate them well on menstruation. Their mothers were also unable to afford proper sanitary products for them. The burning of the sanitary pads was due to superficial</p>	<p>Sanitary pads are required to be provided by the government. Non governmental organisations should look into providing schools with better sanitation facilities to reduce absenteeism rates.</p>
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	adolescent girls.		Region, Ghana.	dried their menstrual materials in rooms to avoid being teased by others around them.	beliefs about what someone could do with the blood on the pad if they found it.	
Mason, L., Nyothach, E., Alexander, K., Odhiambo, F. O., Eleveld, A., Vulule, J., Rheingans, R., Laserson, K. F., Mohammed, A., & Phillips-Howard, P. A. (2013).	“We keep it secret so no one should know- a qualitative study to explore young schoolgirls attitudes and experiences with menstruation in Rural Western Kenya”.	The aim of the study was to examine the potential benefits of different menstrual solutions for schoolgirls and to examine girls’ attitudes, experiences, and concerns around menarche and menstruation.	A qualitative study conducted via focus groups at 6 schools in rural western Kenya. The focus groups were conducted via semi-structured interview type questions.	Schoolgirls displayed little to no knowledge of menstruation prior to the onset of their periods. Boys notice when pubertal changes occur after menarche and then are said to coerce girls into engaging in sex. Girls complain of “feeling sick” with symptoms of headaches, stomach cramps, tiredness, and backache. They experience feeling nauseas and moody. Fear of soiling was the main concern and led to shame and anxiety around menstruating. Girls often practiced hiding behind their friends, going home early or tying a jacket	It is common for girls to be warned that they should stay away from boys after menarche or else they will get pregnant. Colloquial words such as “playing” with men instead of having sex with men are used to maintain secrecy. Girls were made aware that once they get their periods, they are eligible to be married off. It is believed that menstruation should be kept a secret from girls’ fathers as if they know that they have reached menarche, they may	Interventions to prepare girls for menarche need to be put in place. Pressures to encourage them into sexual activities need to stop as this puts them at risk of sexual harm. Girls require access to sanitary facilities to clean themselves properly. They require adequate sanitary products to use instead of cloths and leaves that result in more fear and anxiety when used. Quantitative research is recommended to measure risks associated with poor menstrual management, school

around their waist in order to hide that they were menstruating. Girls were absent from school during menstruation due to a lack of sanitary supplies or due to their physical symptoms. They experienced difficulty in concentrating during lessons as they were preoccupied with the thought of soiling themselves. When walking long distances, their inner thighs would often get bruised from the friction between their thighs caused by the leaking blood. They often had to asked to be canned on their hands rather than buttocks when punished at school so as not to be messed. They are required to use leaves as pads when try to rape them. Some mothers are inattentive and use the money for themselves rather than to buy pads for their daughters. Amongst this population, menstruation is something to be concealed as it is something to be ashamed about. Menstruation is something taboo amongst girls themselves and it is common practice to lie about wearing a pad when using a cloth instead, in order not to be mocked at. Girls have been asked by boys to have sex with them in return for purchasing them absenteeism and engagement, exposure to sexual risks, and identify cost-effective solutions.

they get their periods unexpectedly. Using inappropriate materials such as mattresses and cloth has caused itching, wounds, and vaginal ulcers. The lack of soap and water at home results in the inability of girls to wash themselves adequately during their periods. Girls are often teased for being on their period by other girls and boys as well.

pads. Parents are known to encourage sexual activities between their daughters and their boyfriends in order for them to provide their daughters with these items, so they do not have to purchase it for them. There is anxiety around washing sanitary materials in school for fear of someone seeing it or for flies following the girls when they are washing their clothing.

Nabwera, H. M., Shah, V., Neville, R., Sosseh, F., Saidykhan, M., Faal, F., Sonko, B., Keita, O.,	“Menstrual hygiene management practices and associated health outcomes among school-	The objectives of the study were to describe menstrual hygiene practices and access to	A mixed methods cross-sectional study conducted via a standard pretested questionnaire. The Beck	Schoolgirls had to use pit latrines to burn their pads as their schools lacked sanitary disposal facilities. They also lacked the funds to purchase sanitary pads and were too	Concealment of menstrual periods is highlighted due to embarrassment. Girls are embarrassed to be seen purchasing	It is recommended that proper WASH facilities are implemented and installed in schools. Pain management strategies need to be taught to the girls.
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<p>Schmidt, W.-P., & Torondel, B. (2021).</p>	<p>going adolescents in rural Gambia”</p>	<p>menstrual absorbents and WASH among school-going adolescent girls in a rural district in Gambia and to assess associations of these practices with the risk of three following outcomes: reproductive tract infections, urinary tract infections and depressive symptoms.</p>	<p>Depression Inventory II was used to screen for symptoms of depression. The study was conducted amongst 13 schools within 10 villages in rural Kiang, Gambia.</p>	<p>embarrassed to purchase them themselves at the shop. 21% of the girls experiences depressive symptoms during menstruation. A quarter of the girls experienced genital irritation, abnormal vaginal discharge, and vaginal burning during their period. Most of the girls experienced vaginal pain and lower abdominal pain during their periods. The more extreme the pain was, the higher the association with depression was. Heavy menstrual bleeding was also associated with depression. Girls did not have proper WASH facilities at school which made it difficult to practice adequate</p>	<p>sanitary pads from supermarkets.</p>	<p>Sufficient and appropriate menstrual absorbents need to be provided especially for girls with heavy menstrual bleeding.</p>
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				menstrual health management at school.		
Odongo, E., Byamugisha, J., Ajeani, J., & Mukisa, J. (2023).	“Prevalence and effects of menstrual disorders on quality of life of female undergraduate students in Makere University College of health sciences, a cross-sectional survey”.	The study aimed to determine the prevalence of menstrual disorders and the effect of menstrual disorders on quality of life of female undergraduate students at Makere University.	A quantitative, cross-sectional study conducted via a pre-tested, self-administered questionnaire form from a population of female students at the university in the health sciences department.	Females that experienced menstrual disorders experienced lower quality of life. Females that experience menstrual disorders are often absent from university. Menstrual problems experienced were irregular menstrual cycles, frequent menstruation, intermenstrual bleeding, premenstrual symptoms, and dysmenorrhea. Females also experienced depression or mood changes and painful breasts which were uncomfortable to deal with.	Sociocultural influences are not discussed in this paper.	It is recommended that efforts should be made to screen and possibly treat menstrual disorders among the university students to ameliorate their negative quality of life. Further research is required to elucidate more information on the effects of menstrual disorders on quality of life.
Rheinländer, T., Gyapong,	“Secrets, shame and discipline: School girls’	The aim of the study was to investigate	A qualitative study conducted via	Girls did not have proper and adequate facilities to manage	A culture of secrecy surrounds the topic of menstruation	It is recommended that schools ensure proper sanitation and hygiene

M., Akpakli, D. E., & Konradsen, F. (2019). experiences of sanitation and menstrual hygiene management in a peri-urban community in Ghana”

the full range of ‘hygiene poverty’, defined as the practical as well as the emotional and social challenges of managing sanitation, hygiene and menstruation, as it is experienced by senior schoolgirls in Southern Ghana.

focus group discussions amongst 33 participants in the Ningo-Prampram District in Southern Ghana. Observational data was also collected by two transect walks conducted by the research team.

menstruation at school well. They have to throw their used menstrual waste in school toilets or bushy areas. Girls’ experienced feeling nauseas from the smell of the menstrual waste and complained of getting vaginal fungal infections. They do not have proper working toilets at school and therefore use the nearby bushes, however, feared public insults and shaming if anyone saw them there. They have to visit the bush in groups so that no one will try and rape them if found alone. Girls try to remain extra cautious not to stain anything with their menstrual blood. Female teachers make the girls feel like

within this population. Girls mainly experienced menstruation negatively and felt embarrassed and dirty whilst menstruating. It is a norm to be punished and disciplined for not concealing the menstrual blood and for messing themselves. It is common practice to not be allowed to cook as the food cooked by a menstruating woman is believed to poison a man. Secretive words are used to describe the onset or arrival of menstruation to keep it a secret from men. It is a norm to lie to male teachers about

facilities are provided for the school girls. Supportive discourses need to be provided in order to strengthen female health and alleviate the serious hygiene poverty experienced by this population.

they are complaining for nothing and that they should be able to manage their menstruation whilst being present at school. Girls wait to get home to throw their pads due to a lack of disposal sites. They choose to burn their pads. Girls are often asked to spy on each other by their teachers to discover if they have messed the toilets and are punished for doing so.

their absence due to menstrual challenges as it is believed that they cannot know that you are menstruating. Words such as “playing” are used to warn girls against having sexual relations with boys to avoid getting pregnant. There is a social expectation to always be neat, bath and behave “lady-like” after becoming a woman (reaching menarche). It is considered a sin to talk about sexuality in African culture, so the girls keep this information to themselves.

Shah, V., Nabwera, H., Sonko, B., Bajo, F.,	“Effects of menstrual health and hygiene on	The study aimed to explore how menstrual	A mixed methods, cross-sectional study	Females displayed little knowledge of menstruation. Girls try to limit their movement	Strong cultural norms of keeping menstrual topics secret and concealed	It is advised that mothers and teachers could benefit from training programmes to
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<p>Faal, F., Saidykhan, M., Jallow, Y., Keita, O., Schmidt, W.-P., & Torondel, B. (2022).</p>	<p>school absenteeism and drop-out among adolescent girls in rural Gambia”</p>	<p>hygiene management practices and related factors influence school absenteeism and drop-out among primary and secondary school girls in rural Gambia.</p>	<p>conducted via focus group discussions carried out by semi-structured interviews, in-depth interviews, cross sectional surveys, menstrual diaries, water, sanitation and hygiene (WASH) facility observations amongst 19 schools in Gambia.</p>	<p>whilst menstruating and remain absent from school. Other reasons for absenteeism include experiencing pain, fear of staining clothing with blood, fear of smelling bad and a lack of WASH facilities at school. Girls also experienced an inability to concentrate well in school due to excessive pain during menstruation. They need to exercise caution in ensuring no one sees them whilst they are drying their menstrual material. Girls reported to have experienced atleast one symptom of urinary tract infections and reproductive tract infections whilst on their period. They were often reluctant to use the school toilets as they were smelly and waited</p>	<p>were identified. It is believed that menstruation is something that should be hidden from others. The girls were shy to discuss the topic. It is believed that menstrual blood is special water that comes out through a girl and that the blood comes from the middle of the head and then down to the private parts. It is believed that a girl should be ashamed when she is on her period. Girls are not allowed to pray during menstrual periods and are therefore teased when they refuse to pray with others during this time.</p>	<p>improve their understanding of menstruation in order to teach younger girls about it. Menstrual pain management is required in the schools. Adequate WASH facilities need to be provided. Menstrual absorbents are required to be provided by schools for schoolgirls.</p>
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				to go to the toilets at home after school. Girls are often teased for being on their period.		
Tanton, C., Nakuya, K., Kansime, C., Hytti, L., Torondel, B., Francis, S. C., Namirembe, P., Nakalema, S., Nalugya, R., Musoke, S. N., Neema, S., Ross, D. A., Bonell, C., Seeley, J., & Weiss, H. A. (2021).	“Menstrual characteristics, menstrual anxiety and school attendance among adolescents in Uganda: A longitudinal study”.	The aim of the study was to understand the characteristic of menstruation and examine associations with menstrual anxiety and school attendance in Ugandan secondary school students, using data from a recently completed pilot trial of a school-based	A quantitative study conducted via a longitudinal pilot trial in two secondary schools in Entebbe Municipality in Uganda. A self-completed questionnaire was administered at baseline. Students were also required to complete daily diaries during menstrual periods.	Over half of the participants were anxious about their next period. Girls preferred to stay home on their periods due to being teased by boys who knew that they were menstruating and felt a lot less confident during menstrual periods. Another reason for girls being absent during menstrual periods was due to pain experienced.	The mostly anxious population believed that it is not healthy to run or dance whilst on your period and that when a girl is on her period, she is unclean. There is a maintenance of secrecy even amongst other menstruating females due to a fear of being teased with further contributed towards higher anxiety rates during this time. The socio-cultural contexts that influenced higher rates of anxiety include not living with their mother, negative behavioural	Education on pain management is recommended to better manage pain at school. Social cognitive theory is recommended to frame menstrual health management interventions at school. Myths regarding menstruation need to be addressed. Access to WASH facilities need to be provided in schools.

menstrual health intervention.	expectations, lack of menstrual confidence and shame which resulted in internalised stigmas regarding menstruation.
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4.2.1 Coding

The codes **PAC** and **SIN** will be used to code the data for this study. The data coded **PAC** refers to and was generated from the word “**IMPACT**”. The code **SIN** refers to and was generated from the words “**SOCIOCULTURAL INFLUENCES**”.

Table 6: Thematic analysis with codes for reviewed studies

Study Title	Author(s); Year	Code	Explanation
1. Missing school during period: perspectives of adolescent schoolgirls in Cross River State, Nigeria.	Edet, O. B., Bassey, P. E. M., Esienumoh, E. E., & Ndep, A. O. (2022).	PAC 1	Impact of menstrual experiences 1
2. Dysmenorrhea and its effects on school absenteeism and school activities among	Femi-Agboola, D., Sekoni, O., & Goodman, O. (2017).	PAC 2	Impact of menstrual experiences 2

<p>adolescents in selected secondary schools in Ibadan, Nigeria.</p>			
<p>3. Prevalence and effects of menstrual disorders on quality of life of female undergraduate students in Makere university college of health sciences, a cross-sectional survey.</p>	<p>Odongo, E., Byamugisha, J., Ajeani, J., & Mukisa, J. (2023).</p>	<p>PAC 3</p>	<p>Impact of menstrual experiences 3</p>
<p>4. Effects of menstrual health and hygiene on school absenteeism and drop-out among adolescent girls in rural Gambia.</p>	<p>Shah, V., Nabwera, H., Sonko, B., Bajo, F., Faal, F., Saidykhan, M., Jallow, Y., Keita, O., Schmidt, W.-P., & Torondel, B. (2022).</p>	<p>PAC 4</p>	<p>Impact of menstrual experiences 4</p>
<p>5. Menstrual characteristics, menstrual anxiety and school attendance among adolescents in Uganda: a longitudinal study.</p>	<p>Tanton, C., Nakuya, K., Kansiime, C., Hytti, L., Torondel, B., Francis, S. C., Namirembe, P., Nakalema, S., Nalugya, R., Musoke, S. N., Neema, S., Ross, D. A., Bonell, C., Seeley, J., & Weiss, H. A. (2021).</p>	<p>PAC 5</p>	<p>Impact of menstrual experiences 5</p>
<p>6. Menstrual hygiene management amongst schoolgirls in the Rukungiri district of Uganda and the impact on their education: a cross-sectional study.</p>	<p>Boosey, R., Prestwich, G., & Deave, T. (2014).</p>	<p>PAC 6</p>	<p>Impact of menstrual experiences 6</p>
<p>7. Menstrual health management and schooling experience amongst female learners in Gauteng, South Africa: a mixed method study.</p>	<p>Crankshaw, T. L., Strauss, M., & Gumede, B. (2020).</p>	<p>PAC 7</p>	<p>Impact of menstrual experiences 7</p>

8. Menstrual hygiene management practices and associated health outcomes among school-going adolescents in rural Gambia.	Nabwera, H. M., Shah, V., Neville, R., Sosseh, F., Saidykhan, M., Faal, F., Sonko, B., Keita, O., Schmidt, W.-P., & Torondel, B. (2021).	PAC 8	Impact of menstrual experiences 8
9. Puberty- and menstruation-related stressors are associated with depression, anxiety and reproductive tract infection symptoms among adolescent girls in Tanzania.	Cherenack, E. M., & Sikkema, K. J. (2021).	PAC 9	Impact of menstrual experiences 9
10. Menstrual hygiene management in rural schools of Zambia: a descriptive study of knowledge, experiences and challenges faced by schoolgirls.	Chinyama, J., Chipungu, J., Rudd, C., Mwale, M., Verstraete, L., Sikamo, C., Mutale, W., Chilengi, R., & Sharma, A. (2019).	SIN 1	Sociocultural influences 1
11. A qualitative study exploring menstruation experiences and practices among adolescent girls living in the Nakivale refugee settlement, Uganda.	Kemigisha, E., Rai, M., Mlahagwa, W., Nyakato, V. N., & Ivanova, O. (2020).	SIN 2	Sociocultural influences 2
12. “We keep it secret so no one should know”- A qualitative study to explore young schoolgirls’ attitudes and experiences with menstruation in rural western Kenya.	Mason, L., Nyothach, E., Alexander, K., Odhiambo, F. O., Eleveld, A., Vulule, J., Rheingans, R., Laserson, K. F., Mohammed, A., & Phillips-Howard, P. A. (2013).	SIN 3	Sociocultural influences 3
13. Secrets, shame and discipline: School girls’ experiences of sanitation and menstrual	Rheinländer, T., Gyapong, M., Akpakli, D. E., & Konradsen, F. (2019).	SIN 4	Sociocultural influences 4

hygiene management in a peri-urban community in Ghana.			
14. Knowledge and menstrual hygiene practice among adolescent schoolgirls in southern Ethiopia: a cross-sectional study.	Belayneh, Z., & Mekuriaw, B. (2019).	SIN 5	Sociocultural influences 5
15. Menstrual hygiene among adolescent girls in junior high schools in rural northern Ghana.	Kumbeni, M. T., Otupiri, E., & Ziba, F. A. (2020).	SIN 6	Sociocultural influences 6

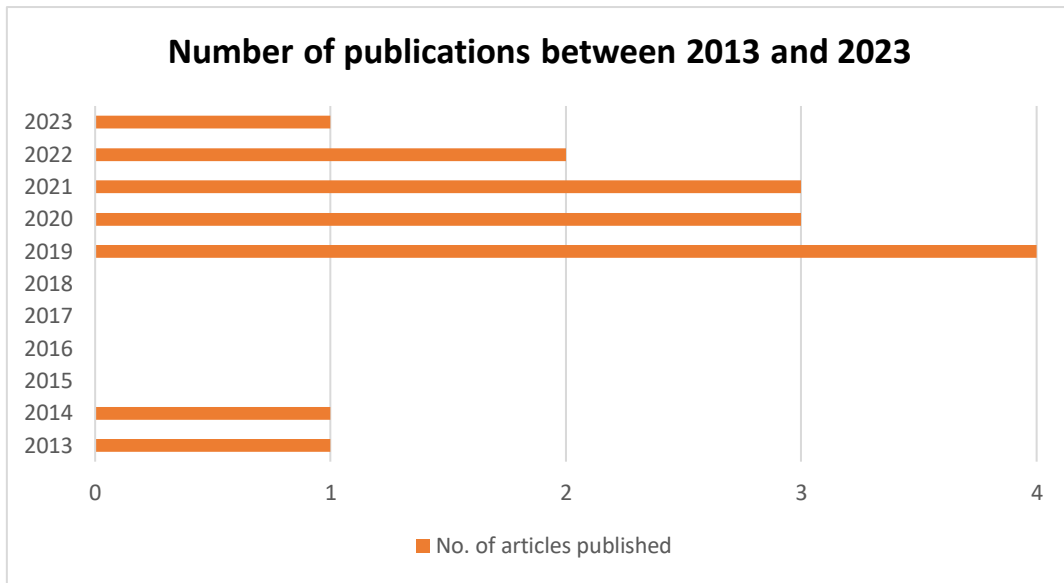
4.3 Description of the results

The search conducted for the current scoping review study yielded a total of 15 articles that were suitable for analysis to meet the objectives of the study and met the study's inclusion criteria. Of the total results sample (n=15), there were (n=7) quantitative studies, (n=4) qualitative studies and (n=4) mixed methods studies. The data collection methods used amongst the (n=15) selected studies were (n=7) structured questionnaires, (n=1) semi-structured questionnaire, (n=1) self-report survey and (n=6) focus group discussions. All of the studies sought to explore menstrual experiences amongst young women in the African context.

4.3.1 Number of publications per year

The graph below (See Figure 2) provides a representation of the number of articles that were published each year between the years 2013 and 2023. Fifteen studies that met the inclusion criteria and focused on menstrual experiences and socio-cultural influences on menstrual experiences were used for the present study. Across the 15 studies, 1 study each was published in the years 2013 and 2014. Between the years 2015 and 2018, there were no studies published. A spike in published articles was noticed in 2019, with 4 articles being published. There were 3 articles each published in 2020 and 2021. A decrease in published articles were noted in 2022 with only 2 published articles, and 1 article published thus far in the current year, 2023.

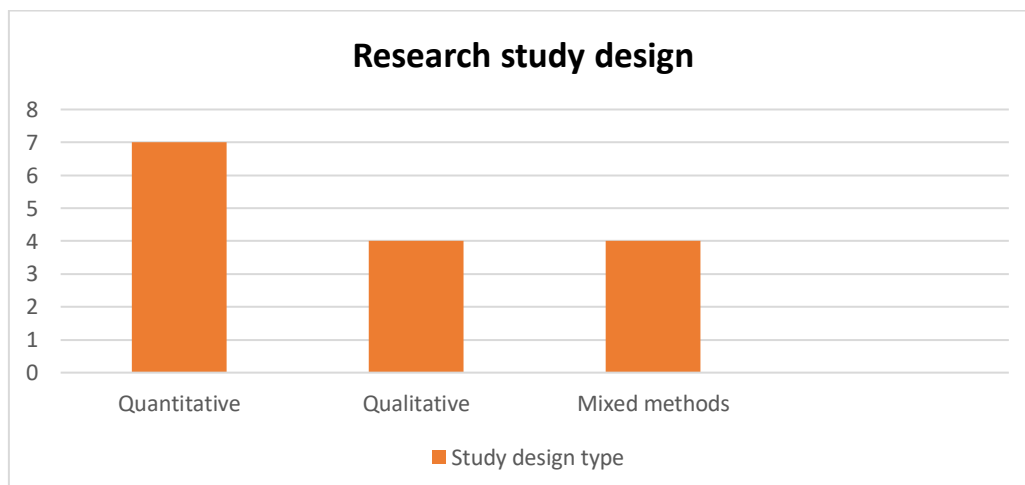
Figure 2: Number of publications per year (2013-2023)



4.3.2 Study designs

Most of the included studies were quantitative (n=7) and the same number of qualitative and mixed methods (n=4) studies were identified to meet the inclusion criteria. These data are represented in the graph below.

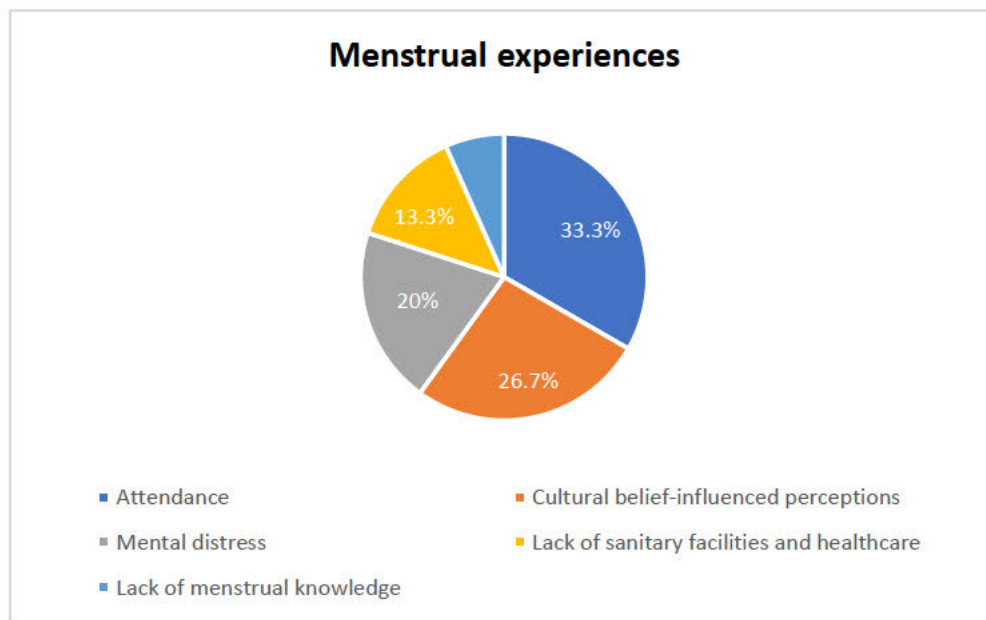
Figure 3: Study designs



4.3.3 Menstrual experiences

The common menstrual experiences identified included influences on attendance such as absenteeism and presenteeism, cultural beliefs such as concealment that changed perceptions of menstruation, mental distress, lack of sanitary facilities that resulted in negative experiences whilst at school, and a lack of menstrual knowledge that led to sexual vulnerability and peer bullying. These experiences are represented in the pie chart below.

Figure 4: Menstrual experiences



4.3.4 Study location and population

The included studies were all conducted within the African context. The included studies were conducted across 9 countries in Africa. Of the 15 included studies, 2 were conducted in Nigeria, 4 were conducted in Uganda and this was where most of the included studies were conducted, 2 were conducted in Gambia, 1 was conducted in Zambia, 1 was conducted in Kenya, 2 were conducted in Ghana, 1 was conducted in South Africa, 1 was conducted in Ethiopia and 1 was conducted in Tanzania (See Figure 5 below).

All the participants included in the study were females that had already reached the stage of menarche. The ages of the participants across the studies ranged between 14 and 35.

The participants across the studies were predominantly secondary school-going females. Only 1 study was conducted within the university context and 2 of the studies did not indicate the education levels of the participants as they were refugee participants and participants that were purposively recruited due to residing within a rural area. The countries within which the studies were conducted are represented in the pie chart below.

Figure 5: Study locations in Africa

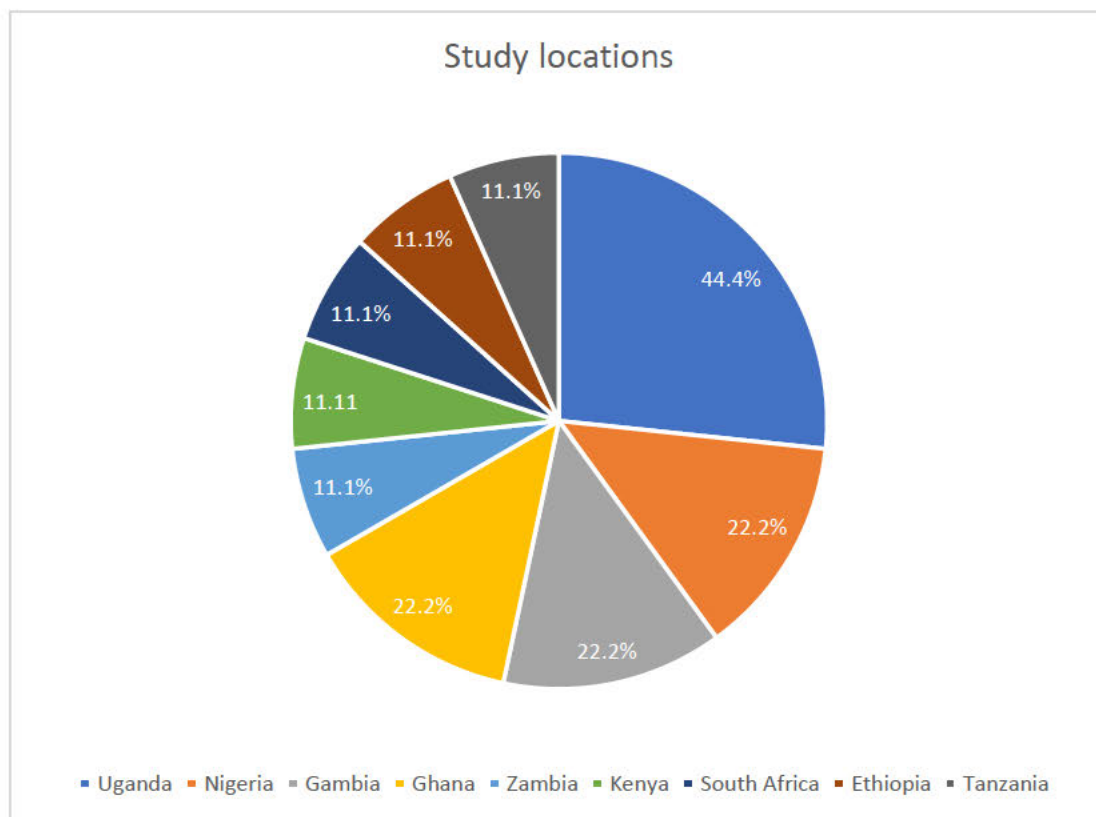
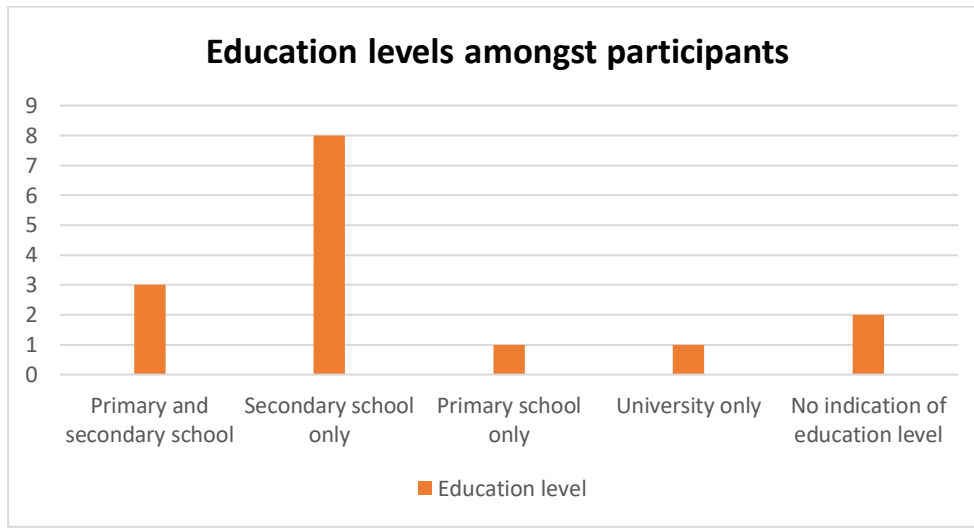


Figure 6: Education levels

The graph below indicates the different education levels of the participants within the reviewed studies.



4.4 Participants, Concept and Context of the included studies

The aim of the study was to explore the menstrual experiences of young women in the African context. “Young” in the South African context refers to any individual between the ages of 14 and 35 (National Youth Commission, 1996). Most of the included studies only consisted of participants of school-going ages. Only one study was conducted within the university context, which recruited participants between the ages of 18 and 35. This may mean one of two things: that menstrual challenges are mainly faced by females that still attend school, or that females older than those of school-going ages are expected to handle menstrual-related problems better and therefore, are not used as study samples when exploring menstrual challenges in the African context.

As mentioned earlier, the results of the included studies suggested that most young women in the African context had negative experiences of menstruation. Most of these experiences were due to a lack of facilities provided within the environments they spend most of their lives in,

as well as due to cultural and religious beliefs about menstruation being a negative ordeal altogether. Although the studies provided insight into the different cultural and religious beliefs that give rise to certain negative perceptions and experiences of menstruation, it is a possibility that the taboo nature of the topic prohibited some participants from being fully open about their menstrual experiences. Mostly qualitative studies explored the in-depth and personal experiences of the young women so the possibility that all the impactful influences over menstrual experiences has not yet been reported on.

All the included studies were conducted within the African context. By referring to figure 5, it was evident that most of the studies were conducted in Uganda and that the included studies were only conducted throughout 9 countries in Africa. This highlights that a lack of research that concerns menstrual challenges in the African context exists. Due to similar experiences being faced by the young women throughout these 9 countries, it is a possibility that young women in other countries in Africa may be faced with similar experiences and may also require interventions to menstrual challenges.

4.5 Study outcomes

It was evident from a review of the selected articles that most studies employed a quantitative research design. Most of the articles were also conducted amongst young women within the school context as opposed to the university or working context. This section aims to present a review of the studies amongst this population in terms of i) the impact of menstrual experiences amongst young women, ii) the role that sociocultural influences play in young women's menstrual experiences, iii) the interventions that have been recommended to assist young women with their menstrual experiences. The themes extracted interrelate to one another demonstrating multiple realities associated with the experience of menarche, that facilitate a deeper understanding of the phenomenon.

4.5.1 The impact of menstrual experiences amongst young women in Africa

4.5.1.1 Attendance

The first area largely affected by young women's menstrual experiences in Africa was attendance. It was apparent that the women were either encouraged to attend school during their menstrual periods or were discouraged from attending school or university whilst menstruating.

Absenteeism

Absenteeism rates in one study increased to as much as 73% during menstrual periods due to physical symptoms (Edet et al., 2022) (PAC 1). It was found that a fear of possibly staining one's clothes whilst menstruating impacted on young women's decision to avoid school during menstrual periods (Edet et al., 2022) (PAC1). Adding to this, experiencing a heavy flow that was unmanageable within the confines of the schooling environment as well as menstrual pain (Femi-Agboola et al., 2019; Tanton et al., 2021; Odongo et al., 2023) (PAC 2, PAC 3 and PAC 5), and a lack of concentration and shame due to peer bullying (Shah et al., 2022) (PAC 4), also impacted on the avoidance of attending school during menstrual periods. Young females preferred to stay home, where they are able to manage their menstruation better, as opposed to attending school, where they lack certain facilities to manage their menstruation properly (Shah et al., 2022) (PAC 4). Culturally, it is believed that menstruating women should refrain from interacting too much with others around them whilst menstruating and this belief further impacted attendance rates at school negatively during menstrual periods (Chinyama et al., 2019) (SIN 1). These factors have impacted on young women's ability to keep up with work in class during these periods and therefore, placed more pressure and anxiety on them to maintain their academic performance.

Presenteeism

Most young women seemed to remain absent during their menstrual periods, however, some young women were present by choice or influence of primary caretakers, or, are forced to be present as the arrival of their menstrual periods occurs whilst they are already at school (Odongo et al., 2023) (PAC 3). In one study, cultural influence impacted on young women's menstrual experience by encouraging them to attend school during their menstrual periods as they are 'taught' how to manage themselves in social environments (Chinyama et al., 2019) (SIN 1). It was evident that the impact of socio-cultural beliefs and influences cause some young women to ignore their physical symptoms and choose to attend school, so as to not miss out on pertinent lessons at school. The impact of these beliefs also resulted in women preferring to rather be provided with drugs to manage the pain from their menstrual cramps rather than missing school which impacts on the importance attributed towards their menstrual health care, which in some cases may have required medical attention (Femi-Agboola et al., 2019) (PAC 2).

4.5.1.2 Mental distress

It was found that negative experiences of menstruation have led to negative mental health experiences (Cherenack & Sikkema, 2021) (PAC 9). Young women were faced with symptoms of anxiety, depression and lack of concentration during their menstrual periods (Cherenack & Sikkema, 2021) (PAC 9).

Anxiety

The socio-cultural norm for menstruation to be concealed and something to be ashamed about impacted negatively young women's menstrual experience in Gauteng. The rates of anxiety amongst young women in Tanzania seemed to increase during the week of the month that young women expected and/or experienced their menstrual periods (Cherenack & Sikkema,

2021) (PAC 9). The impact of social norms contributed towards the negative experience in different ways such as experiencing anxiety due to the fear of the possibility that someone would notice that they are on their menstrual period as they have stained their clothing, a fear of being teased by other students in class for menstruating or for not being allowed by teachers to leave the classroom to manage their menstruation (Crankshaw et al., 2020) (PAC 7). Another contributing factor towards anxiety was the impact that a lack of knowledge regarding menstruation had on menstrual experiences as young women felt that they were unprepared for menarche and did not know how to adequately manage their menstruation (Kemigisha et al., 2020) (SIN 2).

Depression

Symptoms of depression present during menstrual periods impacted on the mental health of a sample of young menstruating women in Tanzania, so much so that they experienced possibly detrimental symptoms such as suicidal ideation and thoughts of self-harm (Cherenack & Sikkema, 2021) (PAC 9). Symptoms of depression were also associated with common medical problems faced during menstrual periods such as reproductive tract infections and vaginal pain and the lack of knowledge regarding these conditions made it difficult for the women to understand and identify what they were experiencing and whether or not to seek professional healthcare (Cherenack & Sikkema, 2021; Nabwera et al., 2021) (PAC 9 and PAC 8).

Inability to concentrate

The overall negative experience of menstruation, particularly in the Gauteng school context, impacted on young women's ability to concentrate well whilst experiencing their menstrual period and resulted in them being conflicted with whether to place focus on schoolwork or on their menstrual symptoms (Crankshaw et al., 2020) (PAC 7). A preoccupation with the fear of others knowing that one was menstruating, coupled with medical problems associated with

menstruation impacted on the ability to adequately concentrate on anything during menstrual periods (Kemigisha et al., 2020) (SIN 2).

4.5.1.3 Lack of sanitary facilities and healthcare

A major concern regarding adequate menstrual management was the lack of sanitary facilities and healthcare systems available in African countries (Boosey et al., 2014). The lack of facilities has led to negative experiences of menstruation and resulted in a period of dread amongst young women in the African context.

Water, Sanitation, and Hygiene facilities (WASH)

One of the major impacts of menstruating was associated with the lack of Water, Sanitation and Hygiene (WASH) facilities within the confines of the school and rural contexts. Young women's menstrual experiences were impacted on negatively due to insufficient facilities at schools to manage their menstruation adequately (Boosey et al., 2014) (PAC 6). They also indicated that schools in particular provided no soap, adequate water or sanitary products to enable them to wipe off the blood and wash their reproductive parts well, which contributed towards unhygienic practices and further discomfort (Nabwera et al., 2021) (PAC 8). Young women were discouraged to use the toilets at school as they complained of a bad odour emanating from the toilets, as well as dirt in the bathrooms that was not cleaned out, which further supported and impacted on the socially influenced perception that menstruation is unclean (Crankshaw et al., 2020) (PAC 7). Adding to this, young women's reproductive health was impacted on as they often held in their urine so as to avoid using the unhygienic appearing toilets in fear of acquiring a reproductive tract infection, however, doing so also led to either infections or extreme bladder discomfort (Cherenack & Sikkema, 2021) (PAC 9). Sanitary products such as pads are deemed to be unaffordable by most of the girls and impacted on the ability to manage menstruation more comfortably in order to concentrate better and feel more

confident (Boosey et al., 2014; Crankshaw et al., 2020) (PAC 6 and PAC 7). Due to the lack of sanitary pads provided by the government, young women are required to use cloths, which impacted on their absenteeism rates as they would rather do this at home where they could wash the cloths often, it impacted on their anxiety as they fear others seeing them wash their cloths, and it impacted on their overall self-esteem as the cloths are prone to getting messed and this causes them to feel impure and embarrassed (Crankshaw et al., 2020; Nabwera et al., 2021) (PAC 7 and PAC 8). Due to a lack of adequate disposal facilities, the young women also found the need to either keep their soiled sanitary towels in their bags until they got home to dispose it, or to wash them at school and dry them in a secluded space which further impacts on their ability to concentrate as they need to be concerned about what to do with their soiled towels (Crankshaw et al., 2020; Shah et al., 2022) (PAC 7 and PAC 4).

Menstrual disorders and access to healthcare

Dysmenorrhea was a common disorder associated with menstruation that impacted negatively on the quality of life of young females during menstrual periods (Femi-Agbola et al., 2019; Odongo et al., 2023) (PAC 2 and PAC3). Adding to dysmenorrhea, other medical menstrual problems that included irregular menstrual cycles, frequent menstruation, infrequent menstruation, intermenstrual bleeding, premenstrual symptoms, painful breasts, reproductive tract infections, genital irritation, and painful abdomens also impacted negatively on menstrual experiences as they resulted in extreme discomfort as well as depressive symptoms (Odongo et al., 2023; Nabwera et al., 2021) (PAC 3 and PAC 8). These menstrual disorders are known to require medical assistance; however, the impact of the lack of provision of menstrual knowledge made these women unsure as to where to seek medical assistance from. Adding to this, the lack of pertinence attributed to menstrual health in these African countries accounted for the lack of access to healthcare staff such as nurses and facilities in these areas (Kemigisha et al., 2020) (SIN 2). The denial by teachers for young women to visit the bathroom during

menstrual periods impacted negatively on the overall comfort faced by young women during classroom hours (Crankshaw et al., 2020) (PAC 7). The impact of teachers disregarding the needs of menstruating young women at school resulted in a divide between the menstrual supportive network as girls were expected to spy on each other to identify the person responsible for messing the toilet with their blood instead of helping each other to get through a phase they knew very little about (Rheinlander et al., 2019) (SIN 4).

Pain was identified as a common challenge associated with the experience of menstruation, which further impacted on learner's productive concentration abilities (Crankshaw et al., 2020; Nabwera et al., 2021) (PAC 7 and PAC 8). Adding to this, the lack of facilities to equip the young women with managing the menstrual pain such as access to pain medication and pain management strategies further impacted on their overall comfort within the school context (Edet et al., 2022; Nabwera et al., 2021) (PAC 1 and PAC 8).

Key recommendations identified

All the included articles made similar recommendations regarding the needs of menstruating young women in the African context in order to eliminate the impact that the negative menstrual experiences have on young women's lives. These included:

- Pain management facilities as well as healthcare facilities to deal with other symptoms of menstruation need to be available and easily accessible (Edet et al., 2022; Femi-Agboola et al., 2019; Nabwera et al., 2021; Odongo et al., 2023; Tanton et al., 2021) (PAC 1; PAC 2; PAC 8 PAC 3; PAC 5).
- Mental health care facilities need to be provided to equip young women with coping strategies to reduce depression and anxiety during their menstrual periods (Edet et al., 2022; Cherenack & Sikkema, 2021; Kemigisha et al., 2020) (PAC 1; PAC 9; SIN 2).

- Teachers are required to serve as a supportive network to young menstruating women and educate young boys on menstruation so that the young women can feel more comfortable around them during their menstrual periods (Chinyama et al., 2019) (SIN 1).
- Adequate water, sanitation, and hygiene management facilities (WASH), including sanitary products need to be made accessible to the young women (Boosey et al., 2014; Chinyama et al., 2019; Kumbeni et al., 2020; Mason et al., 2013; Nabwera et al., 2021; Rheinlander et al., 2019; Shah et al., 2022) (PAC 4; SIN 1; SIN 6; SIN 3; PAC 8; SIN 4; PAC 6).
- There exists a dire need for adequate and correct information regarding menstruation and menstrual processes to be provided for the youth in African countries so that they are better able to manage menstruation and increase their reproductive health knowledge, for discourse to be encouraged between parents and their children regarding menstruation, as well as for incorrect cultural beliefs regarding menstruation to be mitigated (Belayneh & Mekuriaw, 2019; Crankshaw et al, 2020; Kemigisha et al., 2020; Tanton et al., 2021) (PAC 7; SIN 2; PAC 5).

4.5.2 Socio-cultural influences on menstrual experiences

4.5.2.1 Lack of menstrual knowledge

A culture of misinformation, myths and negative beliefs regarding the emergence and process of menstruation exists amongst both women and men of all ages in the African context (Chinyama et al., 2019). The lack of menstrual knowledge negatively impacts on the experiences of menstruation amongst young women in the African context (Belayneh & Mekuriaw, 2019). Mothers are known to be the source of advice and education regarding menstruation, and it was found that young women whose mothers that lack adequate menstrual

knowledge themselves, experienced more difficulty in managing menstruation adequately and more comfortably (Kumbeni et al., 2020) (SIN 6).

Cultural Beliefs

Cultural beliefs and perceptions about menstruation are mostly negative in the African context and as a result, have influenced negative experiences of menstruation (Kemigisha et al., 2020) (SIN 2). Belief systems impacted the perception of menstruation as a disease and associated the use of sanitary pads to be attributable towards causing medical conditions, most notably cancer (Belayneh & Mekuriaw, 2019; Chinyama et al., 2019) (SIN 5 and SIN 1). Common beliefs that young women should only be educated about menstruation once they reach menarche as it is the only time that they will understand what it means to be a menstruating woman, impacted negatively on the preparedness that young women faced when they reached menarche as they did not understand the process of menstruation (Chinyama et al., 2019) (SIN 5). Young women's positive perceptions about being in a relationship and the intentions of a man are impacted on as they were often warned to 'be careful of boys as they are now able to fall pregnant by them and may also be married off to them, which generated a negative and fearful perception of men (Mason et al., 2013) (SIN 3). The cultural belief that men should not eat the food cooked by a menstruating woman as the food will cause a persistent cough and poison him impacted negatively on young women's self-esteem as they were made to feel evil and dangerous (Rheinlander et al., 2019) (SIN 4). The cultural belief about sanitary products being used by Satanists to bewitch and cause sterility to the owner influenced much anxiety in young women as they were required to then fear disposing off their sanitary products (Chinyama et al., 2019) (SIN 5).

Peer bullying

Menstruation was an unfamiliar process to both the youth and adults in Africa and the lack of knowledge around it influences a negative perception where menstruation is not viewed as a normal biological process, but rather an embarrassing condition. An added common impact of the lack of knowledge regarding menstruation was peer bullying. Young women experienced anxiety, shame and embarrassment during menstrual periods largely due to being mocked at by both female and male peers (Kumbeni et al., 2020) (SIN 6). This also influenced and impacted on increasing rates of absenteeism and negative self-esteems as young women were faced with being ridiculed for behaving differently and managing their menstruation inadequately (Chinyama et al., 2019) (SIN 5).

4.5.2.2 Concealment

A culture of concealment exists around the topic of menstruation for multiple reasons. Overall, menstruation was regarded as a taboo topic that should not be discussed out in the open. It was viewed as a topic that is only to be brought up by mothers once their daughters have reached the stage of menarche and it was an experience that should be hidden away from men (Mason et al., 2013) (SIN 3).

Menstruation as a taboo topic

Menstruation has been introduced to young women as a taboo topic, which influenced their unpreparedness for menarche as they were discouraged from talking about it when they tried to. It has also impacted on the ability of young women to openly engage in discourse about menstruation with their mothers as they were fearful of what to expect when they told them about their first menstrual experience (Kemigisha et al., 2020) (SIN 2). The concealment of talk about menstruation influenced new vocabulary such as “the one” and “beatemoe” amongst young women to communicate about menstruation to avoid men identifying that menstruation

was being discussed (Kemigisha et al., 2020; Rheinlander et al., 2019) (SIN 2 and SIN 4). Culturally influenced perceptions about menstruation being dirty and something to be ashamed of influenced young women to keep their menstrual challenges a secret from those around them which impacted on their ability to openly discuss and receive help with how to practice good menstrual health care (Mason et al., 2013) (SIN 3). Social expectations impacted on young women's ability to adequately attend to their physical symptoms as they were encouraged to conceal the fact that they were menstruating and to act "like a lady", as well as ensure that they are always put together and neat (Rheinlander et al., 2019) (SIN 4). Due to socio-cultural influences and beliefs, menstruation was commonly given negative attention and this impacted on absenteeism rates as focus was placed on remaining hidden in order to keep menstruation a secret (Kumbeni et al., 2020) (SIN 6).

Sexual vulnerability due to societal norms

The socially influenced belief that menarche marks the age at which a girl becomes a woman and may engage in sex impacted on the physical safety of young women and impacted on the need for mothers to exercise extreme caution to keep their daughters safe. Mothers were wary of informing their fathers and concealed the fact that their daughters were menstruating due to a fear of the father realizing that the daughter is mature and then making attempts to engage in sexual intercourse with her. This placed a negative impact on the relationship between father and daughter where the role of a father changed to becoming a possible abuser (Mason et al., 2013) (SIN 3). The socio-cultural norm that discourages discourse about menstruation between parents and children impacted on young women's sexual vulnerability as they were expected to exchange sex for money to afford sanitary products instead of discussing their needs with their parents (Mason et al., 2013) (SIN 3). It was also a norm for these young women's parents to conceal talk around where the money has come from as they are aware that they are unable to provide these materials for their daughters themselves and this further impacted on their

sexual vulnerability as they were not made aware of how to care for themselves in such a way that they are not taken advantage of. Young women's ability to feel safe was negatively impacted on as they needed to hide from men when going into the bush to clean off the blood as it was a concern that when a man knows that they are off a menstruating age, he will sexually abuse them (Rheinlander et al., 2019) (SIN 4).

4.5.3 Identified gaps in the literature

The scoping review search yielded a total of (n=15) articles that met the inclusion criteria for the present study. The first gap identified in the literature regarding menstrual experiences was the none to limited amount of research being done in certain countries in Africa. Although Africa consists of 54 countries in total, these studies were only conducted across 9 countries, with nearly half (44%) of the studies having been conducted in one country (Uganda). This illustrates that many countries in Africa have not yet been identified as countries in need of development with regards to menstrual healthcare. This hampers the possibility of identifying different experiences and exploring the different narratives of women from these countries who may be experiencing the same or even worse menstrual challenges.

The second gap identified in the literature was the overall research designs used. It was evident from review of the research designs used within the included studies (see Figure 3), that most of the research conducted on the topic of menstrual experiences have been quantitative. Although quantitative studies provide valuable information regarding significant associations between influential factors, these studies do not explore the in-depth meanings women have of their menstruation and the narratives that explain why menstruation was experienced negatively or positively. This highlights the need for more qualitative research to be conducted to elicit this type of information.

The third gap identified was the population sample gap. It was evident from a review of the included studies that most of the studies were conducted amongst schoolgirls. This highlights the need for more research to be conducted within university, employment and non-schooling/working rural contexts in order to get a broader perspective of menstrual experiences amongst ‘young women’. Menstrual experiences may differ according to contexts and it is therefore, important to have research conducted in the different contexts.

The above section answers research question four and addresses the existing gaps in the literature regarding menstrual experiences and sociocultural influences on menstrual experiences. It was also evident that there is limited research conducted on this topic as a whole and that similar findings and recommendations were made in the little amount of research that was conducted over the years.

4.6 Discussion of results

4.6.1 The impact of menstrual experiences amongst young women in Africa

Table 7: The impact of menstrual experiences amongst young women in Africa

The impact of menstrual experiences amongst young women in Africa	Source
Attendance (Absenteeism and Presenteeism)	<i>Edet, Basse, Esienmoh & Ndep (2022); Femi-Agboola, Sekoni & Goodman (2019); Tanton, Nakuya, Kansime, Hytti, Torondel, Francis, Namirember, Nakalema, Nalugya, Musoke, Neema, Ross, Bonell, Seeley & Weiss (2021); Odongo, Byamugisha, Ajeani & Mukisa (2023); Shah, Nabwera, Sonko, Bajo, Faal, Saidy Khan, Jallow, Keita, Schmidt & Torondel (2022); Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilenge & Sharma (2019).</i>

Mental distress (Anxiety, Depression and Inability to concentrate)	<i>Cherenack & Sikkema (2021); Crankshaw, Strauss & Gumedede (2020); Kemigisha, Rai, Mlahagwa, Nyakato & Ivanova (2020); Nabwera, Shah, Neville, Sosseh, Saidykhan, Faal, Sonko, Keita, Schmidt & Torondel (2021).</i>
Lack of sanitary facilities (Water, sanitation and hygiene facilities, Menstrual disorders and access to healthcare, Recommendations)	<i>Boosey, Prestwich & Deave (2014); Nabwera, Shah, Neville, Sosseh, Saidykhan, Faal, Sonko, Keita, Schmidt & Torondel (2021); Crankshaw, Strauss & Gumedede (2020); Cherenack & Sikkema (2021); Shah, Nabwera, Sonko, Bajo, Faal, Saidykhan, Jallow, Keita, Schmidt & Torondel (2022); Femi-Agboola, Sekoni & Goodman (2019); Odongo, Byamugisha, Ajeani & Mukisa (2023); Kemigisha, Rai, Mlahagwa, Nyakato & Ivanova (2020); Rheinlander, Gyapong, Akpakli & Konradsen (2019); Edet, Basse, Esienmoh & Ndep (2022); Tanton, Nakuya, Kansime, Hytti, Torondel, Francis, Namirember, Nakalema, Nalugya, Musoke, Neema, Ross, Bonell, Seeley & Weiss (2021); Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilenge & Sharma (2019); Kumbeni, Otupiri & Ziba (2020); Belayneh & Mekuriaw (2019); Mason, Nyothach, Alenxander, Odhiambo, Eleveld, Vulule, Rheingans, Laserson, Mohammed & Philips-Howard (2013).</i>

A total of 3 themes were identified that highlighted the impact of menstrual experiences among young women in the African context. They included 1) Attendance, 2) Mental distress, and 3) Lack of sanitary facilities. These themes are further discussed below.

4.6.1.1 Attendance

Absenteeism

Predominantly negative experiences of menstruation have heavily impacted on attendance at school and university amongst the female youth within the African context. The lack of preparation due to concealment of education around the topic of menstruation, together with the lack of adequate facilities to manage menstruation well, led young women to remain absent from school and university during their menstrual periods (Edet et al., 2022; Femi-Agboola et al., 2019). It appeared that young women in Africa were more comfortable managing their menstruation at home and are unable to cope with the lack of facilities as incidences such as messing themselves with blood results in further shame and embarrassment. Similar to the African context, women in India have also reported feeling more comfortable with managing menstruation at home due to the fear of exposing themselves to potentially embarrassing situations during their menstrual periods (Garg & Anand, 2015). This highlights that the shame associated with being a female that menstruates is a universal experience.

Presenteeism

Contrary to the high rates of absenteeism, it was found that many young women in the African context also exercised presenteeism. Presenteeism is defined as the inability to work or function adequately due to health-related challenges, but with the individual attending work or events despite being able to function adequately (Hemp, 2004). It was found that some young women were encouraged to attend places like school during their menstrual periods as they are taught how to manage the menstruation socially (Chinyama et al., 2019). This did not refer to managing the physical aspects of menstruation such as controlling blood flow and using sufficient sanitary products, but rather to social expectations of menstruating women to conceal their symptoms in a way that others around them cannot tell that they were menstruating. This

displayed the overarching exclusion of the actual and lived impacts that menstruation had on young women within the African context. This was similar to findings in the United States of America that report on the need for women to fit into a patriarchal society and behave in a way that exposes men only to socially acceptable appearances and behaviours of women (Jackson & Falmagne, 2013). Apart from this, it was found that there was an internal consciousness experienced by the young women that forced them to be present at school so as to not miss out on important work or to not have to explain why they were absent to teachers at school (Femi-Agboola et al., 2019).

4.6.1.2 Mental distress

Anxiety

The results of this study showed that anxiety levels in young women heavily increased during their menstrual periods and that this impacted on their ability to concentrate well in their respective environments. The fear of someone being able to identify when a woman was menstruating coupled with the fear of managing the menstruation adequately although inadequately prepared for menarche, raised concerns over what people would think and influenced practices to better conceal the fact that these women were menstruating. Similarly to these experiences, Lebanese women have reported experiencing anxiety due to medical problems associated with menstruation and particularly menorrhagia, which is an unusually heavy blood flow during menstruation (Santina et al., 2012). These women have reported that the thought of messing themselves due to the heavy flow was anxiety provoking. The results of the study also highlight that anxiety levels rose when having to explain to female teachers that they are experiencing challenges with their menstruation as they are often ridiculed for not managing the symptoms well (Rheinlander et al., 2019). This displayed, the cycle of misunderstanding and lack of empathy experienced by young women, especially in the school

context, which was found to further encourage a culture of concealment and impacted in the overall comfort of menstruating females in the African context.

Depression

It was found that the symptoms of menstruation include a low mood and also contributed towards experiences of depression in young women. Depressive symptoms seemed to occur due to medical problems associated with menstruation as well as the cultural beliefs regarding menstruation as a negative process. It was evident that the young women, due to cultural impositions and beliefs, have been made to feel inadequate and as if something was wrong with them due to the fact that they menstruate, and this seemed to place a damper on their self-esteem and reduce their confidence. They were made to feel ashamed and therefore isolated themselves and hid the fact that they were menstruating which fostered a “suffering in silence” experience. This also seemed to contribute towards higher rates of depression during that period of the month. According to Biggs and Demuth (2011), symptoms of depression may also occur due to the fluctuations of hormones and drop in oestrogen and progesterone which result in premenstrual syndrome which results in feelings of anxiety and depression as well as physical discomfort in the form of nausea, headaches, dizziness, and abdominal cramps. Due to the lack of healthcare facilities accessible to young women in the African context, it is a possibility that they were not aware of conditions such as this either.

Inability to concentrate

Many of the included studies concluded that the young women were unable to concentrate well during school lessons due to the physical symptoms of menstruation as well as the recurring mental reminder to hide the fact that they were menstruating. This highlighted a conflicting problem. The young women were expected to attend school so as to not miss out on valuable

lessons, yet they were unable to adequately focus on what was being taught due to their focus being placed on the symptoms associated with menstruating.

4.6.1.3 Lack of sanitary facilities (WASH, healthcare and recommendations)

Water, sanitation, and hygiene facilities (WASH)

The lack of provision of sanitary facilities within the environments the young women were exposed to contributed to overall negative experiences of menstruation. Despite having to deal with uncomfortable physical symptoms and disruptive mental challenges associated with menstruating, young women in Africa were also expected to manage their menstruation without vital resources such as soap, water, sanitary pads and clean toilets. Most of the schools within which the studies were conducted in did not have an adequate number of toilets for the number of female students in the school and even when they did, the toilets were not clean. This caused further psychological distress as the young women were anxious about using a toilet that may cause infection and, in many cases, young women did experience contracting a reproductive tract infection (Cherenack & Sikkema, 2021).

Menstrual disorders and access to healthcare

Not only were the young women expected to figure out the process of menstruation on their own, but they were also expected to deal with medical problems associated with menstruation by themselves due to the lack of knowledge around the topic (Kemigisha et al., 2020). It was evident from the results of the study that young women in Africa were faced with multiple medical problems associated with menstruation but are unaware that their symptoms were medically significant. The inaccessibility to healthcare facilities also posed a great risk to young women where reproductive health was off concern. This means that young women were expected to deal silently with medical related menstrual problems at a young age, which may cause more serious problems as they grow older. The young women were socially expected to

ignore the medical related menstrual problems that they faced, in order to present themselves as functioning normally in society.

Key recommendations identified

The recommendations made throughout all the included studies, unsurprisingly report on similar interventions that are required in order to make menstrual experiences of young women in the African context less negative and more manageable. The recommendations made include the provision of adequate sanitary and hygiene facilities within the environments that the women are exposed to, the provision of free sanitary pads in schools, access to healthcare facilities and symptoms management. There also lies a dire need for the correct information regarding menstruation to be provided to young women before the age of menarche so that they are well prepared for menarche and not as challenged and isolated when they reach this milestone. It is important that biologically incorrect beliefs about menstruation are not passed down to both male and female youth so as to not continue the intergenerational misinformation about menstruation which is a natural physical process. This would also eliminate much of the psychological distress associated with menstruating in Africa during current times.

In June 2022, a panel discussion was held by the World Health Organization in efforts to make menstrual health a priority internationally. The purpose was to begin recognising menstruation as a health issue instead of a hygiene issue, to increase access to sanitary products and education about menstruation, and to ensure that the measures undertaken are included in workplaces (WHO, 2022). It was noted that growing motives have been undertaken to provide menstruating women with free sanitary products and grant them with medical leave during menstrual periods, however, these motives, although necessary, were not enough to combat the challenges faced by these women altogether. More is required to be done in order to make progress in the development of menstrual health and management. This study identifies the

different socio-cultural influences over menstrual challenges and this adds to what needs to be addressed in order for change to occur. Although the information regarding what is required has been provided, there seems to be a lack of initiative by African governments in implementing the recommendations that have been made as menstruation has not been given adequate health importance.

4.6.1.4 Summary

The above themes answer research question one. The impact of menstrual experiences among young women in the African are mostly negative and include absenteeism, presenteeism, increased rates of anxiety, depression and inability to concentrate, inability to adequately clean themselves due to a lack of provision of sanitary and hygiene facilities which sometimes leads to infections, the mistreatment of menstrual disorders and discomfort and inadequate healthcare due to the inaccessibility of healthcare facilities in their respective environments. The above also answers research question three. The recommended interventions are similar throughout all 15 included articles. They included the recommendations to provide better WASH facilities in schools, improve young women's menstrual knowledge, eliminate the teaching of beliefs that are incorrect about menstruation, provide supportive networks in schools and universities, as well as for the government to provide schools with sanitary products.

4.6.2 Sociocultural influences on menstrual experiences

Table 8: Sociocultural influences on menstrual experiences

Sociocultural influences on menstrual experiences	Source
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Lack of menstrual knowledge (Cultural beliefs and Peer bullying)	<i>Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilenge & Sharma (2019); Belayneh & Mekuriaw (2019); Kumbeni, Otupiri & Ziba (2020); Kemigisha, Rai, Mlahagwa, Nyakato & Ivanova (2020); Mason, Nyothach, Alenxander, Odhiambo, Eleveld, Vulule, Rheingans, Laserson, Mohammed & Philips-Howard (2013); Rheinlander, Gyapong, Akpakli & Konradsen (2019); Edet, Basse, Esienumoh & Ndep (2022).</i>
Concealment (Menstruation as a taboo topic and sexual vulnerability due to social norms)	<i>Mason, Nyothach, Alenxander, Odhiambo, Eleveld, Vulule, Rheingans, Laserson, Mohammed & Philips-Howard (2013); Kemigisha, Rai, Mlahagwa, Nyakato & Ivanova (2020); Rheinlander, Gyapong, Akpakli & Konradsen (2019); Kumbeni, Otupiri & Ziba (2020).</i>

A total of 2 themes were identified that address the sociocultural influences on young women's menstrual experiences in the African context. These themes were 1) Lack of menstrual knowledge and 2) Concealment. These themes are discussed in detail below.

4.6.2.1 Lack of menstrual knowledge

Cultural beliefs

Most of the cultural beliefs regarding menstruation led to negative perceptions about menstruating females. Young women knew nothing to very little about menstruation due to adults believing that they should only be introduced to the topic of menstruation when they reach the stage of menarche. It was evident that this resulted in a lot of anxiety when young women reached the stage of menarche (Chinyama et al., 2019). The cultural beliefs placed women in a shameful and uncomfortable place during menstrual periods as they were then viewed as being in possession of evil and bewitching traits. This caused the young women to view themselves as possessing qualities capable of harming others even though they were

experiencing normal biological processes that have not been found to scientifically harm others around them. This speaks to the lack of biological menstrual knowledge that exists in the African context as people believed things that are not proven to be true, and this resulted in unnecessary hurt and labelling of young women who grow up to pass the misinformation to their children. Young women also live in fear and were extra cautious about where they disposed their sanitary pads due to the belief that Satanists may use it to bewitch them. This placed added stress on young women as the environments within which they are lacked the provision of adequate disposal sites. Similar findings in the Indian context show that culturally, a woman is impure during the period of menstruation and possess the capability to poison others with the food that they cook (Garg & Anand, 2015). Here, women are also not allowed to enter prayer rooms as it is seen as a sign of disrespect for a menstruating and ‘unclean’ women to come before God in prayer (Garg & Anand, 2015). This information offers conflicting stances as women are taught to respect God and believe in a religion but during menstrual periods are viewed as possessing evil qualities that are harmful to men.

Peer bullying

The unfamiliarity and negative discourse about menstruation has led to peer bullying when it is discovered that a young woman is menstruating (Kumbeni et al., 2020). The lack of knowledge that exists in African countries caused both males and females to view menstruation as an abnormal phenomenon and encouraged them to tease others about it. It was evident from the studies that young women are viewed as vulnerable due to physical and mental challenges during their periods and are therefore ridiculed for the change in their behaviour as well as the inability to maintain cleanliness during this time. The cultural beliefs about menstruating women possessing powers of bewitchment also led to men ridiculing them and being cautious around women when they cook as they believe they may be poisoned by them. These factors added to the lack of confidence in young women as they were unnecessarily targeted for

menstruating. Similar findings in Peru also conclude that young males are responsible for ridiculing young women for being on their period and use hurtful names such as ‘disgusting’ to describe young menstruating women (Ames & Yon, 2022). These young women were constantly verbally attacked and forced to give explanations for why they were bleeding and information about them menstruating was often spread to other males in the classroom. Collectively, groups are formed to laugh at and tease these young women who then remain absent from school for the next few days due to embarrassment (Ames & Yon, 2022). The information gathered from these studies raised questions regarding the involvement of teachers in issues such as peer bullying as they seemed to play quite a passive role in decreasing the freedom of young males to speak about young females in a disrespectful manner, which has not been helpful to young females.

4.6.2.2 Concealment

Menstruation as a taboo topic

Menstruation, due to negative cultural perceptions and individual beliefs, was viewed as a taboo topic. Both girls and boys were encouraged to use certain vernacular when speaking about menstruation as it was viewed as a forbidden topic (Rheinlander et al., 2019). From this, it was evident that menstruation was concealed both in the physical sense as well as in the verbal sense. Young women have been taught to conceal their menstruation by practicing behaviours such as cleaning themselves in bushes, so no one sees their blood and they are also taught to use words other than ‘blood’, ‘menstruation’, and ‘period’, when speaking about their menstruation (Kemigisha et al., 2020). This was also found in Peru, where degrading terms were used to describe a women’s period which resulted in women feeling more ashamed of themselves (Ames & Yon, 2022). Studies conducted in conservative countries such as Poland also indicate the use of words such as ‘flower’, and ‘aunt’ when referring to menstruation

(Joffe, 2015). This concealment has led to young women suffering in silence and forced young women to act in a certain way to meet patriarchal societal expectations whilst ignoring what was happening to them physically and mentally. It also highlighted the worldwide negative perception and taboo nature of the topic of menstruation.

Sexual vulnerability due to social norms

The most concerning finding seemed to be the risk of sexual vulnerability that young menstruating women were faced with in African countries. The concealment of the topic of menstruation has arguably resulted in young women being left to figure out menstruation on their own. Figuring menstruation out alone together with imposed negative beliefs and perceptions being passed down from generations, has left young women to find means of caring for themselves during menstrual periods alone and in secret. Young women were placed at sexual vulnerability as they used sex and were asked for sex by men in exchange to be provided with sanitary products (Mason et al., 2013). Through not being alert in certain situations, young women were at risk of being sexually abused if it were discovered by a man that she menstruates as she was then viewed as being off the age to engage in sexual activities (Mason et al., 2013). This spoke to Africa as a context experiencing problems commonly such as sexual abuse with strangers as well as with known males such as fathers and uncles (Mason et al., 2013; Rheinlander et al., 2019). This made it easier for men to take advantage of young women and for them to keep quiet about it as the men then have something to hold against these vulnerable women. The culture of concealment in this way fostered a space for young women to be taken advantage of and manipulated, and for secrecy around this matter to be maintained.

4.6.2.3 Summary

The discussion above answers research question two, which relates to the knowledge that currently exists around the role that sociocultural and contextual factors play in young women's

menstrual experiences in Africa. Cultural beliefs are known to influence negative and demeaning perceptions amongst young women as well as young men, adult women and adult men, as well as encourage degrading behaviours towards young menstruating women. The culture of concealment contributes towards the ongoing lack of correct menstrual knowledge and plays a role in placing young women at sexual vulnerability risk. Lastly, it was identified that societal and patriarchal norms contribute heavily to negative experiences of menstruation amongst this population.

4.7 Conclusion

This chapter aimed to answer the research questions set out for this study. This chapter has outlined the main themes elicited from the included studies and the gaps identified within the existing literature has been presented. The results of the study were discussed and elaborated on in this chapter. This chapter has discussed the meaning of the results in terms of answering the research questions and has provided a broader understanding of the impact of menstrual experiences amongst young women in the African context as well as the socio-cultural influences on these experiences. In this chapter, recommendations that were already made in order to enhance the experiences of menstruating females in the African context have been highlighted. This chapter has concluded that menstrual experiences have mostly been negative and that interventions need to be carried out both in the environmental and cultural sense in order to improve the lives of young menstruating females within Africa.

Chapter 5: Concluding remarks, limitations of the study and further recommendations

5.1 Concluding remarks

The objectives of this paper were to 1) Examine and map the impact of menstrual experiences of young women in the African context, 2) Examine and map the role of sociocultural and contextual influences in young women's experiences of menstruation in Africa, 3) Examine and map the interventions have been recommended to assist young women in their experience of menstruation in the African context, and 4) Identify existing gaps in the current literature regarding menstrual experiences and sociocultural influences on menstrual experiences.

This paper has mapped the evidence from the studies that discussed menstrual experiences and socio-cultural influences on menstruation amongst young women in the African context. The recommendations for interventions within these studies have been examined and the existing gaps within the literature have been identified. The findings of this study will be useful in future research as a steppingstone to moving forward with the execution of interventions and an evaluation of them in future.

Fifteen studies met the inclusion criteria for this paper. After the process of analysis, 2 major themes were identified.

The first theme was the impact of menstrual experiences amongst young women in Africa.

The sub-themes including the following:

Attendance: It was found that many young women are unable to attend school (absenteeism) or university whilst menstruating due to a lack of adequate sanitary facilities, fear or shame or physical and mental distress. In contrast to this, some young women are forced to attend school (presenteeism) due to cultural perceptions that women need to conceal menstruation and

behave normally in social contexts despite their menstrual symptoms and challenges. Attendance was impacted on due to socio-cultural and contextual factors.

Mental distress: Many young women faced anxiety around messing themselves, about being mocked by their classmates and about being ridiculed by their teachers. Depression rates also seemed to increase due to cultural beliefs that dimmed down young women's confidence as well as a part of pre-menstrual symptoms. Young women noticed that their ability to concentrate well was impacted on in class as they were preoccupied with their menstrual symptoms and were therefore, unable to focus on anything else happening around them.

Lack of sanitary facilities: The lack of water, sanitation and hygiene facilities within the school environment was evidently a major problem within specifically the school environment. Young women had trouble managing their menstruation adequately and had to put up with a lot of discomfort due to not having the resources to care for themselves whilst at school. The lack of knowledge impacted on young women's ability to be aware of when they experienced menstrual disorders. The culture of concealment contributed to this as they were taught to ignore symptoms that were also medically significant. Young women also did not know where to access healthcare facilities and felt ashamed to as culturally, they were taught that they should manage menstruation without complaining as it is a woman's' duty to do so. Unsurprisingly, the interventions recommended included installation of WASH facilities in schools, access to healthcare facilities, accurate information of menstruation and menstrual process to be provided to young women, a supportive network for young women to talk about menstruation and for incorrect cultural beliefs to not be passed down to young women as it has a negative effect on their experiences and self-esteem.

These themes have answered research questions 1 and 3 as they have mapped the impact that menstrual experiences have on young women in the African context, as well as the

interventions that have been recommended to assist young women in their experience of menstruation.

The second theme identified was the socio-cultural influences on menstrual experiences.

The sub-themes under this theme were:

Lack of menstrual knowledge: Young women in Africa evidently displayed a lack of knowledge regarding menstruation and menstrual processes. Due to this, many young women relied on cultural perceptions of menstruation which were all negative and portrayed menstruating females as evil. This led to shame regarding the young women's identity and predestined them for a life of insubordination to men. Adding to this, the lack of knowledge regarding menstruation has also led to peer bullying, where both young men and young women ridiculed young women and engaged in name-calling and labelling during menstrual periods. This further contributed towards absenteeism rates and experiences of anxiety, shame and embarrassment.

Concealment: Concealment both of the talk around menstruation as well as experiencing menstruation altogether was quite evident in all the included studies. Menstruation was regarded as a taboo topic and to be kept a secret despite the challenges experienced because of it. This predisposed young women to sexual vulnerability as they were groomed and manipulated into exchanging sex for money in order to buy sanitary products and manage their menstruation adequately. Due to concealment of the topic, they were unable to openly discuss this topic with adults that they could trust as they would have to bring up the topic of menstruation, which was culturally deemed as taboo.

These themes have answered research question 2, as they have identified and mapped the knowledge that currently exist around the role that socio-cultural and contextual factors play in young women's menstrual experiences in Africa.

5.2 Limitations of the study

A few limitations were noted whilst carrying out the present study. The first limitation was that there exists very little research regarding the topic of menstrual experiences as a whole. In addition to this, narrowing the search down to the African context further limited the number of studies available that discussed this topic and information had to be extracted from the little amount of research available. Although the number of studies conducted on this topic, a scoping review was useful as the challenges and recommendations outlined were very similar and future research may now place more emphasis on intervention as that is what is required. Another limitation was that most of the studies conducted on the topic were quantitative and quantitative studies did not provide as much of a rich understanding of menstrual experiences and narratives as did the qualitative studies. The last limitation was that most all except one of the studies included schoolgirls as part of the ‘young women’ population. Therefore, the experiences of young women out of the scholastic environment have not been examined as broadly.

5.3 Recommendations

It is recommended that interventions recommended in the included studies are first carried out within school and university contexts to better improve the lives of menstruating females. It is recommended that more research be conducted in other countries within Africa as the included studies were only conducted within 9 countries and young women from countries besides these may have different needs that need to be addressed. It is recommended that more qualitative research is conducted regarding the topic of menstrual experiences to explore more in-depth narratives and to normalise talk around menstrual challenges so that young women do not feel so isolated. Execution of these interventions will ease the challenges young African women face with regards to their menstruation and will allow them to take their menstrual health more seriously.

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Appendices

Appendix A: Exemption from Ethics Review Letter



UNIVERSITY OF
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INYUVESI
YAKWAZULU-NATALI

16 February 2022

Miss Lorelle Pillay (215003220)
School Of Applied Human Sc
Howard College

Dear Miss Lorelle Pillay,

Original application number: 00016018
Project title: An exploration of young women's menstrual experiences in the African context: A Scoping Review

Exemption from Ethics Review

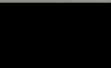
In response to your application received on 15 Dec 2021, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW**.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.






In case you have further queries, please quote the above reference number.

PLEASE NOTE:
Research data should be securely stored in the discipline/department for a period of 5 years.
I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,


Prof Johannes John-Langba
Academic Leader Research
School Of Applied Human Sc

UKZN Research Ethics Office
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
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