

Master of Public Health

Master de Santé Publique

Pedagogical Strategies to Address Menstrual Taboos in the French *Collège* Classroom: A Review of the Literature

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Class and year of the Master: MPH 2, 2023-2024

Location of the Practicum:

Paris, France

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Abstract

Introduction: This literature review explores effective pedagogical practices for addressing menstrual taboos in French *collège* classrooms (ages 11-13). It delves into the diversity, historical persistence, and health implications of taboos, particularly surrounding menstruation, which can hinder education and communication. This review highlights exploring menstrual taboos and education within the French and sexual health education scheme as well as through a critical pedagogy framework.

Methods: A review of articles focused on pedagogical strategies for taboos in general and menstrual taboos in educational settings. The research was limited to published, English articles discussing pedagogy in high-income countries within the last 14 years.

Results: Six articles were found to meet the criteria and were thus reviewed. Findings from the review reveal diverse global perspectives on teaching taboos and menstrual taboos within educational settings, including insights from the United States, the United Kingdom, South Korea, New Zealand, and global viewpoints.

Discussion: The review identifies a significant research gap regarding the French context and middle school education. Key findings emphasize the importance of creating open, trusting learning environments and employing a critical pedagogy approach. Additionally, preparing educators, integrating menstrual education into comprehensive sexual education, and ensuring the curriculum and materials are relevant to students' lives. However, implementation challenges, including financial and political constraints and adapting to technological advancements, are evident.

Conclusion: While implementing these best practices to address menstrual taboos in France faces challenges, the ultimate vision is to cultivate an educational framework where sexual and menstrual education is approached positively. This empowers students with knowledge, resources, and autonomy to navigate menstruation confidently while fostering empathy, inclusivity, and shared responsibility for reproductive health.

Keywords: menstruation, menstrual taboos, critical pedagogy, comprehensive sexual health education

Acknowledgments

There is no shortage of people I would like to thank for not only helping with this research but for being in my life and supporting my public health dreams. To my parents and my brother, for their support throughout my education and beyond, you have always encouraged me to live life to the fullest. An endless thank you to my mom, who has been my lifelong role model, I want to be just like you one day! To my amazing classmates at EHESP, who have challenged and supported me for the last two years, I've never known such kindness or intelligence. Especially for my classmates in the health promotion and prevention track, we are few but mighty-Logan, Gabby, Allegra, and Emilie, I am excited to see how we change the world together! For all my friends and family in Paris and back home (you know who you are!), thank you for loving me and helping me foster my passion for sexual and reproductive health. To Nico, thank you for being my soft landing at the end of the day. A special thanks to Bri for your knowledge and advice, without you I wouldn't have found EHESP and had the chance to rekindle my love for public health. Thank you to my EHESP administration and professors for helping quide the way, this program has been a once-in-a-lifetime experience. Finally, I would like to thank my absolutely incredible colleagues I had the chance to work with during my internship at Règles Élémentaires. A special thanks to my awareness and advocacy team—Justine, Florence, Niena, Evelina, Lucie, and Aliona, this time learning from you all has been challenging and invaluable for me not only as a learner but as a human.

I. Introduction

A. Taboos and Menstrual Taboos: A Brief History

Though the term 'taboo' is relatively new in human history, the very notion and its impacts have persisted long before the English word was coined by Captain James Cook in the late 18th century (1). As the celebrated 'Father of psychoanalysis', Sigmund Freud, points out in his celebrated work: 'Totem and Taboo', they are the "oldest unwritten code of law of humanity...taboo is older than the gods and goes back to the pre-religious age" (2). Often associated with negative connotations, in its original context, the word 'taboo' derives from the Polynesian word 'tapu', which signifies a neutral state of existence, too powerful to speak of or act on (3). While this original 'neutral' definition certainly still rings true for certain subjects amongst certain populations, topics categorized as 'taboo' can also carry positive and/or negative connotations. Perhaps what is most commonly known and recognized today is that these topics are marginalized within societies (3). Though the creation and perpetuation of taboos within cultures remain dependent on various factors such as age, religion, cultural traditions, geographical location, historical period, and colonial influence, many remain consistent across cultures (1,3).

One of the many taboos in the world that often solicits unfavorable discourse and consequences cross-culturally is the menstrual cycle and thus, menstruation or 'periods'. While the "predominant narrative" surrounding menstruation often carries negative undertones, it is crucial to acknowledge the historical and diverse perspectives that present the menstrual cycle and menstruation in a more neutral or positive light, of which there are many (3,4). The ebb and flow of menstrual discourse and its subsequent taboos throughout history have been anything but consistent. In Greek mythology, menstrual blood was called the 'supernatural red wine'. In Norse mythology, Thor reached the land of enlightenment and eternal life by bathing in a river of menstrual blood (4). Meanwhile, Pliny the Elder, an ancient Roman writer, naturalist, and philosopher, claimed in the year 77 AD that menstrual blood had outstanding powers with no limit, therefore it could soil crops, kill bees, drive dogs insane, and rust iron and bronze, amongst other things (5). Menstrual blood has thus continued to be viewed as an 'abomination', 'unclean', 'magical', 'poisonous', etc. throughout history and the world (6). In the case of religion, interpretations of menstruation widely vary throughout time, even within the same religious tradition. Factors such as familial beliefs, religious customs, socioeconomic status, and cultural practices contribute to this diversity. For instance, within Hinduism, attitudes and practices surrounding menstruation diverge significantly. In some Hindu traditions in Southern India, the menarche, or first menstruation, is a cause for celebration. For families who follow a more Brahmanical tradition, menstruation can mean separation from family, sexual activity, household chores like cooking, and religious practices

(4). These historical views heavily impact the way we interact with menstruation today. For example, the belief that menstrual blood is fundamentally impure and unclean perhaps is a direct influence on the motivation to create scented period products to mask the 'odor' and very presence of menstruation (7,8). Only one theme remains consistent in the long history of menstrual taboos: for better or for worse, menstrual blood is powerful.

When we regard menstrual taboos in the original sense of the definition, as a powerful topic often deemed unmentionable, coupled with the prevailing discourse of menstruation as impure and private, the nuances of language and speech are crucial in shaping our understanding of their significance and implications (3). In 2017, one of the largest surveys on period perceptions ever undertaken conducted by the International Women's Health Coalition, and Clue, a menstrual cycle tracking application, found that amongst the 90,000 respondents across 190 countries, there were at least 5,000 euphemisms for the word 'period' (9). Some of the most common French expressions were "Les Ragnanas", insinuating the way people who menstruate talk or 'grumble' during their periods, and 'La Semaine de Ketchup' or 'The week of ketchup'. 'The Curse' or 'Those days' are often used in English (9). The sheer number of expressions present to avoid using the word 'period', a basic biological process, shows how taboo it remains in society even today (6). These expressions could also reveal what preconceived ideas toward menstruation exist.

Acknowledging the variation in how menstruation is regarded throughout history, culture, language, and time is crucial. However, it is equally important to understand the opposing negative discourse that has become predominant in many parts of the world and what effects this has on people who menstruate as well as society at large. As long as there have been neutral, and positive views of menstruation, there have also been negative views that have much more severe consequences. How do these taboos impact behaviors and what are the resulting health impacts?

B. The Impact of Taboos on Health

The literature on the vast impacts that taboos have on health is extensive and ongoing. Taboos in the health context are understood to be "normative silences on health issues, which indirectly reproduce power inequalities in society" such as censoring marginalized patients in a hospital setting (10). Taboos can lead to the suppression of education that would provide tools to allow individuals to have agency over their health and protect themselves against negative health outcomes (11). While Dimitrov and colleagues argue that silence is fundamentally neutral. The presence of taboos renders direct communication impossible and unacceptable, necessitating alternative forms of expression to engage in discourse on the subject, hence the 5,000 expressions to say 'period' without saying the word (9,10,12). Lacking direct communication in school, at home, and in auxiliary spaces can create far-

reaching impacts on health; the inability to speak about, access, or inquire about menstruation is one such example (12).

In the case of menarche, many young people find it difficult to locate answers, period products, and comfort at school and/or at home during this time of transition. Some young people aren't even aware of what menstruation is by the time they reach menarche around 12 years old, which can create confusion, fear, and avoidance in seeking answers and speaking about it with a trusted adult. The resulting consequences are vast, as lacking this knowledge can lead to several poor mental and physical health outcomes which further disenfranchises people who menstruate (13).

Improper use of period products, such as leaving a tampon in for longer than the recommended amount of time, not only increases the risk of vulvar and vaginal infection but also of Toxic Shock Syndrome, a rare but life-threatening infection (14). An additional risk arises from the improper usage of products not specifically designed for period protection such as paper towels, toilet paper, newspapers, or even sand. This misuse often stems from limited access to proper period products or insufficient resources to obtain them, also known as "period poverty" or "menstrual precariousness" (15). Not only can this misuse cause infection, but also low self-esteem, confidence, and diminished school or work attendance and capacity (16). Lacking knowledge of what is 'normal' regarding physical symptoms of menstruation can also make it difficult to diagnose menstrual pathologies like endometriosis, which currently takes seven to nine years on average globally to diagnose (17).

Improper menstrual management can mean missing out on daily activities such as school or extracurricular activities for fear of staining clothes, or not being able to control menstrual pain. While teachers and coaches, similarly impeded by taboo, may also lack the tools to help their students navigate menstruation with agency (18). This creates a divide in opportunity at an early age for those who have their period and those who do not. Even later in life, as the reproductive system ages, menstruation persists as a taboo topic in the case of menopause, marking the end of a person's menstrual cycle. This taboo could manifest in various ways; withdrawing partially or completely from a career, social events, or family life, incapacitated by symptoms that could perhaps be assuaged if there were proper communication channels available between not just the patient and doctor but also the menopausal person and society (12).

The consequences of menstruation being deemed taboo could mean that proper treatment cannot be administered, misinformation and myths manifest, and the cycle of silence continues to create negative health outcomes for those for whom the taboo exists (12). Menstrual taboos create a vicious cycle of silence that on one hand limits individuals from living their daily lives carefree and also prevents society as a whole from engaging in important conversations around menstruation and menstrual management. The impact of taboo topics on health often manifests in the form of stigma. Stigma is understood as an "undesirable designation or association that diminishes someone's identity and it can perpetuate silence, denial, or concealment of various conditions" (19). In the case of menstruation as taboo, the preconceived belief in the impurity of menstrual blood leads to the stigmatization of menstruators in more ways than one. It can therefore be stigmatizing and or 'shameful' to be seen with period products either in the bathroom or in the grocery store because periods are 'private'. To even talk about periods out loud in the workplace or public spaces is deemed inappropriate as periods are 'gross'. The global female population is currently 3.95 billion (20). When including individuals who menstruate outside this binary, more than half of the global population thus bears the burden of this stigma. This reality raises critical questions about inequality in society (16).

C. Education as Prevention

Comprehensive sex education, when done correctly, has been identified as a tool for breaking taboos, ending stigma, reducing 'risky' behavior, creating better health outcomes, supporting social-emotional learning and communication skills, and ultimately helping to support a more equal society (21). Menstrual education normally falls into the wide-scoping realm of what is deemed 'sex education', though it is often separated or even forgotten, especially for those for which the subject is deemed 'irrelevant', like young boys (22). It has been shown that lack of knowledge and management of menstruation impacts not only attendance at school but also academic performance across the globe (23,24). In 2023, Règles Élémentaires, a French organization that fights against menstrual poverty, and taboos conducted a study with OpinionWay amongst French school girls aged 11-18 and found that 53% of their respondents aged 15 and older had already missed school because of their period (24). Their study also found that because of school absences, 1 out of every 4 respondents declared their period was an obstacle to their education. These results raise the question: Could including menstrual education as a component of comprehensive sexual health education increase knowledge, and agency and help reduce this global inequality?

Paulo Freire, an educational revolutionary, in his globally renowned book "Pedagogy of the Oppressed," speaks of the importance of education as a tool to fight against systems of oppression and consequent inequalities that exist. Freire wrote that students should be empowered to see themselves as human beings with agency and knowledge, with the capacity to transform the world with their learning and action. He contends that for students to be genuinely engaged and effectively learn, teachers need to acknowledge that school is a space for horizontal reflection and collaboration. This theoretical approach to education, or 'spirit' rather than strict pedagogy, is known as 'critical pedagogy' (1,25).

D. The French Education System

Freire's educational principle, aimed at combating systems of oppression, diverges from the 'Top-Down', centralized model that typically characterizes the French school system (26). The 'Top-Down' approach is also evident in the classroom, where teachers assume authoritative roles and often adhere to what Freire calls the 'Banking Model' of education, in which the teachers are 'active depositors' of information into 'passive students' (25–27). The French Education system stands upon five 'pillars': a right to education, free of charge, neutrality, secularism, and compulsory schooling from ages 3 to 16 years old (28). The education system has been criticized for its interpretation of 'secularism' and 'neutrality' as ways to separate pupils from their lived experiences, communities, and culture, upon entering the 'school sanctuary' (26). The very notion of 'school sanctuary' stands in contrast to Freire's model in which he specifies that students can not and should not separate from their lived experiences as they enter this 'school sanctuary' (25,26).

Since its inception in 2001, French law, Article L312-16, states that emotional, relational, and sexual life education must be provided in all French schools from primary to high school levels, with a minimum of three sessions per year, implemented by the school or a qualified third party (29). In practice, only 15% of students in the country benefit from these 'mandated' sessions (30). In 2023, three French sexual health associations, Le Planning Familial, Sidaction, and SOS Homophobie, filed a lawsuit against the government, alleging that the law had not been effectively implemented since its inception over 22 years prior (30).

In response to this lawsuit, the Ministry of National Education and Youth published its Sexual Education plan in March of 2024, which has yet to be officially approved for the 2024 academic year (31). This 65-page document showcases the ministry's plan for each grade level from daycare to the end of high school for emotional, relational, and sexual health education. The document highlights the need for an age-appropriate, streamlined, and comprehensive program. Whether this plan will be approved and implemented in schools across France remains unknown at this time. Throughout this document, 'menstruation' is mentioned exactly two times. These notions can be translated as: "Taking into account the changes induced by menstruation" and "Discussing solutions to alleviate physical and psychological discomfort" and were thus listed under competencies for the "classe de sixième", for ages 11 and 12, or the beginning of middle school (31).

The average age of menarche in France is 12.5, though it can occur as young as 8 or as old as 18 years old (24). For most students who menstruate, menarche typically occurs during *'collège'*, or 'middle school', for ages 11-15. Around this time, most students are also experiencing puberty, an intense period of physiological change from childhood to adolescence. The importance of sex education before this time of change not just for those who menstruate is vital. Society has often come to understand sexual education as prevention

for 'risky behavior' coinciding with hormonal changes and sexual behaviors amongst other pubescent phenomena. However, knowledge about menstruation and menstrual management is vital to ensure healthy menstruation that allows students to live their best lives while participating in their families, communities, and schools (32).

Menstrual education has the potential to serve as a tool to diminish negative menstrual taboos and their consequences while creating a more equal society. Knowledge remains scant on how this can be implemented in the French cultural and educational context, despite its seemingly progressive plan for sexual education. This raises the question: What are the best pedagogical practices to address taboos surrounding the menstrual cycle and menstruation in the *collège* classroom setting for ages 11-13 in France?

Table 1: Objectives of the Literature Review

Research Question	What are the best pedagogical practices to address taboos surrounding the menstrual cycle and menstruation in the collège classroom setting for ages 11- 13 in France?		
General Objective	Review the current state of knowledge of pedagogical practices surrounding menstrual taboos to improve current middle school program implementation et Règles Élémentaires.		
Objective 1	Build upon existing knowledge of menstrual taboos and their subsequent health impacts on adolescents.		
Objective 2	Evaluate and enhance current pedagogical practices within the association Règles Élémentaires.		
Objective 3	Create and propose new pedagogical tools and resources tailored to the target population.		

II. Methods

The following research presents an exhaustive literature review of the available, current state of knowledge in France regarding pedagogical tools for the age group 11-13 years old. The following search engines: Google Scholar, PubMed, and ScienceDirect were utilized for this research due to their effectiveness in retrieving relevant results (33). Additionally, using multiple search engines ensures a more comprehensive search. Google Scholar was particularly selected because of its easy-to-use interface, access to 'grey literature', and the variety of research provided available to the public or through access granted through the institution, École des Hautes Études en Santé Publique (34). 'Grey literature', or wide-ranging literature produced on the margins of conventional publishing, was

considered vital for conducting thorough research, as an initial review proved clear that there was limited information on the topic.

A. Inclusion Criteria

To conduct research, ten key search words were used alone or in various combinations within the database. Upon initial review, any relevant research written in English, conducted between 2010 and 2024 that aligned with the ten key search terms was noted. The key search words were taboo, stigma, menstruation, menstrual blood, periods, pedagogical tool, classroom, adolescents, France, and sexual education. Initial research that aligned with the keywords and subject matter was sparse: 17 scholarly articles, books, and unpublished theses in total (Figure 1). The consolidated list of articles needed to be relevant to the keywords and also specifically address the teaching of taboo topics in the educational classroom space.

B. Exclusion Criteria

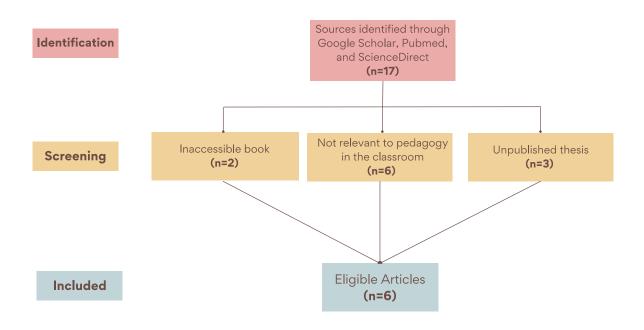
Inaccessible books and unpublished theses were not considered in the final review. Any articles relating to specific menstrual education interventions outside the classroom or in Lower Middle-Income Countries, or LMIC, were excluded. Only published and peer-reviewed articles from the last 14 years remained after refining the material for relevance, subject matter, and availability (Figure 1). The finalized articles were read, analyzed, and logged, and their main ideas, results, limitations, keywords, and concepts were noted. The finalized articles were then thematically grouped based on key themes and ideas presented. The following literature review will present these themes.

C. Consideration for Menstruators Beyond the Binary

The current state of research often only acknowledges and produces data surrounding menstrual health in the binary: women and girls menstruate, while men and boys do not. Throughout this literature review, I will utilize inclusive terminology: 'women', 'girls', 'young people who menstruate', and 'people who menstruate' to acknowledge all bodies and people that menstruate regardless of gender expression. However, it is important to recognize that the research conducted only presents data on and conducted with cisgender, 'female' bodies, girls or women, who menstruate, and 'male' bodies, boys or men who do not.

III. Results

Figure 1: Study inclusion flow chart



A. Description of Studies Included

"Taboos and Controversial Issues in Foreign Language Education: Approaching Taboos and Controversial Issues in Foreign Language Education", presents the first chapter of a book written in 2023 by Dr. Christian Ludwig and Dr. Theresa Summer, Professors of English education in Germany at the University of Wuerzburg and the University of Bamberg, respectively. This text presents a global perspective on the theory, importance, and practice of teaching taboos in the classroom, in particular the foreign language classroom setting. This text introduces critical foreign language pedagogy, a tool to speak about taboo topics in the classroom setting developed utilizing Freire's critical pedagogy. The text mentions the role of social media in creating and sustaining taboos, tailored and student-centered approaches to curricula, and teaching materials altered to integrate taboo topics. This text addresses the foreign language classroom on a global scale (1). "Teaching Taboo Topics: Menstruation, Menopause, and the Psychology of Women" was written in 2013 by Dr. Joan C. Chrisler, a professor of Psychology specializing in Women's health, menstruation, and menopause at Connecticut College in the United States. This article illustrates how menstrual taboos enter the university classroom, often causing discomfort and avoidance of the subject, for pupils and professors alike. She writes about the causes behind insufficient and nonexistent menstrual education in the United States, and why menstruation is an important topic to be discussed in the classroom. She includes her best practices for professors for teaching about menstrual taboos in the university classroom. This text specifically addresses the American university setting for the average ages of 18 to 21 (35).

"Learning About What's 'Down There': Body Image Below the Belt and Menstrual Education" was written in 2020 by Dr. Maragaret L. Stubbs, a doctor in psychology at Chatham University, and Dr. Evelina W. Sterling, professor of Sociology at Kennesaw University. This article addresses the importance of menstrual education as an integral piece of comprehensive sexual education. This article conducted the first exploratory review of 40 books that provide information on menstruation. The article analyzes the current state of written menstrual education in English. Some key themes introduced were the links between sexuality and menstruation, evidence-based menstruation, beauty standards, positively framed education, medicalization of menstruation, and diversity and variation in content. This article presents an American perspective on menstrual education for young girls (32).

"Addressing Menstrual Stigma through Sex Education in England--Taking a Sociomaterial Turn" was written in 2022 by three authors from the School of Policy Studies at the University of Bristol in the United Kingdom: Kate Bowen-Viner, former teacher and doctoral student, Dr. Debbie Watson, teacher and professor in child and family welfare, and John Symonds, a professor. This article was written after the Department of Education in England published its new guidance for sex, relationships, and health education in 2019, including menstrual well-being as a topic. This piece explores the idea of a relational socio-material pedagogical approach to menstrual education. This article provides an interesting theoretical perspective that focuses on non-human materiality in the daily lives of those who menstruate as an approach to menstrual education. This research is within the context of the United Kingdom, addressing education for children and adolescents (36).

"Students Engagement with Alternative Discursive Construction of Menstruation" was written in 2019 by Shire Agnew and Alexandra C. Gunn from the College of Education at the University of Otaga in New Zealand. This article dissects current menstrual education as part of the national sexuality education in the country. They conducted a study among teachers and their students aged 10-12, inviting them to participate in workshops that used critical literacy pedagogy to encourage and teach menstrual education in schools. The workshops

focused on menstrual product advertisements, highlighting how both teachers and students reacted to this educational approach. The context of this study was New Zealand, with only two out of the 96 invited schools having participated (37).

"How can we improve knowledge and perceptions of menstruation? A mixed methods study", was written in 2020 in South Korea by Gayoung Moon, Inkyung Kim, Habhin Kim, Suwan Choe, Soyeon Jeon, Jeonghun Cho, Sujeong Hong, and Jisan Lee, professors at the College of Nursing at the Catholic University of Pusan. This article discusses the growing menstrual precariousness in Korea due to the high price of menstrual products and how sexual education in Korea does not accurately and comprehensively address menstruation. A study was conducted on 20-year-olds to evaluate current menstrual knowledge from their previous menstrual education as adolescents. The study evaluated the current knowledge of participants and then gauged attitudes toward and knowledge gained from a menstrual education program that was created by the researchers. The program combined in-person and online modalities that highlighted the variety and utilization of period products. This study was conducted in the Korean context for young adults using a relatively small sample size (38).

Source	Year	Author(s)	Methods, Nature of Article	Results	
Taboos and Controversial Issues in Foreign Language Education	2023	Dr.Christian LUDWIG, Dr. Theresa SUMMER	eviewing theory, importance, and practice for teaching taboo topics. The classroom is the ideal place to introduce topics. Best practices include teacher preparation employing critical pedagogy.		
Teaching Taboo Topics: Menstruation, Menopause, and the Psychology of Women	2013	Dr. Joan CHRISLER	The author reflects on teaching experience to highlight the widespread lack of knowledge among students regarding women's reproductive health, attributing it to limited access to reliable information and reliance on stereotypes perpetuated by popular culture.	The article emphasizes the stigma around menstruation and reproductive health, advocating for increased attention to combat negative attitudes and promote understanding, with instructors playing a key role in fostering positive change.	
Learning About What's "Down There: Body Image Below the Belt and Menstrual Education	2020	Dr. Margaret STUBBS, Dr. Evelina STERLING	An exploratory review of 40 books that provide information on menstruation.	The authors suggest that menstruation education offers a valuable chance to foster a positive understanding of genitalia among girls, which can lead to a healthier sexual self-perception, and they provide recommendations for improving this aspect of sexual education.	
Addressing Menstrual Stigma through Sex Education in EnglandTaking a Sociomaterial Turn	2022	Kate BOWEN- VINER, Dr. Debbie WATSON, Dr. John SYMONDS	The paper utilizes a theoretical approach, discussing existing human-centered research on menstruation and applying ideas from relational socio-material theory.	The article argues that while current interventions address the physical management of menstruation, incorporating how menstruation is experienced in daily life could better address menstrual stigma by considering the role of material things in young people's engagement with menstruation.	
Students Engagement with Alternative Discursive Construction of Menstruation	2019	Shire AGNEW, Alexandra GUNN	Transcripts of workshops, interview data, and field notes from observed lessons were analyzed using discourse analysis	While teachers continued to engage with discourses of shame and secrecy, students demonstrated a willingness to challenge these discourses and explore alternative perspectives on menstruation	
How can we Improve Knowledge and Perceptions of Menstruation? A Mixed- Methods Research Study	2020	Gayoung MOON, Inkyung KIM, Habhin KIM, Suwan CHOE, Seonghun CHO, Sujeong HONG, and Jisan LEE	A mixed-method approach involving focus group interviews and an online survey was used to determine program needs and assess knowledge and perceptions of menstruation among young adults, followed by the development and verification of a multi-experimental menstrual education (MEME) program	The study revealed a demand for more information on menstrual products among young adults, with exposure to menstruation positively influencing knowledge and perception; the MEME program led to high satisfaction, improved knowledge, and changed perceptions of menstruation and menstrual products.	

Table 2:	Summary	/ of Included	Studies
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IV. Discussion

A. Social Media and Popular Culture

A majority of the literature reviewed mentions the role of social media and pop culture in not only the daily lives and educations of adolescents but also in their ability to invent and sustain taboos (1). Social media can be defined as "the means of interactions among people in which they create, share, and/or exchange information and ideas in virtual communities and networks" such as Facebook, X/Twitter, TikTok, or Instagram (39). Though 'popular culture' can hold different meanings for different individuals and contexts, it can be roughly defined as "the vernacular or people's culture that predominates in a society at a point in time" (40). As technology continues to advance, and knowledge is available within seconds, it is crucial to learn how these facets of modern-day society play a role and how they can be best utilized in the menstrual education space.

To figure out how social media and popular culture can be used as assets to gain knowledge in the menstrual education sphere, we must first understand what information is being dispersed about menstruation through social media and popular culture. Chrisler argues that even amongst her older, university-age students, menses is seen as something 'disgusting', something to be avoided (35). Students absorb negative attitudes toward menstruation and menopause from pop culture, this then affects attitudes in general toward women and people who menstruate (35). Chrisler speaks to the power of the media when portraying stereotypes about women and menotruators during their period as 'weak', 'miserable', 'ill', 'violent,' 'less sexy', and 'impure' (35). Stubbs and Sterling state that sexualization and objectification in American society which young people develop have a negative views and attitudes are ever present in adolescents, who remain the most active age group online (32). They further argue that to re-envision menstrual education, cultural views of menstruation must be understood (32).

As Ludwig and Summer argue, societies are increasingly open to discussing taboos, so how can we transition this newfound amenability to the classroom space (1)? Creating curricula that include the role and knowledge produced and circulating by social media and popular culture is crucial, though there is limited knowledge on how this can be done in the menstrual health sphere (1,32,35). Ludwig and Summer suggest engaging students with pop culture artifacts such as songs and poems to learn about taboo topics (1). Chrisler suggests that instead of shying away from speaking about preconceived ideas and stereotypes present in media and pop culture around menstruation they should be brought forth into the classroom and discussed (35).

B. Critical Pedagogy

This pedagogy, which values critical thinking, listening to others, and its dedication to questioning societal structures of power was used as a foundation for a majority of the literature that was reviewed (1). Given that menstrual equity is a society-wide issue, it proves logical to use critical pedagogy as the foundation for menstrual education. Lugwig and Summer argue that taboo topics are defined by systems of power, and therefore critical pedagogy provides a relevant perspective for discussing these topics (1). This pedagogy attempts to call the student to action, to think critically, and to develop tools for seeing how taboos have power over language, people, and society (1).

The most important aspect of employing critical pedagogy is to ensure that the education itself connects with the lived experiences of students, allowing them to feel empowered, think critically, and take action (1). This can be done by encouraging students to bring in their own materials, allowing the class to view an alternative discourse on taboos and culture (1). Chrisler bolsters this principle as she takes a student-centered approach, encouraging students to think about how they see people who menstruate in their own families compared to stereotypes and predominant attitudes toward menstruation (35). Creating a trusting environment within the classroom that allows these conversations to be done in a welcoming and participative environment is key (1).

Some of the research suggests using a critical literacy-based approach could increase knowledge and interaction with menstrual education for both teachers and students alike. This style of education is a specific approach to critical pedagogy that focuses on developing critical literacy, supporting students in understanding how language holds power and can be used to disenfranchise marginalized groups of people (1,37). Agnew and Gunn utilized this pedagogical tool to build student-led discussions around menstruation by dissecting menstrual product advertising. This not only allowed students to connect with constructions of menstruation within their lives but also to broader societal issues (37). Many students in the study found through these workshops that the subject matter was interesting and relevant, and their menstruation could even be something to take pride in, despite the common discourse of shame around menstruation (37).

While not specifically mentioned as critical pedagogy, Moon et al., pointed out the inefficacy of unilateral, lecture-focused, menstrual education in South Korea, or in Freiren terms; the 'banking model' of education (38). This research also shows the importance of creating new, innovative menstrual education programs that focus on hands-on demonstrations and activities, participant satisfaction, knowledge, and perceptions of menstruation (38).

C. Role of the Teacher

The role of the teacher in menstrual education is vital. The role, for Chrisler, is to discuss menstruation openly, correct misinformation, and challenge students to think critically about stereotypes and stigmatized messages around menstruation not only in the media but in their lives (35). Ludwig and Summer argue that teachers are not only responsible for instructing students about menstruation but also have much to gain as learners. By exploring taboos, teachers can also discover and understand different cultural perspectives, further dismantling the vertical, 'banking model' approach in the classroom (1). Ludwig and Summer also argue that under the principles of critical pedagogy, teachers have a role to play as activists, supporting the students to be engaged citizens who question and take action against inequalities in the world (1). Teachers must create a space that encourages students to voice their opinions, without fear of being dismissed or reprimanded (1,35).

As with any subject, teachers set the tone for classroom behavior. However, unlike most topics, menstruation adds an extra layer of difficulty to the discussion given its taboo nature. In Shire and Gunn's study, they found shame as the dominant discourse around menstruation more so amongst the teachers of the study than the students themselves. The potential for a positive approach to menstrual education was hindered by teachers' acceptance of the 'reality' of the prevailing discourse of shame (37). Chrisler argues that physical discomfort displayed by not only the student but also the teacher—such as laughing, boredom, or embarrassment—reinforces a desire to miss class or skip teaching the subject entirely (35). This highlights the need to create programs and tools to help educators overcome their own prejudices and long-standing taboos, to avoid reinforcing them in the classroom space.

For teachers to effectively instruct menstrual education, they must be prepared. Many instructors feel ill-equipped to handle these topics not only because they are taboo but also because of a lack of training (35). Ludwig and Summer add that teaching taboo topics is often difficult, reinforcing the hidden nature of these subjects. The goal of integrating taboo topics into the classroom space is not to create negative responses or conflicts. The teacher must be prepared to deal with consequences that may arise when introducing these topics (1). Training, preparation, and consulting with the school guidance counselors, social workers, and psychologists can create a support system for teachers to feel prepared and comfortable to open their classrooms to taboo topics such as menstruation (1).

D. Integration into the Classroom

Once a teacher or educator is ready to introduce menstrual education into the classroom, they must have a clear understanding of menstruation and menstrual taboos in addition to a well-thought-out strategy for implementing the program. Oftentimes, taboos are avoided because of the inherent diversity of the pupils in the classroom, invoking potential problems, conflicts, or disinterest. However, Ludwig and Summer argue that this very

dimension is what makes it the perfect environment for discussing these topics (1,37). Chrisler highlights that the classroom is one of the only spaces where students can participate in conversations about menstruation (35). In contrast to, for example, the gynecologist's office where menstrual discourse is personal and medicalized, thus perpetuating the idea that menstruation only holds relevance for girls and those who menstruate (35). Integrating taboos into the classroom allows students to learn to respectfully express and receive opinions while developing their critical thinking skills (1).

Even though research and therefore evidence-based programs are currently insufficient, there remains a small body of research that includes best practices for teaching taboos and menstruation in the classroom space (32). Ludwig and Summer, who utilize a critical pedagogy approach, highlight that integrating taboos into the classroom requires a learner-centered approach that accounts for the subjective needs of the class as a whole as well as the individual needs of students (1). A learner-centered approach requires a horizontality, allowing collaboration between students and teachers to share insights and ideas (1). This horizontal learning space could also help disintegrate the power imbalances that exist between the teacher and student in the classroom, an important factor to consider when creating any lesson plan that necessitates collaboration (1).

Teaching taboos in the classroom can be a difficult balance to strike; it is important to focus on the topic at hand and not on the personal views and experiences of the student to avoid potential conflicts Ludwig and Summer argue (1). Finding the balance between utilizing relevant materials to the lives of students and not involving their personal experiences that could be potentially traumatic is difficult from a critical pedagogy perspective and therefore requires preparation (1).

Though parents are not a fixture in the classroom space, students spend the majority of their lives within the family unit, so including them throughout the process of menstrual education should be prioritized. Ludwig and Summer emphasize that involving parents can reduce misunderstandings and complaints when teachers address taboo topics. This involvement might even foster acceptance outside the classroom space and enable parents to guide their children through these subjects in the home (1). Sterling and Stubbs point out that there is a large proportion of educational books and guides created for mothers and daughters to explore menstruation together (32). This is a great step to further communication in the home, but is insufficient and could be more inclusive of a variety of parent-child relationships. More books and guides should also be created for all parents to communicate with all children regardless of whether the child does or will menstruate (32). This challenges two taboos: the belief that menstruation is only for girls, and the notion that menstruation cannot be discussed openly and without shame in various settings.

Even for experienced educators, creating lesson plans and programs for menstrual education often requires references, textbooks, and scientific texts, especially as students get older and need information that is relevant, current, and age-appropriate. Chrisler explains that menstruation and the menstrual cycle are severely lacking in textbooks and other materials. This hinders all educators from being able to create fact and evidence-based lesson plans and programs. This also demonstrates that menstruation is neither crucial nor relevant in the classroom, as it was not even important enough to include in the reference materials. For university professors who often base their classes and syllabi on textbooks, it could mean creating lessons that hold misinformation, or even forgetting to teach the subject altogether (35).

E. Period Products

The research shows the importance of including period products in menstrual education. Chrisler points out that the taboo nature of menstruation renders even the products associated with it as stigmatized objects. Though there is increased coverage of menstruation and thus menstrual products on social media, marketing for these products still claim their tampons or pads are for 'feminine hygiene', as though menstruation or the human body is inherently dirty (35). Thus, the products utilized to manage menstruation are often diminished in importance, deemed "not essential", not accurately represented, or just left out completely from menstrual education (32,38). The extent of this stigma is so significant that it can often hinder individuals facing period poverty from accessing freely available products. This raises profound concerns regarding the omission of menstrual products from sexual and menstrual education curricula (36).

Menstrual education in the UK does not tackle how menstruation and menstrual prejudice enter the daily lives of young people, instead focusing on the biological aspects, argues Bowen-Viner et al.(36). This educational approach overlooks the importance of 'non-human materiality' in its relationship to menstruation: menstrual products, clothing, and technology for example (36). Moon et al., contend that there is a lack of knowledge of which menstrual products exist and how to use them, with concerns about the possible consequences of disposable products (38). If these materials play such an important role in the daily lives of people who menstruate, why are they often overlooked during menstrual education?

Based on the research, there are significant gaps in knowledge surrounding period products on a global scale. Sterling and Stubbs point out that even when menstrual products are demonstrated in learning materials, they are often not accurately represented in comparison to the size and location of organs, like the uterus or bladder, of a young menstruator (32). This can create confusion and fear, perhaps deterring young people who menstruate from trying products and further perpetuating myths about the body and

menstruation (32). The authors suggest not only avoiding unrealistic or cartoon representations but also displaying a wide range of body types and ethnicities in addition to diverse vulva appearances (32).

In a world with an increasing variety of menstrual products, it should be integral to sexual and menstrual education not only to show these products but also to demonstrate how they are used while facilitating open conversations about composition, preference, and lifestyle (38). Moon et al., offered that menstrual education only focuses on disposable pads in South Korea. Within their study, participants showed a keen interest in discovering and discussing other products, particularly the menstrual cup (38). Sterling and Stubbs found that there is very limited discussion on alternative menstrual products like the cup or menstrual underwear, limiting knowledge often to the disposable tampon and pad (32).

By highlighting period products in menstrual education it is possible to acknowledge their importance in the daily lives of menstruators, thus changing the discourse to view these products as 'essential' (38). Moon et al., argue that the perception of these products as non-essential often impacts the price, rendering them unaffordable, leading to period poverty or menstrual precariousness (38). This fact is further made clear by the sheer number of countries (most of the countries in the world) that add some variation of a 'tampon tax' to menstrual products (38,41). Until 2015, France had a 20% value-added tax, or VAT, on menstrual products, the same tax applied to luxury products like a yacht (42). Period products are hidden, taxed, and taboo but remain incredibly important for the daily lives of over two billion people in the world that menstruate every month, and should thus be an integral part of menstrual education (43).

F. Beyond Biology: Positive and Comprehensive Menstrual Education

As has been exemplified, the predominant approach to menstrual education is often biological, though many programs even fail to comprehensively address this. Menstruation as a basic, natural, biological function should be the foundation of any comprehensive menstrual education program, but it should not stop there. For Chrisler, the issue with restricting menstruation to a simple biological function is that it not only medicalizes the menstrual cycle but also diminishes the role that menstruation plays in society (35). Chrisler finds this problematic for multiple reasons, for one, it confines menstruation to just an issue for girls and people who menstruate. Secondly, medicalizing periods not just during menstruation itself but throughout the cycle during the pre-menstrual and ovulatory phase suggests that those who menstruate are possibly ill for half of every month. This can reinforce negative preconceived ideas around menstruation, for example, that women and menstruating people are 'crazy' and 'over-emotional'. It is also potentially unhealthy for an individual to view themselves as 'ill' or even 'disordered' when the emotions being felt are completely 'normal' (35). Though without a proper idea of what 'normal' is, this distinction can be incredibly difficult to make. On the

other hand, the normalization of the idea that periods are very painful physically and emotionally could mean people delay seeking treatment for diagnoses like endometriosis and premenstrual dysphoric disorder (32). Stubbs and Sterling conclude, "Imagine what it might be like to create menstrual education content using evidence-based information about menstrual health as opposed to menstrual illness" (32).

Beyond biology, Shire and Gunn discuss the prevailing discourse on hygienic menstrual management (37). They further maintain that a large proportion of education that young people receive centers around "managing menstrual discharge and maintaining femininity" (37). This education appears to be highly influenced by popular preconceived ideas and menstrual taboos that have claimed that periods are 'gross' and 'dirty' and must be managed properly and discreetly, reinforcing the stigma around menstrual products and menstrual management (37). Bowen-Viner et al., conclude that orienting menstruation as solely biological ignores the "social aspects of menstruation" like how menstrual stigma plays a role in the daily lives of menstruators. They propose bringing the daily aspects of menstruation to light such as bathroom facilities, technology, and menstrual products from a perspective beyond hygiene (36). One way to approach this in the classroom could be to address practical, everyday problems such as finding solutions when starting a period without any products (32).

As technology evolves, we must evolve with it, learning to adapt our pedagogical approaches, and ultimately use technology as a tool to help students further develop and access knowledge. As Bowen-Viner et al., exemplify, it is important to not undermine the role of digital media in the daily lives and experiences of young menstruators (36). Applications that track periods can be a great tool to support students in their self-reflection and allow them to relate their menstrual education in the classroom to their personal experience of menstruating (32). Ludwig and Summer contend that using technology and digital media can be a very powerful tool to encourage and increase student participation in taboo subjects. Digital art, music videos, and songs could be used as tools to spark discussion around these topics (1). Moon et al., saw positive reactions to online modes of education, especially in the creation of a YouTube video to demonstrate menstrual products' methods of use and possible risks (38).

What is often forgotten is the inherent link between sexuality and menstruation. Menstrual education should be an integral piece of comprehensive sex education. Stubbs and Sterling state that there is a missed opportunity to provide a groundwork for positive body imagery, especially as it pertains to vulva appearance, as well as supporting students to recognize themselves as sexual beings with unique and normal body parts (32). Puberty is another piece of menstrual education that can be developed further. Oftentimes, puberty is portrayed as a time of complete chaos, a body wrecked by hormones, which can make young

people feel scared and confused before their menarche. Avoiding overemphasizing the fear associated with change and puberty and highlighting the incredible capability of the body to menstruate every month is an example of what Stubbs and Sterling refer to as a "positive puberty outlook", creating agency, and diminishing dread (32). Recreating education as a tool to not only inform but encourage students to feel positive and empowered about their bodies and menstruation is possible.

G. Limitations

The following research presents many limitations, often stemming from the chronic lack of funding and therefore research on menstruation. A majority of the literature presented showed an awareness of the deficit in evidence-based menstrual education and thus mentioned this as a limitation in their research. Stubbs and Sterling add, "Where is an evidenced-based scope and sequence chart of facts and concepts related to menstrual education?" (32).

The location and language of the studies reviewed were a limiting factor. Publication of studies is nearly exclusively done in English. This prioritizes not only knowledge written by those who speak and write in English but also researchers who live or conduct studies in countries that are English speaking like the United States and England. Only published articles were taken into account, excluding knowledge about the French context that is perhaps unpublished. The selection of articles only relevant to high-income countries also presents a knowledge gap for menstrual education in other economic demographics.

Notably, there is a lack of published research in English on pedagogical tools designed to teach menstruation in the classroom, not only for the French *collège* setting but for the entire French education system. Though this research presents several pedagogical practices to tackle menstrual taboos in the classroom, none are specific to the French setting, or therefore the *collège* setting. As this review has exemplified, it is important to tailor pedagogy surrounding taboos to the specific needs of students. So while this knowledge is valuable for developing pedagogical tools for this population, the lack of evidence-based research on effective menstrual education for this specific context makes it unclear whether current efforts are effective.

Research restricted to the gender binary is not exclusive to menstruation. It is important to mention how this limits this research in particular. It is essential to move beyond the gender binary in menstruation research, creating possible solutions for menstrual equity for and by all who menstruate. Restricting research to the gender binary leaves a knowledge gap, further disenfranchising marginalized menstruating communities like transmen and non-binary folks. This literature review intended to summarize the state of knowledge on current pedagogical practices that serve everyone, menstruating or not, in the endeavor of breaking menstrual taboos. As menstrual health is a public health challenge globally, it must be a priority for everyone. However, with limited knowledge and research conducted for people who menstruate outside the binary, this knowledge falls short.

V. Conclusion

This literature review has attempted to show the current state of pedagogical practices to address menstrual taboos in the classroom. Though specific literature remains to be developed for the French *collège* context, there is still pertinent information about how to bring menstrual taboos into the classroom sphere. Creating open, trusting, and horizontal learning spaces that allow students to voice their opinions is a great place to start. Having prepared and certified teachers, instructors, and educators to design and implement menstrual education alongside a school support system including but not limited to parents, school social workers, and psychologists is important but requires a rather extensive budget that is not accessible for all who would benefit from this education. Creating and encouraging materials relevant to students' lives and current culture allows the classroom learning space to transform into an environment for reflection and critical thinking. Adapting pedagogy to current technological advances and ultimately using it as a tool to aid learners is crucial. However, the question remains—are these best pedagogical practices for introducing menstrual taboos in the classroom realistic for the current French educational context?

Given the current state of sexual education programming in France, implementing these best practices needed to address menstrual taboos in the classroom is highly unrealistic. This effort would require not just dedication, but the absolute prioritization of emotional, relational, and sexual life education. Currently, few students in France receive their mandated three sexual education sessions each year, indicating that this is not a matter of urgency. Furthermore, menstrual education is only mentioned twice in the entire document outlining the 2024 sexual education plan, which as of June, is yet to be reviewed and confirmed for this upcoming school year starting in September. For these best practices to be implemented, there also needs to be a recognition that menstrual education is integral and deserves significant attention. This comprehensive implementation would demand resources, time, and energy across various sectors. Additionally, these best practices rely on creating a horizontal learning space supported by a critical pedagogy approach. This approach contrasts sharply with the vertical 'school sanctuary' ideology that seems to dominate classroom spaces in France and across the world.

Though the implementation of these best practices may not be realistic to implement into the French educational system currently, it doesn't mean that they cannot be utilized to some extent. A part of the integration of these sessions surrounding sexual education requires exterior involvement, through organizations like Règles Élémentaires. While involving third parties may pose challenges in building rapport with students and integrating menstrual taboos into the everyday classroom environment, these organizations must possess these tools, as successful implementation often hinges on their involvement.

Central to this vision is the creation of a world where sexual and menstrual education is rooted in positivity and support, empowering every student with knowledge, resources, and the autonomy to not only navigate menstruation confidently but to lead fulfilling lives. By equipping individuals, regardless of whether or not they menstruate, with comprehensive education, we foster empathy, inclusivity, and a shared responsibility for reproductive health. This not only promotes equality but also cultivates a more compassionate and informed society.

Abstract

Introduction: Cette revue de littérature explore les pratiques pédagogiques efficaces pour aborder les tabous menstruels dans les salles de classe des collèges français (âges 11-13). Elle examine la diversité, la persistance historique et les implications sanitaires des tabous, en particulier autour de la menstruation, qui peuvent entraver l'éducation et la communication. La revue met en lumière l'exploration des tabous menstruels dans le cadre de l'éducation française à la santé sexuelle ainsi qu'à travers un cadre de pédagogie critique.

Méthodes: Une revue d'articles portant sur les stratégies pédagogiques pour les tabous en général et les tabous menstruels dans les milieux éducatifs a été menée. La recherche était limitée aux articles publiés en anglais discutant de la pédagogie dans les pays à revenu élevé au cours des 14 dernières années.

Résultats: Six articles répondant aux critères ont été trouvés et examinés. Les résultats de l'examen révèlent des perspectives mondiales diverses sur l'enseignement des tabous et des tabous menstruels dans les milieux éducatifs, y compris des informations des États-Unis, du Royaume-Uni, de la Corée du Sud, de la Nouvelle-Zélande et des perspectives mondiales.

Discussion: L'examen identifie un écart de recherche significatif concernant le contexte français et l'éducation au collège. Les conclusions soulignent l'importance de créer des environnements d'apprentissage ouverts et de confiance et d'adopter une approche de pédagogie critique. Cependant, des défis d'implémentation, y compris des contraintes financières et politiques et l'adaptation aux avancées technologiques, sont évidents.

Conclusion: Bien que la mise en œuvre de ces meilleures pratiques pour aborder les tabous menstruels en France soit confrontée à des défis, la vision ultime est de cultiver un cadre éducatif où l'éducation sexuelle et menstruelle est abordée de manière positive. Cela donne aux élèves des connaissances, des ressources et une autonomie pour naviguer en toute confiance dans la menstruation tout en favorisant l'empathie, l'inclusivité et la responsabilité partagée en matière de santé reproductive.

Mots-Clés : menstruation, tabous menstruels, pédagogie critique, éducation complète à la santé sexuelle

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