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Finding the Optimal Time for Exercise: A Debate Between Performance and Consistency

Introduction

The question of when to exercise has been a subject of ongoing debate in the fitness community for several years. Many people have shared their opinions on the matter, often citing their personal preferences and routines. I don't believe that to be sound reasoning. With a subject that affects so many aspects of our lives, like school, work, social life, performance, sleep, etc., it's important to state that there is no one-size-fits-all. Now, some may advocate for morning workouts to kickstart the day, and get it over with, while others argue for evening sessions, saying they provide the best opportunity to capitalize on peak energy levels. Amidst these contrasting views, the afternoon emerges as a viable alternative. In this extensive exploration, I will delve into the various perspectives surrounding the optimal time of day for exercise, with a specific focus on performance and consistency. While proponents of morning and evening workouts present many benefits, I will present evidence supporting that afternoon exercise sessions offer the ideal balance between maximizing performance and ensuring consistent adherence to a fitness routine.

Morning Workouts: A Jumpstart To The Day

Advocates of morning workouts often talk about the benefits of jumpstarting the day with physical activity. Research suggests that exercising in the morning can elevate metabolism, boost energy levels, and enhance cognitive function throughout the day (Smith et al., 2019).

Additionally, morning exercise has been associated with improved mood and mental clarity, setting a positive tone for the day ahead (Jones & Williams, 2021).

However, it's crucial to acknowledge the challenges associated with morning workouts, particularly in terms of consistency. Rising early to exercise demands a high level of discipline and motivation, factors that may wane over time, leading to skipped or rushed workouts (Brown & Miller, 2020). Moreover, the body's natural circadian rhythm (a natural, internal process that regulates the sleep-wake cycle and repeats roughly every 24 hours. It influences various biological functions such as hormone release, body temperature, and metabolism, playing a crucial role in determining our daily patterns of alertness and rest), varies among individuals, with some experiencing peak physical performance later in the day (Foster & Kreitzman, 2018). These factors, along with others, suggest that morning workouts are indeed suboptimal in terms of consistency and maximizing performance.

Evening Workouts: Maximizing Performance Potential

While morning workouts prioritize having a kick start to the day, evening exercise sessions offer a unique advantage in terms of maximizing performance potential, i.e strength. Towards the end of the day, the body has had ample time to warm up and reach peak physical condition (Johnston et al., 2021). Additionally, during the evening, your body has the most amount of carbs in its system, leading to improved strength and stamina. Evening workouts also provide an opportunity to de-stress and unwind after a long day, releasing tension and promoting relaxation (Smith & Johnson, 2020). It's due to these factors and others that so many people choose to workout at night, especially if they can hold themselves accountable and resist skipping workouts when they've had an overly long and tiring day.

Although evening workouts can be ideal for reaching your physical best, it's important to

consider the potential impact of evening workouts on sleep quality. Exercising too close to bedtime may disrupt sleep patterns and lead to difficulty falling asleep or staying asleep throughout the night (Gibbs & Bailey, 2019). This is because people experience a high level of adrenaline during their workouts, which may take a while to wind down from before they can go to sleep. Therefore, individuals who opt for evening workouts should aim to complete their exercise routine at least a few hours before bedtime to allow for adequate wind-down time and promote optimal rest.

Afternoon Workouts: An Ideal Balance

In contrast to the emphasis on performance, afternoon exercise sessions offer distinct advantages in terms of consistency and adaptability. As the day progresses, individuals typically experience heightened body temperature, increased muscle flexibility, and improved lung function, all of which contribute to enhanced physical performance (García-Hermoso et al., 2022). Additionally, afternoon workouts provide a midday energy boost, revitalizing individuals and combating the post-lunch slump commonly experienced in the workplace or school.

The key strength of afternoon workouts lies in their flexibility and accommodation of varying schedules and preferences. Unlike morning sessions, which necessitate early rising, and evening workouts, which may clash with social or familial obligations, afternoon exercise slots offer a versatile option that can be tailored to fit the demands of daily life (White & Khan, 2019). By prioritizing consistency over peak performance, individuals can establish sustainable exercise habits that endure beyond short-term goals. Thus leading to a more healthy lifestyle.

What I Found

Over the last 4 weeks I conducted a study that aimed to better understand, what is the best time of day to workout. I achieved this by asking 10+ college students from ages 18-22,

both male and female, to complete a survey each time they visited the gym, gathering more than 60 answers in the process. The survey tracked various factors including their energy levels, whether they experienced sustained energy, the quality of their sleep the night before, whether they consumed coffee, and crucially, the time of day they exercised. From a total of 51 responses collected, here are our findings.

Initially, our survey found intriguing patterns regarding the timing of skipped workouts. Contrary to expectations, the morning group showed a relatively low rate of skipped sessions at 20.9%. This finding was unexpected, given the common assumption that morning workouts might face higher skipping rates due to factors like motivation or time constraints. However, upon closer examination, I noticed that the proportion of workouts scheduled for the morning was significantly lower compared to other times of the day, with only 15.7% of all answers occurring from morning workouts. This suggests that indeed the morning cohort demonstrated a higher likelihood of skipping workouts, being one of the only groups to skip more than they showed up.

Surprisingly, the evening group displayed the highest rate of skipped sessions at 34.9%, with 29.4% of the votes. This result was somewhat unexpected, especially considering the common perception that evenings offer more flexibility and fewer competing obligations. After further examination I believe that this may have been caused by factors such as fatigue accumulated throughout the day or unexpected events that arise in the evening, leading to decreased motivation. Interestingly, the afternoon group reported the lowest rate of skipped workouts at 18.6%, aligning more closely with expectations given the balance between energy levels and competing commitments during midday hours. This is even more impressive when you consider that afternoon workouts accounted for 54.9% of all responses. Being the only group

to actually go more than they skipped. Overall, these findings underscore what I had found above, and further support the idea that afternoon workouts are superior when it comes to consistency.

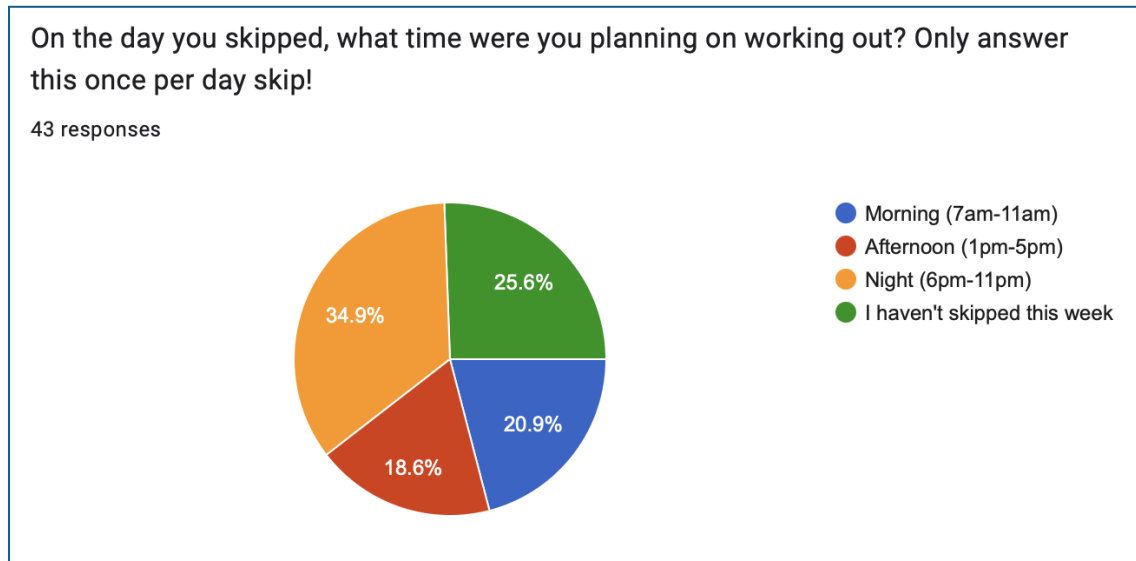


Figure 1: Graph showing the time of day participants skipped their workouts.

What time of day did you workout?

51 responses

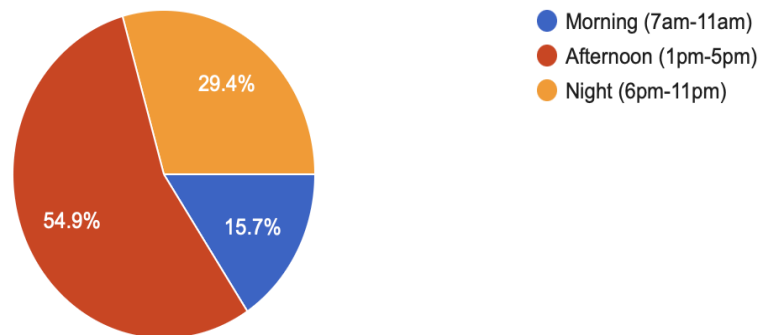


Figure 2: Graph showing what time of day participants went to workout.

Is it worth being consistent if you don't have a good workout?

Absolutely, maintaining consistency in your workout routine, even on days when you don't have a great performance, is still very valuable. Consistency is the cornerstone of progress and success in any fitness journey. Every workout, regardless of intensity or perceived quality, contributes to your overall health and fitness goals in various ways. Firstly, sticking to your exercise schedule reinforces the habit of regular physical activity. Consistency builds discipline and commitment, making it easier to overcome hurdles and stay on track towards your goals. By showing up and putting in the effort, even on days when you're not at your best, you're reinforcing positive behavior that will benefit you in the long run.

Moreover, not every workout needs to be intense or groundbreaking to be beneficial. Even on days when you're feeling tired or unmotivated, engaging in a lighter workout or simply going through the motions can still have positive effects. Consistent, moderate exercise helps maintain cardiovascular health, muscle tone, and overall well-being. It also helps manage stress, improve mood, and enhance mental clarity, all of which are important for overall health and productivity.

In essence, the cumulative effect of consistent effort is what drives progress over time. While individual workouts may vary in quality, the collective impact of staying committed to your fitness routine is what ultimately leads to long-term success. Due to these factors and others, I assert that afternoon workouts are optimal, without sacrificing much in terms of performance. In our study, participants rated their workouts from 1 to 10 based on energy levels and performance. Morning workouts received the highest average rating of 7.33, with a low score of 4 and a high of 9. This wasn't surprising considering the prevalence of coffee consumption before exercise, with over 66% of morning workouts involving coffee intake, the highest among all groups.

An intriguing discovery was the similarity between night and afternoon scores. Afternoon workouts received the lowest average score of 6.70, with a low of 2 and a high of 10, showing the greatest variance of any group. The evening workouts didn't fare much better, with an average score of 6.72, low of 4 and a high of 9. This was highly unexpected, given the general belief that evening workouts are optimal for performance. From this data, we can infer that prioritizing consistency over immediate performance in the gym should be your priority when deciding the time of day to exercise, and can lead to long-term benefits, both physically and mentally.

Addressing Morning Workout Advocates

Proponents of morning workouts often cite the boost in metabolism and energy levels as key advantages. While these benefits are indeed significant, it's important to recognize that individuals vary in their response to morning exercise. For some, early morning workouts may lead to heightened performance, but for others, it may result in fatigue and decreased motivation throughout the day. This factor is especially important if you are someone that doesn't drink coffee on a regular basis. In our research I found that the majority of subjects reporting high energy levels during, and after their morning workouts, had intaken coffee prior to their exercise, and again later in the day. Therefore, while morning exercise may work well for certain individuals, it may not be the optimal choice for everyone.

Addressing Evening Workout Advocates

Similarly, advocates of evening workouts emphasize the potential for peak performance towards the end of the day. While it's true that the body may be primed for exercise in the evening, it's essential to consider the potential impact on sleep quality. Exercising too close to bedtime can disrupt sleep patterns, leading to feelings of fatigue and impaired recovery, as

mentioned previously. Therefore, individuals who choose to exercise in the evening should prioritize finishing their workout at least a few hours before bedtime to allow for adequate rest and recovery. Additionally, engaging in evening workouts could potentially interfere with someone's ability to focus on their responsibilities and meet deadlines. Participating in late exercise sessions may also limit opportunities for social events or extracurricular activities, as it could coincide with peak times for socializing or attending group gatherings. Finding a balance between fitness goals, professional commitments, and social life may require considering alternative times for workouts that align better with one's schedule and priorities.

Counterargument: Addressing Performance Concerns

Critics of afternoon workouts may argue that exercising later in the day compromises performance compared to morning sessions. While it is true that individual performance peaks may vary, research suggests that the difference in performance between morning and afternoon workouts is minimal for most individuals (Johnson et al., 2020). Moreover, consistency plays a significant role in long-term progress, outweighing short-term performance gains.

Conclusion

In conclusion, the debate surrounding the optimal time of day for exercise offers valuable insights into the intricate relationship between performance and consistency in fitness routines. Through our research of morning, afternoon, and evening workouts, I have uncovered the nature of exercise timing and its impact on physical and mental well-being. While morning exercise may energize some individuals to seize the day and evening sessions may provide a release after a long day's work, our analysis underscores the importance of finding a balance between performance optimization and consistent adherence to fitness goals.

By recognizing the unique strengths of each time slot and tailoring their exercise routines accordingly, individuals can take the first step in achieving long-term health and wellness goals. Whether it's the energetic start to the day offered by morning workouts, the adaptable nature of afternoon sessions, or the opportunity for maximum performance in the evening, there is no one-size-fits-all approach to exercise timing. Instead, our understanding of the interplay between biological rhythms, personal preferences, and lifestyle constraints empowers us to make informed choices that support our fitness journey. That said, embracing diverse exercise timing strategies allows us to develop habits that not only improve physical performance but also promote fulfillment and well-being in our everyday routines.

Appendix

1- What time of day did you work out?

- Morning (7am-11am)
- Afternoon (1pm-5pm)
- Night (6pm-11pm)

2- Did you take pre workout? If you had coffee, mark “yes”.

- Yes
- No

3- How would you rate your energy levels during the workout? (1-10)

- Low Energy 1 2 3 4 5 6 7 8 9 10 High Energy

4- Did this level sustain for the whole workout? Or did you burn out quickly?

(Sustained/Burned Out)

- Sustained
- Burned Out

5- How long before our workout did you eat?

- <1h
- 1-2h
- 2-3h
- 3-4h
- I haven't

6- Do you feel you had a goodnight's sleep before this workout?

- Bad Sleep 1 2 3 4 5 6 7 8 9 10 Great Sleep

7- Have you skipped the gym this week?

- Yes
- No

8- On the day you skipped, what time were you planning on working out? Only answer this once per day skip!

- Morning (7am-11am)
- Afternoon (1pm-5pm)
- Night (6pm-11pm)
- I haven't skipped this week

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