

The Mirage of Multitasking



Find Your FOCUS, *Flow*, and Finish Line 🏁

Scott Blades, M.Ed.

Assistant Director, Training & Organizational Development
University of Florida

Course Objectives

- Define multitasking.
- Explain the difference between multitasking and managing multiple priorities.
- Explain the negative effects of multitasking on productivity, cognition, accuracy, decision making, stress, and creativity.
- Describe how music can help or hinder work performance.
- Explain differences between men and women related to multitasking.
- Apply personal discipline strategies to increase focus, performance, and productivity.
- Reflect on your personal productivity strengths and weaknesses.
- Create an action plan for improving your productivity and impact.

Disclaimer

1. We live in the real world, and we have many demands on our time and attention.
2. Sometimes the demands of the modern-day workplace *will* necessitate multitasking.
3. We will *never* be able to avoid multitasking completely.
4. The goal of this course is to reduce our multitasking tendencies and implement best practices in productivity to increase our effectiveness.
5. 2-3% of the population is actually good at multitasking—and the scientific literature refers to them as *supertaskers*.

What is Multitasking?

Focusing on more than one assignment at a time, repeatedly switching back and forth between two or more activities, or performing a number of loosely related or unrelated tasks in rapid succession can all be considered “multitasking.”

For most people, the performance of the human brain breaks down when it attempts to engage in two tasks that require conscious thought at the same time.

Example pairings that don’t affect performance:

- Walking and chewing gum at the same time
- Folding laundry and singing along to your favorite songs on the radio
- Doing chores around the house while carrying on a conversation
- Thinking of what you want to say in an email while typing on a keyboard to construct that message on a computer screen

Why? One or both of these activities don’t require much thinking. Walking, eating, cleaning, and typing are examples of motor skills you have learned to put on autopilot.

If you pair two activities that require *conscious thought*, your performance on both tasks will suffer.

Activity: Generate a List of Examples of Multitasking at Work

The Multitasking Brain

Doing two cognitive tasks at once? Here is what happens in your brain:

- Your cerebral cortex manages what are called “executive controls.”
- These controls organize the way your brain processes tasks and are divided into two stages:
 - **Stage #1 is called goal shifting.**
This is what happens when you shift your focus from one activity to another task.
 - **Stage #2 is rule activation.**
When your brain shifts to the new activity, it has to deactivate the rules of the previous activity and then turn on the rules for the new task.

Therefore multitasking is actually **switchtasking**. You are switching back and forth between two activities and forcing your brain to shift focus repeatedly and turn rules on and off in a rapid-fire fashion.

Multitasking burns up oxygenated glucose—the same fuel you need to deeply focus and do your best work.

Multitasking: Effects on Cognition and Productivity

Mental Disorganization

- Russ Poldrack, a neuroscientist at Stanford, found that multitasking while learning information causes the new information to go to the *wrong part of the brain*.
- Long story short: When we multitask, we make our learning more mentally disorganized and more difficult to recall later.

Loss of IQ points

- A research study from the University of London suggests that multitasking affects your brain much like smoking marijuana or going without sleep for a night.
- Participants who multitasked during cognitive tasks dropped as many as 15 IQ points and fell to the average range of an 8-year-old child.

More Errors

- In his 2008 book, *Brain Rules*, John Medina reports that multitaskers make up to 50% more errors than those who are not multitasking.

“Inattentional Blindness”

- According to a 2009 study from Western Washington University, people who are busy doing two things at once don’t even see noticeable things right in front of them.
- In this case, the researchers asked a clown to ride around on a unicycle at a campus square. Seventy five percent of college students who walked across this square while talking on their cell phones did not even notice the clown!

Decreased Productivity

- A 2001 study by Rubinstein, Evans, and Meyer suggests that people can reduce their productivity by as much as 40 percent by the mental blocks that result from repeatedly switching tasks.
- John Medina’s research reveals that multitaskers take *50% longer* to accomplish a single task than people who focus on one thing at a time.

Multitasking Olympics: Activity #1

Please use refer to the blue handout that should still be face down. ☺

Debrief questions:

- What was your experience like as you tried to do these two activities at the same time?
- Where did your mind focus the most?
- What were your challenges?

Multitasking: Effects on Stress, Decision Making, and Creativity

Increased Stress

- Multitasking increases the stress hormone cortisol as well as the fight-or-flight hormone adrenaline.
- Result? An overstimulated brain, mental fog, and scrambled thinking.
- Gloria Mark and Stephen Vaida of the University of California found that employees who were constantly connected to email stayed in a perpetual “high alert” mode and experienced higher heart rates.

Decision Making

- Lots of multitasking requires lots of decision-making.
- This exhausts our neural resources and causes us to lose impulse control.

Diminished Creativity

- According to a 2010 research study from the University of Chicago, multitasking requires a lot of “working memory” or temporary brain storage.
- Creativity also requires a large amount of working memory.
- If we use up our working memory to multitask, we diminish the cognitive resources necessary to daydream and generate imaginative ideas. This in turn degrades our performance as creative problem solvers.

Multitasking: What About Music?

Dr. Joanne Cantor, a Professor Emerita at the University of Wisconsin-Madison, reports that music can help or hinder your work depending on the *nature* of the task you’re trying to perform and the *nature* of the music. Here are her general conclusions based on her in-depth research:

	Type of Work	Type of Music to Play	When to Listen
1	Repetitive tasks requiring focus but not much cognitive processing	Upbeat music with or without lyrics	<i>During</i> the task
2	Tasks necessitating cognitive processing or creativity	Upbeat music	Beforehand or during breaks (<i>not during</i>)
3	Tasks requiring high information processing	Zen-like, tonal music (no lyrics)	<i>During</i> the task
4	WARNING: For problem-solving or highly cognitive, complex tasks, <i>avoid</i> popular music with lyrics as it will pull you into multitasking and interfere with the quality of your work.		

Are Women Better Multitaskers than Men?

Both men and women are awful at multitasking—but according to research women are slightly less awful at it than men.

- The best practice should still be to avoid multitasking whenever possible. Both men and women perform better when focusing on one thing at a time.
- Research has found that women on average perform better than men *after* they have been put through a period of intense multitasking.

Multitasking: Recap

1. Multitasking = switch tasking.
2. Only 2-3% of the population can multitask well.
3. Multitasking negatively affects cognition, accuracy, productivity, decision making, stress, and creativity.
4. Listening to music while working = multitasking.
5. Both men and women are awful multitaskers, but women tend to outperform men *after* multitasking.

Top 5 Strategies for Minimizing Multitasking and Maximizing Your Performance

1. Set Clear Priorities

A guaranteed way for becoming overwhelmed and ineffective is to take on too much work and view all of your tasks as equal priorities. Work with your supervisor or a trusted colleague to help you determine what needs your focus now, what can wait, and what you can release altogether. Do you have any activities that drain your time and energy and offer little return on your investment? What are some obligations that you could set free without any long-term, negative consequences? By responsibly reducing the number of things you need to do in a day, you can decrease your need to multitask and—as a result—accomplish more. Stephen Covey refers to this type of prioritizing as learning to say “no” to protect the time you’ll need for your bigger burning “yes.”

2. Chunking

Rather than constantly switching back and forth between multiple activities every few seconds or every other minute, set aside chunks of time to focus on a specific task or a group of related tasks. Clifford Nass suggests following a 20-minute rule at minimum. An example of this would be to set aside 20 minutes to pay all of your bills at once rather than pay each one separately as you receive it. Or maybe you set aside an hour to work on that key report you need to present at next week’s meeting. Focusing on a task for 20 minutes at a time or longer will allow you to get into the zone of whatever you’re doing and make progress. Focused effort during *chunks* of time also eliminates the extra energy it takes to shuffle back and forth between too many things. Consider your responsibilities and identify the types of things you can “batch process.” Block off these chunks of time on your calendar and hold yourself accountable for getting focused and getting *finished*.

3. Enter a Lockdown State

When necessary, give yourself permission to focus on a single task for a more extended period of time like a full morning, afternoon, or even most of a day. Be sure to have your bases covered before doing this. For example, you may need to discuss your strategy with your supervisor and colleagues to work out phone and email coverage. Entering this type of temporary lockdown state will allow you to get laser-beam focused on a single task and make significant headway. If you can’t go the whole day without checking your email and phone messages, consider doing these activities in 2-4 batches *throughout* the day. As discussed in the previous section, chunking these types of tasks is a more effective way to work anyway.

4. Minimize distractions in your workspace

Does your email client issue sound alerts when you receive messages? You might consider muting your computer to avoid these distractions. Another strategy is to customize your sound alerts for your leadership and key customers who might demand a more immediate response.

Does your email client tempt you to click on every message by displaying a popup window on your screen? This feature can be disabled so you’re not constantly distracted by a constant stream of emails (many of which you probably don’t need to read anyway).

Does your smartphone have a bunch of chirps, chimes, and ringtones for every notification you receive from your apps? The research shows that the average person checks his or her phone 150 times a day. Unless you need to rely on your smartphone to do your job, you should consider minimizing or disabling the distracting notifications you receive or keeping your phone on mute.

5. Watch that Open Door Policy

To maintain professional relationships, it's important to be available to others. Having an open door policy is a great way to establish that you're approachable and collaborative. But be careful what that open door communicates. Are you really 100 percent available to everyone all of the time? A poorly managed open door policy can lead to constant interruptions and pull you into a switchtasking mode. Business research suggests that the average interruption takes anywhere from 2 to 15 minutes of recovery time. This is about how long it takes you to reorient yourself to what you were working on before the interruption.

If you need to avoid any interruptions for a stretch, shoot an email to your team or put up a friendly “do not disturb” sign on your office door or cubicle entry way. Scheduling regular check-ins with your supervisor, direct reports, and key customers is also a great way to prevent interruptions. By having regular meetings on your calendar, your colleagues will be more likely to hold off on engaging you until your scheduled time together. They'll have less of a need to interrupt you throughout the week and instead bring a list of questions or agenda items to your meeting.

Additional Tips for Human Resources Professionals

Hiring Practices

- Job postings often call for multitaskers as if this is a highly coveted skill: “Must be able to multitask.” Avoid this. Given the overwhelming research to the contrary, it is more appropriate to call for professionals who have a track record of “effectively managing multiple priorities.”
- When interviewing candidates, avoid giving them the opportunity to flex their “multitasking muscles.” A candidate who is proud of their “ability” to multitask is likely unaware of how ineffective they are at work and may serve as more of a liability than an asset.
- Assess candidates based on their ability to focus, prioritize, plan, and execute on their work despite having multiple demands on their time. Look for candidates who can set a direction and stick to it—rather than be easily pulled in a multiple directions.

Onboarding

- Create a structured onboarding plan that seeks to prevent constant interruptions and appropriately chunks the new employees' time around key functions. This will allow them to absorb their duties and become proficient in their roles more efficiently and effectively.
- Establish email protocols that reduce multitasking tendencies. Consider a 24-hour response time policy and encourage new employees to chunk their time and batch process emails at given points during the day. Discourage employees from checking email during other tasks such as meetings and phone calls.

- Institute phone practices that discourage multitasking. Consider establishing a shared phone line for your department and dividing and conquering the responsibility of answering calls. Set a schedule for who will be on deck for different points during the day or week.
- Establish check-ins with new employees to create distraction-free zones where you can discuss progress toward onboarding goals.

Performance Management

- Base performance evaluations on quality work and results—not how busy someone is or appears to be. Multitaskers often convey a sense of busyness and effectiveness, but this—as you have seen in the research and your experiences in the session—is a mirage.
- Multitasking sub-optimizes performance. Great results require focus, structure, and discipline. Encourage these behaviors in employees through training and support.
- Actively praise and award employees who are able to effectively organize their time around top priorities and serve stakeholders by delivering top-notch work.

Leadership Development

- During professional development sessions with leaders, encourage them to disconnect from their laptops and smartphones. Dividing their attention between work items “back at the office” and the training activities at hand will diminish their performance on both.
- Encourage leaders to develop a clear strategic purpose, vision, and goals for their departments. A department with a clear direction is better equipped to remain focused and execute on what matters most. Organizations lacking direction are more likely to be more reactive in their approach to work—which, in turn, breeds a multitasking workstyle and lower performance.
- To increase team performance, leaders must establish workplace norms that reduce distractions and interruptions. Leaders who (for example) encourage people to check email while participating in meetings or regularly interrupt team members who are trying to focus actually cultivate a culture of lower performance.

References

- Adams, C. Can People Really Multitask? Retrieved from http://ergonomics.about.com/od/ergonomicbasics/f/can_people_multitask.htm
- Bradberry, T. (2014). Multitasking Damages Your Brain And Career, New Studies Suggest. *Forbes*. Retrieved from <http://www.forbes.com/sites/travisbradberry/2014/10/08/multitasking-damages-your-brain-and-career-new-studies-suggest/>
- Cantor, Joanne. (May 27, 2013). Is Background Music a Boost or a Bummer? *Psychology Today*. Retrieved from <https://www.psychologytoday.com/blog/conquering-cyber-overload/201305/is-background-music-boost-or-bummer>
- Cherry, K. (July 29, 2016). Multitasking: The Cognitive Costs of Multitasking. Retrieved from <http://psychology.about.com/od/cognitivepsychology/a/costs-of-multitasking.htm>
- Covey, S. (1989). *The Seven Habits of Highly Effective People*. Free Press.
- Egan, T. & Lahl, S. (2014). Distracted and Overwhelmed Employees Are Costing You Big. Try These 3 Fixes. *Entrepreneur*. Retrieved from <http://www.entrepreneur.com/article/235968>
- Goldhill, Olivia. (July 03, 2016). Neuroscientists Say Multitasking Literally Drains the Energy Reserves of Your Brain. *Quartz*. Retrieved from <https://qz.com/722661/neuroscientists-say-multitasking-literally-drains-the-energy-reserves-of-your-brain/>
- Gorlick, A. (August 24, 2009). Media multitaskers pay mental price, Stanford study shows. Retrieved from <http://news.stanford.edu/news/2009/august24/multitask-research-study-082409.html>
- Lapowsky, I. (April 17, 2013). Don't Multitask: Your Brain Will Thank You. *Time*. Retrieved from <http://business.time.com/2013/04/17/dont-multitask-your-brain-will-thank-you/>
- Levitin, Daniel J. (January 18, 2015). Why the Modern World is Bad for Your Brain. *The Guardian*. Retrieved from <https://www.theguardian.com/science/2015/jan/18/modern-world-bad-for-brain-daniel-j-levitin-organized-mind-information-overload>
- MacMillan, A. (June 18, 2013). 12 Reasons to Stop Multitasking Now! *Fox News*. Retrieved from <http://www.foxnews.com/health/2013/06/18/12-reasons-to-stop-multitasking-now/>
- Markman, Art. (January 1, 2017). Sorry, But Your Brain Only Knows One Way To Multitask Effectively. *Fast Company*. Retrieved from <https://www.fastcompany.com/3067257/sorry-but-your-brain-only-knows-one-way-to-multitask-effectively>
- McGowan, Kat. (January 1, 2014). Meet the Super Taskers. *Psychology Today*. Retrieved from <https://www.psychologytoday.com/articles/201401/meet-the-super-taskers>

Medina, J. (2008). *Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School*. Pear Press.

Morgan, James. (October 24, 2013). Women 'Better at Multitasking' Than Men, Study Finds. *BBC News*. Retrieved from <http://www.bbc.com/news/science-environment-24645100>

Scott, E. Single-Tasking For Productivity and Stress Management. Retrieved from <http://stress.about.com/od/managetimeorganize/fl/Single-Tasking-For-Productivity-and-Stress-Management.htm>

Tains, Laurence Roy. "Focus, Dammit!" *Men's Health*. May 2003: 118.

Wiley, Jennifer, Jarosz Andrew F. (2012). Working Memory Capacity, Attentional Focus, and Problem Solving. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/0963721412447622>