

**“Cycle Syncing”**

CAPSTONE

Submitted to the Department of English & Communications in Partial Fulfillment of the  
Requirements for the Degree of Bachelor of Arts

Nelli Gevorgyan

American University of Armenia

EC 299 Capstone

Mica Hilson

May 2025

**Abstract**

Male and Female biology vary, especially when it comes to the hormonal fluctuations and the effects of those on day-to-day lives. This research unveils how the structure of the modern world around a 24-hour circadian rhythm impacts women's health and productivity, and how cycle syncing practice helps women optimize their well-being and performance. The effects of hormonal fluctuations are researched and studied based on analysis of various literature, including books and scientific articles on the subject matter as well as interviews conducted with experts and a focus group to unveil the effects of hormones on women's health and productivity as well as gain expert insight into cycle syncing practices for both research and creative components of the project.

**TABLE OF CONTENTS**

INTRODUCTION

CREATIVE COMPONENT & ITS PURPOSE

KEY TERMS & DEFINITIONS

LITERATURE REVIEW

RESEARCH QUESTION

METHODOLOGY

ANALYSIS

CREATIVE PROJECT

CONCLUSIONS

BIBLIOGRAPHY

## **Synced: Empowering Women to Explore and Align with Their Natural Rhythms through Cycle Syncing**

### **Introduction**

Women are continuously affected by their hormones and their fluctuations. These affect women's lives in every aspect, from day-to-day activities to fitness and work. The most common effects include mood and energy fluctuations impacting overall productivity levels. Despite the awareness of the effects hormones have on women gaining more popularity and acknowledgment in the past few years, the modern world is still built around a 24-hour circadian rhythm, which complies with the male hormonal cycle, leaving female biology and its nuances out. The female population around the world is constantly shamed due to their differences. Women are expected to perform and display the same level of energy and productivity every day, even though our basic biology does not allow this, which ultimately contributes to worse well-being, overwhelm, burnout, and low performance. One of the main solutions is to adopt a practical solution, such as cycle-syncing practices, to boost female well-being in the modern world, which will not accommodate female biology.

Cycle syncing is an essential practice that includes a variety of practical frameworks for adjusting daily routines and adopting nutrition around different phases of the menstrual cycle based on an average cycle length of 28 days.

This research is accompanied by a creative project named "Synced" with the slogan "empowering women to explore and align with their natural rhythms through cycle syncing," and I am creating it to share the research conducted on the issue for educational purposes and to reach general public bringing more awareness to it, and provide women with actionable solutions.

### **Creative Component and Its Purpose**

The website has a podcast and blog section as well as downloadable PDFs and guides. The blog section materials feature educational content regarding women's health, the effects of hormones on women's health, menstrual phases, and information on cycle syncing. The website's podcast section features interviews with women's health experts to provide viewers with practical advice and tips regarding cycle syncing and gaining more insights into the practice. Also, the podcast features ordinary women sharing their daily experiences, telling how they feel throughout different phases of their cycles, while I, as a host, explain to them what cycle syncing is and how they can incorporate it into their lives for improved well-being. These podcasts were originally made for research purposes to gather expert opinions on the issue and solutions, and to gather data from a "focus group" of ordinary women who deal with the effects of their cycles on a daily basis. Besides being utilized for research, they are efficiently leveraged as a free resource to women with the consent of participants to help them gain more awareness of their health and get acquainted with actionable solutions. Finally, the PDFs and other downloadable resources are going to feature practical toolkits and checklists that will help women adopt cycle-syncing practices into their daily lives. For instance, there will be a downloadable resource listing the types of foods recommended to consume during different phases of the cycle. My creative component of the project, the website Synced, is backed by extensive scientific research and expert advice, providing women with both theoretical knowledge and practical tools to maximize their productivity in the modern world while acknowledging their biology instead of feeling ashamed of it. Therefore, this project aims to

empower women to walk along with their biology instead of going against it, which ultimately will help them feel well, be productive, and increase life satisfaction levels.

### **Key Terms and Definitions**

**Menstruation** - Menstruation is the monthly shedding of the lining of the uterus, according to the definition provided by the Cleveland Clinic.

**Monthly Cycle** - The monthly cycle refers to the time from the first day of the menstrual period until the first day of the next menstrual period, according to the definition provided by the Cleveland Clinic.

**Cycle Syncing** - Cycle syncing is a practice tailored for women to adapt their exercise routines, diet, and other lifestyle-related habits based on the phase of their menstrual cycle, aimed at improving overall well-being, productivity, and focus (Krupp, 2024).

**Circadian Rhythm** -The circadian rhythm refers to the human brain following the 24-hour cycle as our organism reflects physical, mental, and behavioral changes over the one-day period (Reddy et al., 2023).

**Infradian Rhythm** - The infradian rhythms are rhythms that occur for more than 24 hours but are shorter than a year (Clinic, 2025).

### **Literature Review**

In one way or another, women are constantly affected by their biology, more specifically, different phases of their cycles. The structure of the modern world, based on a 24-hour circadian rhythm, which is closely tied to the male biological clock (cycle), tends to impact women's health and productivity in different areas of life, ranging from personal and fitness to work and productivity. The structure of the modern world fails to acknowledge that women also operate by infradian rhythms synced to their cycles. However, due to many nuances such as the fact that

women's cycles around the world are not synced, the world cannot fully adapt to the infradian rhythm. This is when practices such as cycle syncing take utmost importance due to their usefulness for women's well-being. Cycle syncing is a complex practice that involves adjusting daily routines and adopting nutrition around different phases of the menstrual cycle (Vitti, 2020). Cycle synchronization, as a practice to help women sync with their biological rhythms, positively influences their lives and empowers them to start their journey toward wellness and prioritization of health. Stating the issue does not allow us to provide effective solutions; rather, it only contributes to raising awareness. The aim of the capstone project of the website "Synced" is to shed light on practices of cycle syncing while simultaneously educating women about their biology. The project will contain podcast episodes, articles, and PDF guides, all available for free to every woman interested in optimizing their well-being.

For the practical aspect of the project, including tips, recommendations, and tracking charts as well as elaboration on the impact hormones have on women's day-to-day lives, the practical frameworks presented in the books "In the Flow" and "Period Power" are going to be extensively utilized. Also, another study on "Physiology of the menstrual cycle" by Owen, J.A. Essentially, these sources are critical to helping women understand the overall impact of cycles on their lifestyles and learn about tools for lifestyle optimization. Alisa Vitti, in the book "In the Flow," presents a biohacking framework for modern women to synchronize their eating habits, lifestyles, and work routines with their monthly cycles. The author, based on extensive scientific research and practical expertise in women's health, showcases how hormonal health can optimize overall well-being and help to foster a happy and productive life. Essentially, she elaborates on the fact that most research regarding the optimization of health and productivity in

the modern world is conducted around males; thus, what works for them will not work for women, as we are biologically different (Vitti, 2020). Similarly, Maisie Hill, in the book *Period Power*, elaborates on menstrual health and empowerment through knowledge while also providing recommendations on practical applications of the knowledge. Both authors explain hormonal cycles and their effects on productivity levels, elaborating on how the estrogen levels change through different phases of the cycle from menstrual (day 1-5), follicular (days 6-14), ovulation (Day 14), and luteal phase (Day 15-28). During the menstrual phase, estrogen and progesterone levels are low, which leads to low energy levels and the need for rest. The following follicular phase, during which estrogen levels actively rise, preparing the body for ovulation, also leads to boosts in mood, cognitive clarity, and high energy levels. The ovulatory phase is when the estrogen peaks alongside testosterone levels, resulting in increased sociability, energy, and sexual desire. In the final phase of the cycle, which is also the longest, on average 14 days, estrogen drops while progesterone rises. This drop in estrogen and a rise in progesterone slowly contribute to lower energy levels as the body starts winding down. Closer to the menstrual phase (5-7 days in advance), many women also experience PMS symptoms, including fatigue, cravings, bloating, mood changes, and cramps due to the impacts of hormonal fluctuations (Owen, 1975). Conventional medical approaches are highly criticized as they often overlook the individuality of menstrual cycles, presenting gaps in healthcare. Besides the physical effects of hormonal fluctuations, it also has an immense impact on mental health, resulting in mood changes, stress, and other effects (Hill, 2018). The failure to provide practical frameworks for women and instead adopting well-being to male cycles leads to unawareness of the issue and decreased well-being among women who do not know how their bodies work and

how to incorporate practices optimized for their health (Hill, 2018). When it comes to the practical adaptation of life around a period referred to as cycle syncing, the menstruation itself is referred to as winter. The idea is that it is a time of inward focus, rest, and relaxation. The practical recommendation for this phase of the period is to take it all slow and easy. For instance, gravitate toward rest, getting more sleep (up to 10 hours), eating nutritious foods, and exercising lightly. Then, the body enters spring, aka the follicular phase, which is a time of playfulness and possibilities. For this phase, it is recommended to be active, and it is a perfect time for high-intensity workouts and strength training. The ovulation phase is summer, when mood and energy reach their peak. During this time, women feel increased energy and can do anything, especially when it comes to high-impact physical training such as strength workouts, as testosterone also rises alongside estrogen. Then, the body prepares for winter by entering fall, aka the luteal phase (Hill, 2018). On average, the cycle length is 28 days, varying from woman to woman, with around a day difference. Thus, the practices presented in the book “In the Flo” that will be elaborated upon during the project are adopted for a 28-day cycle. These practices, plus additional information women will find available on the website, are flexible and can be individually adapted based on personal cycle length. In order to reach maximum productivity and well-being during each phase of the cycle, it is crucial to incorporate lifestyle changes. These changes range from adopting nutrition and modifying the selection of foods during different phases to adopting exercise routines in accordance with the menstrual cycle. The selection of proper foods is scientifically proven to benefit women and allow them to reduce PMS symptoms and weight gain, as well as improve skin health while making them feel energized. For instance, during the luteal phase, where PMS symptoms oftentimes take over, women need foods that are

high in protein, complex carbs, magnesium, and calcium. These foods will help to stay full (proteins) while also boosting energy (carbs). During the follicular phase, when energy levels are high, it is recommended to consume lean proteins, healthy fats, and higher-fiber carbohydrates (Vitti, 2020). The author also argues against the popular fitness approach, which is once again adopted in male biology. When it comes to exercise, women in the follicular and ovulation phases experience a boost in energy, strength, and concentration (Vitti, 2020). These phases are perfect for strength, high-intensity, and resilience training, as the body is at its most capable. During the luteal menstruation phase, the best recommendation is to take it easy and slow. Thus, navigating toward low-intensity exercise such as Pilates will be more beneficial both in terms of mental and physical health. At the end of the day, societal narratives that emphasize masculinity drive women away from their natural rhythms, forcing them to comply with male rhythms. Thus, exploring, syncing, and adopting routines as a woman to female biology is the best way to feel most productive and well (Vitti, 2020). Incorporating proven methods and recommendations, the authors suggest, as well as backing up everything but hormonal effects on women's research, will allow them to provide useful materials women can use to plan their lives and adopt lifestyles for better well-being.

24-hour work and productivity cycles are male-dominated as their cycles reset every 24 hours, while women's cycles span around 28 days, resulting in energy fluctuations. The 9-5 workday, time-blocking, and focus on achieving the same levels of productivity on a daily basis are also adopted around male cycles and the circadian rhythm (Smith, 2022). The circadian clock is an evolutionary endogenous timing program. It is about a structured behavior according to the time of day. It works for men as their hormonal cycle also lasts 24 hours. Typically, the male day

starts with testosterone levels reaching a peak between 7:00 and 10:00 AM, then gradually decreasing during the day, and starting to increase in the night once again. This cycle repeats itself every 24 hours, around which the circadian rhythm and the world are structured (Smith, 2022). That is why men can continuously exercise even on a daily basis, including strength and high-intensity training, while women cannot due to hormonal fluctuations during their 28-day cycle. It will lead to hormonal imbalances and effects such as feeling low energy or decreased strength during the luteal phase (Kramer et al., 2022). Several studies explore the dangerous effects of not following circadian rhythms, proving how it can result in a variety of pathologies disturbing human health (Kramer et al., 2022). What these studies lack is the impact on women and their health as women operate on two rhythms, the circadian and infradian rhythms, with the latter being tied to their biological cycle. Disruptions in circadian rhythm impact men due to their hormonal levels being closely tied to that rhythm, including impacts on male fertility. Other effects of circadian rhythm disruptions on men include reduced sleep quality, impaired sperm quality, and increased stress (cortisol hormone) levels (Li et al., 2022). Similarly, failure to assess and adapt to the monthly cycle and infradian rhythm for women leads to several pathologies, including painful menstruation, elevated symptoms of PMS, and intense mental health fluctuations (Reed, Levin & Evans, 2008). The project “Synced” aims to not only provide practical recommendations for women to optimize their well-being but also educate them on where these recommendations come from and how the modern world operates. By drawing conclusions and contrasting infradian and circadian rhythms, it aims to educate about the differences and impacts of failing to comply with the rhythms on both male and female physiology. The project aims to empower women to understand that not only is male health

impacted if circadian rhythm is disrupted, but also female health is impacted by not following their natural cycle. Thus, to understand the distinct differences between male and female biology, it is essential to explore the 24-hour circadian rhythm more in-depth and how the world is built around it, which several sources and studies help to achieve.

Work-life is an essential component of a modern-day woman. Thus, it is also important to elaborate on various studies focusing particularly on this aspect. The project will have a dedicated section on optimizing female productivity in the modern-day work environment. It will help to analyze the scope of the impact of the menstrual cycle, specifically on work productivity, and educate women further on their biology, providing them with knowledge for practical change. First, it is important to cycle sync in the work environment and leverage the distinct benefits of each phase for enhancing productivity and maintaining a balance between health and work. The modern workplace is designed around the male circadian rhythm (the 24-hour cycle) with the requirements of 9 to 5. The study called *Body and Social Time* elaborates on mood patterns in accordance with different menstrual phases. It offers useful insights into hormones affecting mood, which ultimately impact productivity and cognitive ability (Rossi, 1977). Another study conducted later in 2008 elaborates on the effects of the cycle on moods and its ultimate impact on behavior. It focused on analyzing hormones and female behavior, examining changes in mood, performance, appetite, and other daily functions during different phases of the cycle (Reed et al., 2008). The studies elaborate on these changes, particularly focusing on the luteal phase during which women experience PMS (premenstrual syndrome) symptoms. PMS results in extreme changes in appetite, cravings, mood swings, and cognitive ability. For instance, when it comes to the effects of hormone fluctuations on cognitive ability, it is proven to

significantly impact concentration and decrease verbal and working memory. In addition, it impacts motor coordination and reaction time. All of these functions are essential during work, yet female biology does not allow for peak performance during the luteal phase when women experience PMS symptoms or PMDD, which is a more severe version of PMS (Reed et al., 2008).

All of these sources are of significant importance for the research paper and the creative component of the project “Synced.” These materials showcase how women’s hormonal fluctuations affect their lives and provide study-based evidence for the claims made. The books also provide additional resources and recommendations regarding practical tools women can use to sync with their biological rhythms. Each of the works and additional materials will play a crucial role in building the theoretical foundation to educate women on their biology and to provide them with practical and actionable recommendations encouraging them to take action toward well-being and self-care. The project aims to empower women to accept and sync with their nature instead of feeling ashamed and less capable. It aims to provide a variety of useful tips, practices, and information about their biology and cycle syncing practices, ultimately helping to reach a more productive, healthy, and fulfilled life.

### **Methodology**

The research question aimed to answer requires qualitative and quantitative research. For the quantitative research, I will conduct a survey with dedicated questions and specific goals to find out more about the lack of awareness and the effects of the menstrual cycle on women’s lives, particularly on the lives of the selected sample. For qualitative research, I will conduct interviews with industry experts as well as ordinary women selected on a voluntary basis who

are not aware of cycle syncing practices as a target focus group. These two groups are going to contribute to the project in several ways.

The main goals of the quantitative research include the following:

- Discover the levels of awareness of Cycle Syncing among AUA students.
- Understand to what degree the menstrual cycle affects the day-to-day lives of AUA female students.
- Find out the best channels of distribution, including social media, website, and others, to deliver educational materials and spread awareness on the practice of Cycle Syncing to improve women's well-being.

The selected sample of the survey is 85 responses. The selected sample also has certain limitations. The sample size and focus group are quite specific and do not represent the general population. However, as a counterargument to the limitation, the sample size is also beneficial. Benefits the selected sample provides include the following: AUA students tend to have more awareness of contemporary topics, considering the international level of education and system. Thus, the likelihood of them being aware is higher compared to other samples of the population. If the survey finds out that awareness is lacking here as well, it can be a good indication that there is a lack of awareness among the general public. The number of female students enrolled in AUA currently is 1441, and the number of respondents is 85 or above, according to the sample size calculator, which represents that the selected group represents the population with a 90% chance that the real value is within  $\pm 8.58\%$  of the measured/surveyed value.

The qualitative research is an interview I conducted with three women, one of whom has PCOS. I chose a focus group research to unveil deeper issues and effects that tend to be overlooked. The aim of qualitative research was to understand the scope and level of the effect

cycles have on women's daily lives. Also, qualitative research was aimed at uncovering the level of pressure women feel to perform like men due to the 24-hour circadian clock around which the modern world is structured. The overall portrait of my focus group was women aged from 21 to 26, students and professionals (often combining work with study), and regular attendees of the gym/women prioritizing wellness through exercise. The choice of focus group was specific to understand the full scope of effects, as women's cycles affect not only mood and energy but motivation, focus, and ability to perform at their best throughout different phases. Thus, choosing female individuals who are students/workers and demonstrate interest in sports gives a deeper understanding of this specific research. The limitation of qualitative research is the choice of a specific focus group that does not represent the whole population. However, the main benefit is to apply different parts of the research to different samples of the population, as participants are quite well-rounded across different aspects of life, and we also have a representative of a woman with a diagnosed PCOS.

### **Results & Analysis**

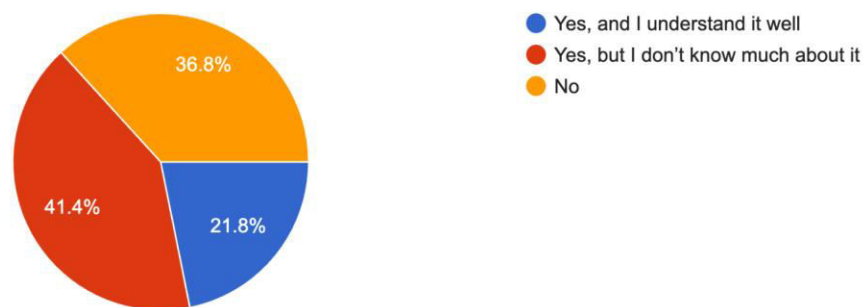
The survey was conducted, and the anticipated number of responses was gathered: 87 respondents. The survey questions were designed to determine the level of awareness of the topic among AUA female students and to understand how the menstrual cycle affects the daily lives of the respondents who represent the selected population sample.

The demographic questions included age and academic year. Most of the respondents, 55.2%, represent the age group of 21-23, 40.2% represent the age group of 18-20, and 4.6% represent the age group of 24-26. 51.7% of the respondents were seniors, 21.8% freshmen, 14.9% juniors, 6.9% sophomores, and 4.6% graduate students.

The questions in the next section were designed to find out the level of awareness about cycle syncing, as well as where the selected sample learned information about their menstrual health. To the first question in this section “Have you heard of Cycle Syncing before?” the majority 41.6% answered that they had heard about the practice but did not know much about it, 36.8% answered that they had never heard about this practice and only 21.8% of the respondents answered that they have heard about the practice and are well aware of it. Overall, this survey shows that the vast majority of the respondents, even in a place like AUA, where awareness levels are generally higher than among the general population, lack in-depth knowledge.

Have you heard of Cycle Syncing before?

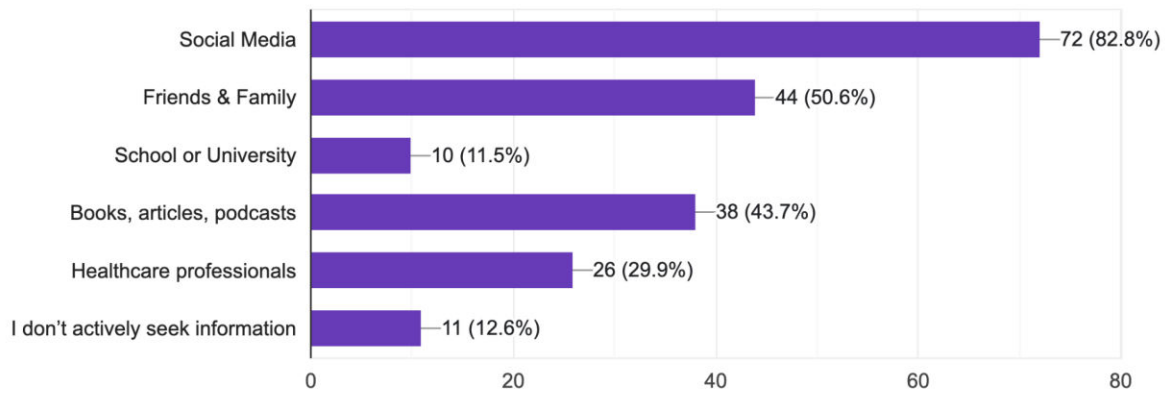
87 responses



The next question, “Where do you usually get information about menstrual health?” was designed to understand where students learn about their menstrual health. The results are as follows: the majority use social media (82.8%), leverage resources such as books, articles, and podcasts (43.7%), and ask friends or family (50.6%). This section shows where women are getting their information, and typically, those are social media pages, so there is also a lack of available and scientifically backed resources. There is also a clear lack of awareness of education in schools and universities on basic topics such as female biology.

## Where do you usually get information about menstrual health? (Select all that apply)

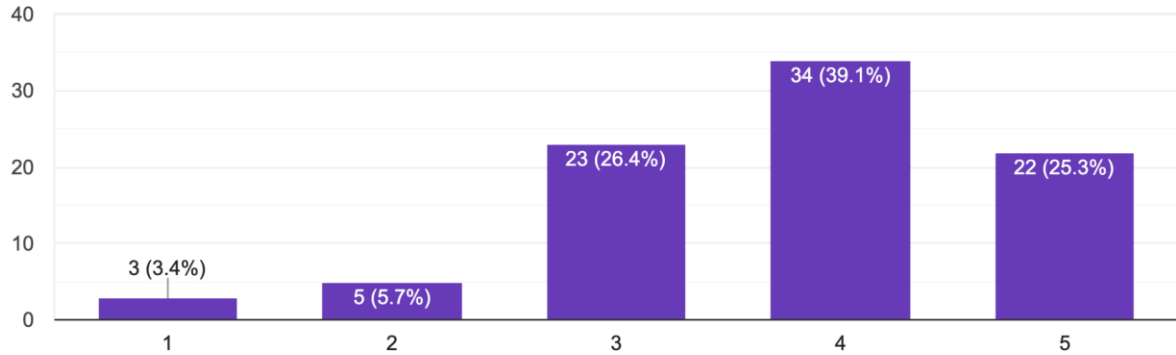
87 responses



The next section of the survey was designed to understand the impact the menstrual cycle has on women's day-to-day lives. The first question was: "How much does your menstrual cycle affect your daily life? (Scale: 1 = Not at all, 5 = Affects everything I do)" to which over 90% of the respondents chose the numbers 3 to 5 which are quite high on the scale of 1 to 5, showcasing the level to which their cycle affects their daily lives. This question reveals the claims made in earlier studies and research that the menstrual cycle actually affects women's day-to-day lives, and there is a need for better education on the topic. This further proves the relevancy of cycle-syncing practices and the need to offer available resources to the population to give women a chance to feel their best during any phase of their cycle.

How much does your menstrual cycle affect your daily life? (Scale: 1 = Not at all, 5 = Affects everything I do)

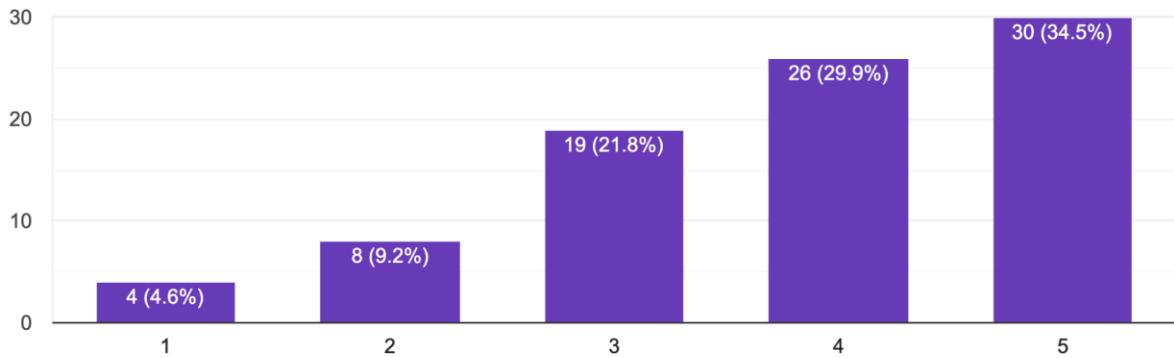
87 responses



Considering that the academic world is built around a circadian clock, which is adapted to male biology, it is essential to understand how women are affected in academics during their cycle. Education is a major part of everyone's lives. Thus, to find out the impact of the menstrual cycle on academics, the next question was, "How much does your menstrual cycle affect your ability to concentrate and complete academic work? (Scale: 1 = Not at all, 5 = Significantly impacts my performance)". Over 83% of the respondents, on a scale from 1 to 5, once again chose numbers 3 to 5. This indicated that women are highly impacted by their cycle when it comes to work that requires extreme levels of attentiveness, attention to detail, and mental work. Thus, in certain phases of the female cycle, as studies alongside the survey results claim, the luteal phase specifically impacts the ability to concentrate, stay productive, and focus. This proves the relevancy of educating women on cycle syncing and providing them with actionable tools to be productive while being aligned with their natural rhythms.

How much does your menstrual cycle affect your ability to concentrate and complete academic work? (Scale: 1 = Not at all, 5 = Significantly impacts my performance)

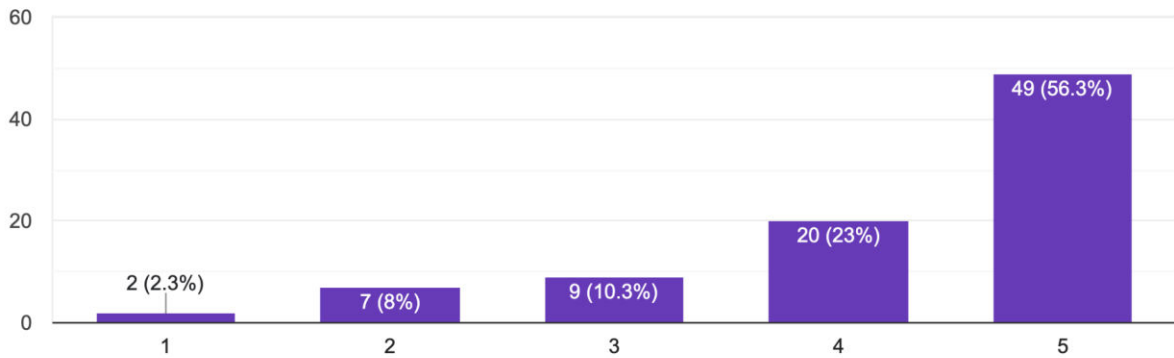
87 responses



Regular exercise is crucial for human health, yet this is another area highly affected by the menstrual cycle. The two phases impacting this area the most are the luteal and menstruation phases themselves. The survey showed that 56.3% of the respondents experienced a high negative impact on exercise routines during certain phases of their cycle. Overall, over 89% of the respondents chose numbers three or above on a scale of 1 to 5. Cycle syncing practices offer practical frameworks and recommendations for adapting exercise routines based on the phase of the cycle the female is in to reduce the impact hormones have on the female's ability to be physically active. The survey further proves the effect of the cycle on women's ability to stay physically active and the importance of education on cycle syncing.

How much does your menstrual cycle affect your physical activity and exercise routines? (Scale: 1 = Not at all, 5 = Significantly impacts my routine)

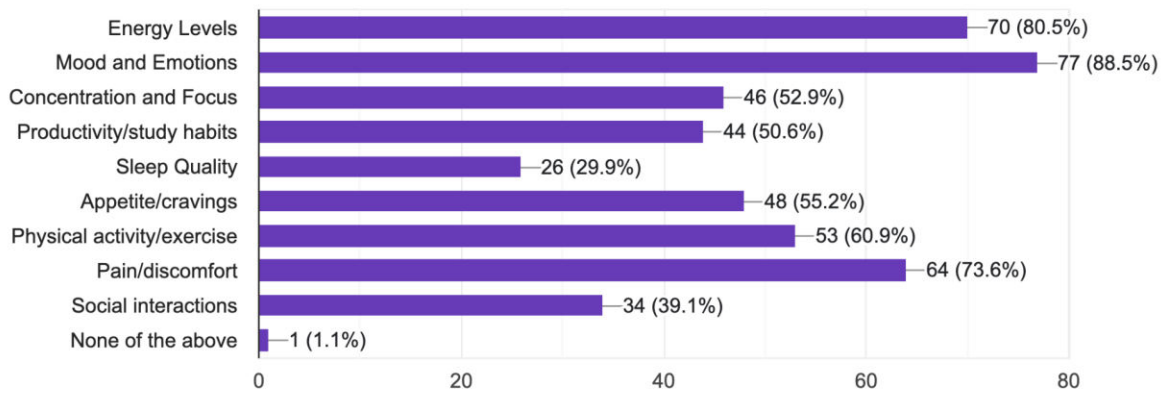
87 responses



To find out the areas most affected by the menstrual cycle, I also asked the respondents, “Which of these areas are most affected by your menstrual cycle?” so that they could select answers applicable to them. Over 70% mentioned energy levels, 88% mentioned mood and emotions, 73% pain and discomfort, 60% exercise, 55% appetite and cravings, and 50% productivity. Other results are shown in the graph below. As the resources earlier suggested, the top areas women are impacted in during their cycle include mood, energy, exercise, productivity, and appetite; the survey results further proved the relevance of the previous research conducted for this paper.

Which of these areas are most affected by your menstrual cycle? (Select all that apply)

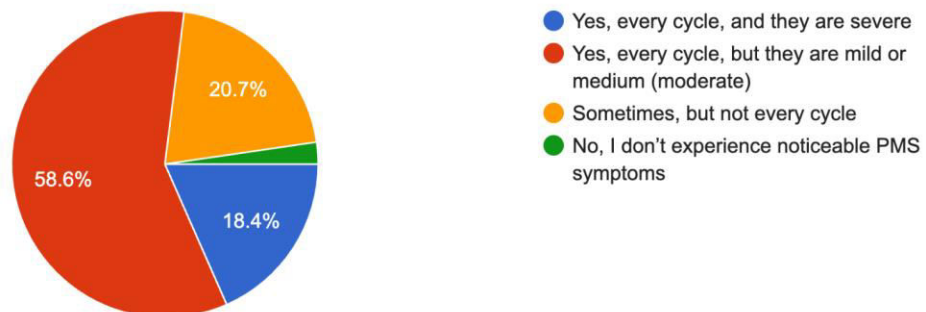
87 responses



Women who experience PMS symptoms are especially impacted in terms of mood and energy during their luteal phase. According to various studies, most women tend to experience PMS, which is why I thought it was necessary to understand how many of the respondents deal with the PMS symptoms. Over 58% experience mild to medium symptoms, 20.7% experience them sometimes but not every cycle, and over 18% of the respondents experience severe PMS symptoms.

Do you experience PMS (premenstrual syndrome) symptoms before your period?

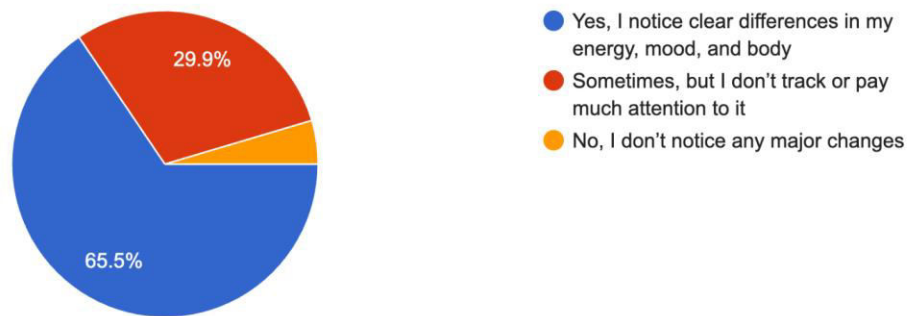
87 responses



The next question was, “Do you experience noticeable changes during different phases of your cycle?” and was designed to find out how many respondents experience changes in energy, mood, and even body during different phases of the cycle. As studies suggest, women tend to feel better and look fitter during the follicular and ovulatory phases, while tendencies to be more moody and bloated arise during the luteal phase. Over 65% of the respondents mentioned that they noticed clear differences in energy, mood, and physical appearance.

Do you experience noticeable changes during different phases of your cycle?

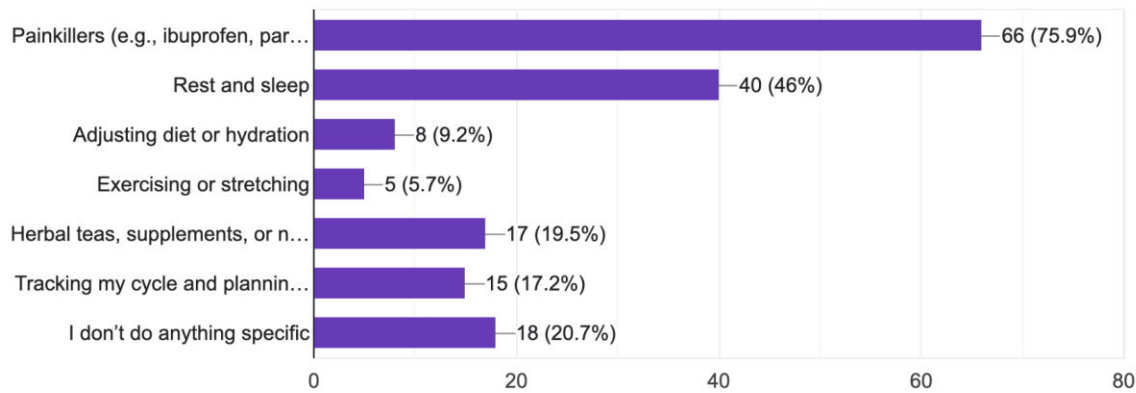
87 responses



The last question summarizing the section was, “How do you usually manage symptoms related to your menstrual cycle?” Most of the respondents, 75.9%, mentioned that they are using painkillers to deal with the pain and other symptoms. This is a normalized practice; however, it can be extremely harmful, especially in the long run.

## How do you usually manage symptoms related to your menstrual cycle? (Select all that apply)

87 responses



The last section of the survey was designed to support the need for a creative project. To the question, “Would you be interested in learning how to align your lifestyle (e.g., diet, exercise, productivity) with your cycle?” 92% of the respondents answered “Yes.” Also, the open-ended answer box mentioned that they would like to see a website resource that comprehensively elaborates on cycle syncing and provides not only theoretical knowledge but also actionable tips on how to stay synced with the natural rhythms of female bodies to feel the best.

Overall, this survey showcases that the vast majority of the respondents are either unaware of cycle syncing or have limited knowledge about it. It also showed that the vast majority experience PMS and other symptoms throughout different phases of their cycle, mostly tied to more negative symptoms during the luteal phase and during menstruation. It also showcased that the majority are taking measures such as painkillers to deal with period pain, which is normalized across the world; however, it can have a significant negative impact on health in the long run, ranging from the development of tolerance to other health consequences.

The next step for research I conducted included an interview in an audio format, which later on will also be repurposed for the website's podcast section. The interview was with three individuals, one of whom has PCOS. They were my focus group to understand the scope and level of the effect cycles have on women's daily life, as well as the level of pressure women feel to perform like men due to 24-hour circadian clock around which the modern world is structured. To keep the focus group interview focused on the main goals of the survey, I came up with five main questions to discuss during the interview. These questions included (1) Can you describe changes in your mood, energy levels, and focus throughout the month? The first question was aimed at uncovering the scope of how hormonal changes women experience throughout the month affect their daily lives. The second question was (2) Do expectations from work, school, and social life actually match how you are feeling throughout your cycle? This question was aimed at unveiling the pressure women feel to match expectations while ignoring their natural needs. The third question was also aimed at understanding the pressure women feel to power through their days while feeling low due to the hormonal changes experienced. It was (3) Have you pushed yourself to power through the day even when your body craved rest? The fourth question was (4) Now that you have heard about cycle syncing, do you think you will adapt some of the practices, and does this concept make sense to you based on your experiences? With this question, I understood how well the practice will fit everyday lives and whether or not female individuals were ready to learn more about it to improve their well-being. The fifth question was (5) If you could adjust something about your routine to fit your bodily needs, what would it be? This question was designed to understand what the participants are willing to adjust and uncover how advice and recommendations from cycle syncing would fit their daily lives.

The podcast started with me, the interviewer briefly introducing what cycle syncing is, then after introductions of the participants, we moved on to the first question. Once again, the first question was, "Can you describe changes in your mood, energy levels, and focus throughout the month?" One of the participants, Lusine, mentioned that her cycle is on track, her menstruation always starts on time, and so she can feel clear differences throughout different phases of her cycle. She specified that she gets more irritated and angry during PMS, experiences more severe mood changes, and has a drop in energy levels. To clarify, PMS symptoms are typically experienced anywhere from 7 to 10 days before the period, essentially during the luteal phase. Another participant, Hasmik, mentions that she also experiences something similar, especially when it comes to anger and mood swings. She also mentioned that the luteal phase affects her self-esteem as she feels bloated, gets acne, and thinks she is seeing a completely different person in the mirror. These natural effects of hormone fluctuations are oftentimes unnoticed by others, but they still greatly affect her perception of herself, thus her mood and ability to focus or perform at her best due to a lack of confidence in herself. Goharik, the participant with PCOS, mentioned she experiences severe symptoms and effects during the luteal phase due to her condition. PCOS stands for polycystic ovary syndrome, and many women deal with it while being unaware of their condition, which once again showcases the lack of availability of resources and education related to female health. She mentioned her period is quite irregular. However, she also tends to notice typical changes discussed earlier. She experiences severe cramps 7-10 days before her menstruation starts; that is how she identifies that she is in her luteal phase. She also experiences mood swings during this phase, while post-menstruation, she mentioned that she tends to feel more energized, productive, and capable (follicular phase). She shared her menstruation experiences, which tend to be very painful to the

point where she cannot leave her bed, and pain medications do not help either. She mentioned that during the luteal phase and during her period, she becomes angrier, fights a lot, and tends to get irritated by everything, even if those things usually do not make her irritated otherwise.

After we moved toward the second and third questions, which go hand in hand, “Do expectations from work, school, and social life actually match how you are feeling throughout your cycle?” and (3) Have you pushed yourself to power through the day even when your body craved rest? According to the responses, the participants all tend to have increased levels of anxiety, specific food cravings, and tend to feel antisocial. They mentioned that especially during as women experiencing PMS (in luteal phase), they feel increased pressure to perform and meet societal or work/school expectations while all they feel like doing is to take a rest and allow their bodies to recover. The conversation moved forward, with participants expressing the need for more flexibility in the workplace or schools, or a practical day off solution policy for the first or first two days of menstruation. Goharik, our interviewee with PCOS, mentioned that she feels a lot of guilt and pressure to perform. However, she is physically unable to do so during menstruation due to severe pain. Hasmik and Lusine mentioned similar responses during menstruation, and simply increased pressure and guilt during luteal phases, while their body craves rest, but the world demands the same level of performance. These responses showcase the severe impact hormonal changes have on women throughout their cycles. It also delves deeper into the topic, uncovering the fact that women feel pressured and guilty when they are unable to express themselves in the same way men do every single day. This pressure and guilt come from a lack of awareness and education about their own bodies and biology, as these changes are only natural and connected to hormones. So, there is a clear need to educate women on their biology and help them overcome the guilt. Acknowledging the fact that the modern world structure

cannot be fully adjusted to also fit female needs, there is still a need for more flexibility and female-friendly policies, such as paid days off during menstruation. Also, there is a need to talk more about practices like cycle syncing and making resources available for women worldwide, as the practice is aimed at helping minimize the effects that hormonal fluctuations have and moving through the cycle, feeling empowered and well.

The fourth question discussed was “Now that you have heard about cycle syncing, do you think you will adapt some of the practices, and does this concept make sense to you based on your experiences?” One of the participants, Goharik, said, “I’ll do literally anything that will help me feel better.” Others also agreed that they are ready to learn and implement practices that will help them feel better and move through different stages of their cycle more easily. This question was essential to uncover the willingness of women to adapt practices aimed at their well-being and understand the demand for learning about cycle syncing.

The fifth question was “If you could adjust something about your routine to fit your bodily needs, what would it be?” Finally, with the last question, the research aimed to unveil what the areas or practices females feel most comfortable adjusting to reach better performance and improve their well-being. Participants mentioned that exercise and food routines seem most appropriate. Lusine mentioned that she also noticed that although she craves salty food during the luteal phase, in reality, fatty foods and nuts make her feel better; others also agree with this. This is an important mention as Cycle Syncing’s recommendations around diet recommend navigating toward more healthy fat-rich foods throughout the luteal phase as these can also help to ease symptoms of PMS and balance out hormones, while, for instance, during the follicular phase, lean proteins are more encouraged. With Lusine sharing her experience and others also agreeing, we can see how even individuals not fully knowledgeable about cycle syncing have

noticed certain changes when they implemented the general recommendations within the practice.

The interview was in a podcast format, so we also managed to discuss the overall lack of education surrounding menstruation and women's health. For instance, participants shared their experiences of getting their periods and being fully unaware of what that was, and getting scared that they might die. Also, the discussion included societal stigma around this topic, some religious limitations, such as visiting the church while on your period, and others. Moreover, participants and I (the host) discussed how the world would be completely different and more flexible if men had periods instead of women. Those were additional points of discussion emerging from the question and focus group interview; however, it is essential to mention that these once again prove a strong demand for raising awareness about topics such as women's health, menstruation, and practices such as cycle syncing.

### **Creative Project**

Website: <https://cyclesyncingwellness-012q6xb.gamma.site/#card-bgzus1510z4uk7e>

The creative component of this capstone project is a website named "Synced." Synced is a website aimed at raising awareness regarding cycle syncing and helping women get access to free resources that will educate them and help them improve their overall well-being.

The color theme of the website is leaning more toward dark mode with prominent use of black and accent elements of pink and white. The black is displayed to psychologically imply seriousness, while pink is a typical color associated with female health, well-being, hygiene products, breast cancer awareness logo, etc. White is used as a background color for the blog section on the homepage to make it stand out among the others, as the main materials and resources are published in the blog.

The website itself has a few main sections and elements. These include the home page, where users can find access to other pages, resources, and definitions, along with the brief benefits of cycle syncing. Other pages include the blog section and the podcast section. Currently, four blog articles have been published, and one podcast episode has been uploaded to the website.

The podcast was derived from the interview conducted during the methodology phase with the individual female focus group. It is the first podcast episode aimed at displaying how women tend to feel throughout different phases of their cycle. One of the female individuals who participated in the podcast also has PCOS, which makes the episode more relevant and useful for a wider audience and for females experiencing their cycle through PCOS. I prepared five clear questions to have a more focused discussion for the episode, which I have talked about in the methodology and analysis section. These questions explored topics of how mood, energy levels, and focus of the participants were affected throughout their cycle. In the podcast, we also discussed how expectations from work, school, and generally social life pressure the participants throughout different phases of their cycle, as well as whether or not they feel pressured to perform when their bodies naturally crave rest. We also talked about cycle syncing and how they think it will help them, and whether or not they are ready to learn more about it and implement some recommendations into their daily lives. Thus, the episode was designed to not only showcase how women deal with their cycles but also their willingness to adapt certain practices, such as those recommended within cycle syncing, to improve their well-being.

The blog section covers articles such as:

- What is Cycle Syncing? Beginner's Guide: This article explains what cycle syncing is from A to Z, also covering topics such as phases of the cycle and how long each phase

typically lasts. It also briefly covers recommendations during different phases as part of explaining what the practice of cycle syncing is and why it is essential for female well-being.

- Exercise Recommendations based on Different Phases of the Cycle: This article covers typical recommendations that cycle syncing includes regarding exercises based on the phase of the cycle.
- Everything You Need to Know about Luteal Phase: a guiding article stating what the luteal phase is, when it typically occurs, and how long it lasts. It also delves deeper into PMS symptoms women can experience and overall, how to deal with different aspects of life during the luteal phase.
- Strength training advice based on the Phase of the Cycle: this article focuses more on strength training, specifically providing actionable recommendations on the intensity of workouts and recommended exercises throughout different phases of the menstrual cycle. This was an essential topic to cover, as many individuals do not want to substitute strength training with yoga throughout phases such as luteal. That's why it is essential to also know how current routines can be adapted instead of implementing a completely new form of physical activity.

The creative project, the concept of themes, and the choice of topics were based on my knowledge of marketing and PR, as well as on research conducted, including surveys and interviews. All the topics covered were essential not only from the perspective of raising awareness and then delving deeper into it, but also from the perspective of the media. After all, it is an accessible media resource, and people visiting the website must be able to understand what it is about and what it tries to communicate to the audience. Hence, the choice is to include a

definition of the practice and the main benefits on the homepage of the website itself. It also justifies the choice of sticking to fewer pages but more efficient communication of the main messaging, as I have a homepage and all the main sections displayed on the homepage. When visitors want to read or listen to a specific resource, they can click it on the homepage, and only after that will it redirect them to the page with that specific resource, for instance, a blog post.

### **Conclusions**

To summarize this research, we can note the lack of awareness among the female population about the practice and confirm the effects of female cycles on the daily lives of women, whether positive or negative, depending on the phase of the cycle.

The research and interviews showcased that most female individuals also experience a drop in productivity during the luteal phase and during their period, while energy typically starts to pick up during the follicular and ovulatory phases. This goes to show the huge impact hormones have on women throughout the month, as during the drop of productivity, increased irritability and less concentration, estrogen levels tend to drop and they are going up during follicular and ovulatory phases right when the mood improves, concentration, focus and else tend to rise.

The impact of hormones and changes outlined in scientific research, in survey results, and focus group interview results also showcases the lack of flexibility the modern world's structure has for women. It can be hard and impossible to adapt the structure to fit female needs; however, at least there is a need to raise awareness on practices such as cycle syncing to give women around the world the opportunity to feel and perform at their best during different phases of their cycle. Adapting exercise, nutrition, and other aspects of life depending on a particular

phase of the cycle has been shown to consistently improve female well-being and ability to perform without feeling guilt for the natural impact their hormones have on their daily lives.

The main issue is that this is not talked about; female cycles and periods are considered taboo, and hence, all the struggles women face daily and the guilt they feel around it. There is a clear need to remove social stigma around female biology, acknowledge that most medical research and modern structures are conducted or adapted for men, and simply move forward by raising awareness and taking accountability. Cycle syncing is an essential process female individuals need to be aware of, as female biology is very different from men's, and the changes female bodies go through are different. There is a need for more medical research tailored for women and more awareness of the practices suitable for women.

As part of taking accountability and raising awareness, I have created this website about cycle syncing. The website features articles, podcast episodes, and other useful materials on female health and practices for cycle syncing. More materials, such as schedules, nutrition guides, and exercise guides, are going to be uploaded and available in the future.

Website: <https://cyclesyncingwellness-0l2q6xb.gamma.site/#card-bgzusl510z4uk7e>

### **Bibliography**

Vitti, A. (2020). *In the Flo: Unlock Your Hormonal Advantage and Revolutionize Your Life*, HarperCollins

Hill, M. (2018). *Period Power: Harness Your Hormones and Get Your Cycle Working For You*, Bloomsbury Publishing

Li, T., Bai, Y., Jiang, Y., Jiang, K., Tian, Y., Gu, J., & Sun, F. (2022). The potential impacts of circadian rhythm disturbances on male fertility. *Frontiers in Endocrinology*, 13.

<https://doi.org/10.3389/fendo.2022.1001316>

Smith, D. (2022). The Evolution of Human Circadian Rhythms: an ancient defence mechanism impacting modern Life-Styles. *Medical Research Archives*, 10(7).

<https://doi.org/10.18103/mra.v10i7.2926>

Kramer, A., Lange, T., Spies, C., Finger, A., Berg, D., & Oster, H. (2022). Foundations of circadian medicine. *PLoS Biology*, 20(3), e3001567.

<https://doi.org/10.1371/journal.pbio.3001567>

JA Owen, Physiology of the menstrual cycle, *The American Journal of Clinical Nutrition*, Volume 28, Issue 4, 1975, Pages 333-338, ISSN 0002-9165,

<https://doi.org/10.1093/ajcn/28.4.333>.

Rossi, A. S., & Rossi, P. E. (1977). Body time and social time: Mood patterns by menstrual cycle phase and day of the week. *Social Science Research*, 6(4), 273-308.

<https://www.sciencedirect.com/science/article/abs/pii/0049089X77900138>

Reed, S. C., Levin, F. R., & Evans, S. M. (2008). Changes in mood, cognitive performance, and appetite in the late luteal and follicular phases of the menstrual cycle in women with and without PMDD (premenstrual dysphoric disorder). *Hormones and Behavior*, 54(1), 185–193.

<https://doi.org/10.1016/j.yhbeh.2008.02.018>