



Advancing Women in Leadership

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Women and Multitasking: Strategy or Pitfall for Career Advancement?

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Despite its ubiquitous adoption in the workplace and home, research suggests that multitasking is not an effective strategy for productivity (Cabrera, 2016; Crews & Russ, 2020). Workplace demands and the disproportionate division of labor in the home make multitasking unavoidable, indispensable and a necessary coping tool, especially for women with professional and domestic responsibilities (Holdsworth, 2020; Kirchberg et al., 2015). Women multitask more than men do and are also perceived to be better multitaskers than men but sadly multitasking decreases productivity and increases error rates (Cabrera, 2016; Crews & Russ, 2020). The purpose of this concept paper is to share research on multitasking and its effects on productivity and to assist women in making informed decisions about whether multitasking is a strategy or a pitfall for career advancement. We offer perspectives on why women multi-task, the challenges associated with multitasking and cultural differences to be considered. We conducted a literature review and concluded that multitasking is the de facto coping strategy for most women in the modern-day era given the competing demands on their time. We also suggested strategies for career advancement in professional and personal spaces.

Keywords: multitasking, women, productivity, stress, time management, cultural differences

Multitasking is a way of life for most people and has become an epidemic in modern life as it takes a toll on people's health (Healy, 2004) and a temporality for the 21st century where "there is a collective sense of dystopia about family and working lives" (Holdsworth, 2020, p. 678), and indispensable in the workplace (Kirchberg et al., 2015). In fact, multitasking is actually rewarded in the workplace as "the ability to multitask has become a de rigeur requirement in many job postings" (Crews & Russ, 2020, p. 1301). Women multitask more often than men (Cabrera, 2016; Cui et al., 2021; Offer & Schneider, 2011). Although a necessity in the workplace, several studies documented the negative effects of multitasking that include reduced cognitive functions, decreased productivity, frequent errors, high levels of stress and burnout (Cabrera, 2016; Crews & Russ, 2020). Such negative outcomes definitely impact worker morale and yet studies show that happiness of workers results in higher performance (Bellet et al., 2022).

The purpose of this concept paper is to share research on multitasking and help women make informed decisions about whether multitasking is a career strategy or a pitfall in their career advancement. We discuss perspectives on why women multi-task, the challenges associated with it, and propose solutions to these problems. This topic is significant and timely to most professional women, particularly those with young families, caregiving responsibilities, and very high pressure and, or demanding jobs. Although there is variation of intensity in the

pressure of work, most would agree that the challenge for most women is the lack of time in the day to accomplish daily tasks and to balance work-life responsibilities. Such antecedents to the careers of women leave them with very little to no choice and are forced to resort to multitasking as an unavoidable coping tool despite the negative outcomes.

Multitasking Defined

Multitasking refers to "engaging in two or more activities simultaneously, without disengaging from any one of them" (Amichai-Humburger & Etgar, 2016, p. 827). According to the American Psychological Association (2006), "Multitasking can take place when someone tries to perform two tasks simultaneously, switch from one task to another, or perform two or more tasks in rapid succession." (para. 2). Multitasking was also defined as "people switching between multiple contingent tasks" (Buser & Peter, 2012, p. 644). Examples of multitasking abound. One can carry a baby on their lap, talk on the phone and jot something at the same time. Some can drive, talk on the phone, and listen to the news or music on the car radio while others engage in dangerous practices of drinking, driving and texting. Multitasking can also be referred to as task-switching. This is when an activity is temporarily abandoned, such as switching among the smartphone, computer and watching television (Amichai-Humburger & Etgar, 2016). It is quite clear from the definitions that multitasking is an ability and arguably not all people are good at it.

Conceptual Framework

We live in a world that is replete with stimuli and activities competing for time and attention that make multitasking almost unavoidable. The process of task switching places extra burden on cognitive function as the brain requires time to activate rules of the new task. In fact, “it will take more time for the brain to switch among tasks than it would have to complete one and then turn to the other” (Healy, 2004, p. 1). The extra response time the brain takes to process task-switching reduces productivity, creativity and accuracy (American Psychological Association, 2006; Cabrera, 2016). Extra processing time demanded during multitasking means loss and mismanagement of time. We argue that multitasking is not an effective strategy because it creates an inflated sense of productivity (American Psychological Association, 2006; Cabrera, 2016; Ophir et al., 2009; Stoet et al., 2013). Arguably, though necessary and unavoidable on rare occasions, multitasking is not a sustainable strategy as it negatively affects job performance. Both men and women multitask but women multitask more and are perceived to be better at it than men (Cabrera, 2016; Cui et al., 2021; Offer & Schneider, 2011). Ophir et al. (2009) argued that people who multitask are often worse at it. In addition, there are also hidden and long-term costs of multitasking associated with health, productivity and career advancement (American Psychological Association, 2006; Healy 2004).

Why Women Multitask

The three major reasons why people multitask are “the changing nature of work, the enablement of Information and Communication Technologies (ICT), and time demands” (Crews & Russ, 2020, p. 1303). With more women participating in the labor force today, unpaid house work is still disproportionately the work of women than men, giving women a de facto second shift. Chores such as preparing meals, cleaning the house, laundry, etc., are still the burden for women and are “subject to the whims and demands of other family members” (Bianchi et al., 2000, p. 195).

While Crews and Russ’ (2020) three reasons are true, Bianchi et al. (2000) offer three other reasons. First, is the availability factor. This is predicated on the division of housework being tied to the availability of household personnel and the work to be done. Women and girls are conditioned by society to take care of household chores compared to men and boys. Historically, men have spent their time in the labor market while women were relegated to house or unpaid work. Second, is the relative resource perspective, which argues that division of labor in the home is a function of the resources brought in by the parties involved. This highlights how resource input in the home determines power relations and the division of labor. Even if the man does not earn more money than his female partner, a woman might not ask for help with household chores in fear of upsetting or shifting the balance of power.

Third, is the gender perspective, which argues that women and men perform roles assigned to them by society. From early

childhood, socialization processes are oriented toward producing proper male or female adults. This process hinges on the mastery of gender-prescribed roles. This results in creating turf wars in adult life when a male partner might spurn performing feminized tasks. Using this narrow perspective of enacting gender in the home, women will continue to engage in unpaid and unattractive work. Housework is demanding and exhausting and, in many cases, women are left with no choice but to multitask as a coping strategy. Additionally, the burden of looking after children and attending to their demands creates another layer of complication in the division of labor. Bianchi et al. (2000) observed that “Husbands tend not to respond to their wives’ constraints or to the demands of children” (p. 195).

Although there is a prevailing assumption and myth that women are better at multitasking than men (Cabrera, 2016), there is no scientific evidence to support such claims (Buser & Peter, 2012). Many women perhaps resort to multitasking under the veil of this myth and stretch themselves thinly over too many activities. Inevitably, this leads to exhaustion, stress, feeling overwhelmed, irritability, and a lost opportunity to ask help from family members.

Why Women Should Limit Multitasking

As stated earlier, women and mothers still carry more of the burden of house work and childcare than fathers, indicating an unequal division of labor (Holdsworth 2020; Sullivan & Gershuny, 2013). This expectation that they be nurturing, caring and giving of themselves comes at a cost to women’s health. A study by Offer and Schneider (2011) concluded that “For mothers, multitasking activities at home and in public are associated with an increase in negative emotions, stress, psychological distress, and work-family conflict” (p. 809). The American Psychological Association (2010) completed longitudinal studies from 2007 through 2010 on stress and gender and reported the following: (a) Women are more likely than men to report higher levels of stress; (b) money and the economy stress women more than men while men report their job as a great source of stress; (c) women are likely to report physical and emotional symptoms of stress than men; and (d) married women report higher levels of stress than single women; for example, being irritable or angry, having headaches, and feeling fatigued. Added to these are the daily activities in the home, especially domestic work, such as cleaning and attending to younger children. Such activities involve long hours and the work is physically and emotionally draining. These tasks force women to resort to multitasking in order to get things done in the home.

Research also indicates that multitasking negatively affects job performance (Bregman, 2010), people who multitask are often worse at it (Ophir et al., 2009), increases stress levels (Cabrera, 2016), reduces productivity by up to 40% (American Psychological Association, 2006), and finally it increases the chances of risky errors on the job, communication lapses, rudeness and employee stress (Healy, 2004). Despite its prevalence, multitasking is only associated with a sense of

increased productivity that may not correlate to actual productivity. Lastly, it is perceived as a negative experience in the workplace (Offer & Schneider, 2011).

Scholars point to a relationship between multitasking and brain functions. The American Psychological Association (2010) reported that women are more likely to report physical and emotional symptoms of stress than men. Prolonged and chronic stress leads to suboptimal performance or malfunction of multiple body systems, including the executive part of the brain called the prefrontal cortex (Healy, 2004), digestive, reproductive and immune systems (Chrousos & Gold, 1992). This also results in the death of brain cells in the hippocampus. A critical function of the hippocampus is the formation of new memories that enable humans to learn new information and skills (Healy, 2004). Overwhelming stress also kills the ability to learn new information (Healy, 2004).

Multitasking causes people to function like robots because automaticity, i.e., performing tasks without conscious thought does not require higher level thinking. During multitasking, the brain takes a momentary rest and suspends high order thinking. The result is robotic behavior characterized by role overload, forgetfulness, irritability, errors, misjudgment and anxiety. According to Healy, (2004) for women in their 40's and 50s, "Their forgetfulness appeared to be a function of depression, stress and 'role overload'—the multitasking of many roles at once" (p. 3). In light of these negative factors of multitasking, women should reconsider the potential harm of multitasking both at home and in the workplace as multitasking is considered a factor in serious mishaps (Healy, 2004).

Is Multitasking a Successful Strategy or Pitfall for Career Advancement?

As stated earlier, multitasking is unavoidable in many jobs and especially for women with professional and domestic responsibilities. Although there are perceptions that women multitask better than men (Buser & Peter, 2012; Stoet et al., 2013) and that women multitask more than men (Cabrera, 2016, Offer & Schneider, 2011), it is vital to understand the hidden and long-term costs of multitasking on health, productivity and career advancement (American Psychological Association, 2006). Despite the ubiquity of this practice, there are several reasons why women should reconsider multitasking as a coping strategy in the workplace and home. First, multitasking is a challenge for human cognition (Ophir et al, 2009; Stoet et al., 2013). The human brain cannot handle two activities at a time, let alone, five multitasking activities that women are reported to handle at a time (Cabrera, 2016). Multitasking results in declined productivity because it places extra demand on cognitive processing that results in a longer response time during task switching (American Psychological Association, 2006; Cabrera, 2016; Ophir et al., 2009; Stoet et al., 2013). The compromised cognitive function is due to abnormal stress that causes "amygdala hijack" (Nadler, 2009, p. 1), the emotional part of the brain that is responsible for fight or flight. The hijack causes

irrational behaviors that cause regrets in life (Nadler, 2009), and the aftermath 'what was I thinking?'"

For working mothers, cortisol, the potent stress hormone, is particularly high in the morning as they manage multiple activities for their children while also mentally and physically preparing for the work day (Larsson et al 2009; Hibelet al, 2012). The excessive excretion of cortisol under stressful conditions potentially causes amygdala hijack in the morning for mothers resulting in parenting stress, irritability, anger, frustration, fatigue. Sustained high levels of cortisol in the morning are also related to general life stress, post traumatic stress, and chronic fatigue (Hibel et al., 2012) and weight gain (Larsson et al, 2009). Also, in their study Larsson et al., (2009) reported that there are higher levels of cortisol in women than in men.

Given that the workplace involves activities that require undivided attention, including deliberate thought process, listening attentively, planning, and efficient execution of tasks, multitasking becomes a liability to one's productivity (Healy, 2004). A lack of focused attention amid competing demands for time and attention from family responsibilities such as child care, elderly parent care and household chores, make it imperative for women to come up with strategies that boost productivity at home and in the workplace. In fact, child care responsibilities, looking after elderly parents and the daily house chores are full-time jobs that clearly cannot be done by a woman holding a full-time job elsewhere. Women cannot carry this burden of unpaid work in the home single handedly and expect to perform the job demands efficiently without the work taking a toll on productivity and personal health. The Whitney Houston song I'm Every Woman in the early 1990's, whose lyrics "Whatever you want done baby, I will do it naturally" perpetuates the notion that women can do everything and are there to serve others at the detriment of their own health. According to Holdsworth (2020) assumptions about busyness and prioritization are framed from a patriarchal perspective and advises that to do less is more and distracting tasks can be deferred or delegated.

Strategies for Successful Career Advancement in the era of Multitasking

Research suggests that multitasking should be avoided as human beings are not wired to do so much at once (Cabrera, 2016, Healy, 2004). As stated earlier, research suggests that women multitask more than men (Offer & Schneider, 2011), but there are ways to lessen multitasking on the job. First, intentionally practice mindfulness, i.e., focus on one thing at a time and complete tasks sequentially (Cabrera, 2016), or single task (Bregman, 2010). Second, plan activities and allot time to each activity and maintain focus (Cabrera, 2016). Third, if resources permit, seek outside help/domestic sourcing (Sullivan & Gershuny, 2013) to give more time to focus on tasks and activities or can defer or delegate activities.

Other methods of managing multitasking include effective use of executive control functions (ECF) according to Royall et al. (2002). Executive functions “encompass a set of cognitive skills that are responsible for the planning, initiation, sequencing, and monitoring of complex goal-directed behavior” (p. 378). In real life these functions translate to task planning, postponing tasks and ignoring task irrelevant information. Rubinstein et al. (2001) discussed the complementary stages of executive functions during task switching which are goal shifting (keeping track of current and future tasks) and rule activation (turning off the rules of the previous task and selecting a new set of rules for a current task). These functions are conscious decisions about what to do and which rules to follow during task switching. Making fundamental changes to routines requires critical examination of ethos (cherished values), pathos (anything that touches feelings, emotions and passions), and logos (reasoning and rationality that seeks harmony and understanding) as postulated by Vyas (2013). Perfectionism in house chores such as cleaning, meal preparation and laundry may mean relinquishing these tasks to others as they place competing demands on schedules for professional women. Completing these tasks makes perfect sense and creates harmony in the home, but at whose, and at what cost to the well-being of women?

Multitasking and Cultural differences

Multitasking is inherently a cultural trait and determined by *monochronic vs. polychronic* preferences in task completion, terms coined by Hall (1959). Monochronic is the preference of completing one task at a time while polychronic is the preference to complete multiple tasks simultaneously. These preferences occur at the individual and cultural group and impact time management and perceptions of time. Western cultures are monochronic in nature and observe the cultural cherished values of rigid time keeping while failure to observe time is considered inappropriate, incompetent, ineffective and inefficient (Guenther, 2019). Also, there is a very clear demarcation between work and personal time. Activities are linear and sequential and everyone understands the idea of giving undivided attention. For example at a business entity, one customer is served at a time. Those in line don't complain about the time given because of the shared value of respecting the customer and focusing on one customer at a time.

Whereas, in polychronic cultures such as African, Asian and South American, multiple tasks are completed simultaneously and family responsibilities must be addressed concurrently with workplace responsibilities (Guenther, 2019). Maintaining relationships and human interactions is paramount and time rigidity may or may not be observed depending on the task demands, but the tasks will get done although not within the allocated time. Agendas may be suspended because of distractions. Unplanned interruptions are embraced and entertained, and one can always go back to the tasks at hand after the interruption. In these cultures, it is perceived as rude if one does not entertain interruptions. In polychromatic cultures, multitasking especially for women is admirable behavior as it is

perceived to be a sign of strength, resiliency, power, discipline, stamina, and a strong work ethic. There is a high premium placed on multi-taskers because they are perceived as highly productive and ideal. These two preferences to multitasking underscore the importance of cultural differences considerations in the workplace.

Although there is a dearth in studies that investigated multitasking and cultural differences, research revealed that American adults who owned multimedia gadgets tended to multitask more compared to Taiwanese (Kononova & Chiang, 2015), contradicting the view that western cultures are monochromatic. It also demonstrates how the privilege of ownership of multimedia technologies in western cultures has increased multitasking and polychronicity for business, scheduling, entertainment, networking, and control purposes. For instance, multimedia tasking enabled by smartphones is a case in point (Crews & Russ, 2020; Srivastava et al., 2016). One can choose to answer an incoming business call and give undivided attention to that call thus choosing the monochronic option. However, another individual may use the smartphone to answer a call, and at the same time text, email and read messages coming through different platforms such as twitter, Instagram, Facebook, etc., thus engaging in polychromatic multitasking. In both monochromatic or polychromatic cultures, media multitasking is influenced by variables such as access, age, race, educational level (Srivastava et al., 2016)

Other studies attributed happiness to employee productivity in multitasking environments. Bellet et al. (2022) studied the effects of employee happiness on productivity at call centers at a British telecommunications company. Their study revealed that as the measurement of happiness increased and so did their performance and productivity in sales. Conversely, low levels of employee morale hurt levels of productivity in an organization. Another study at a university in Malaysia investigated happiness among Islamic women who self-identified as multitaskers (Rosli et al., 2020). The women perceived their religion as playing a significant role in sustaining their multitasking behaviors. They highlighted five aspects that are worth considering. The first is the physiological as reflected in financial stability to alleviate worries, good accommodation, and the length of commute to and from work. The second is the cognitive factor where it is important to know self-worth, understand their role as wife, mother and manager of the household. One relies on God as the ultimate helper and sustainer in carrying family responsibilities and the burdens of life and to remain optimistic about life. The third element is psychological as evidenced by a carefully thought out schedule, self-regulation, allocating time to tasks, giving the best at all times and using the best way possible to complete the tasks. Rewarding oneself after achieving a goal was seen as positive self-affirmation. The fourth is social support from spouse, family, friends, colleagues, and babysitters. The final is the spiritual element where one accepts fate and to be always thankful. The perception of Islamic women in the study is that they are expected to multitask in order to fulfill obligations to family and God. Given these systems of support,

the women reported that these would be ideal and will enable them to manage work-life balance.

Organizational Solutions to Multitasking

Busyness has become the defining temporality of the 21st century (Holdsworth, 2020). Furthermore, work is one of the unhappiest activities that people do on a daily basis in the USA and the United Kingdom (Bryson & MacKerron, 2016). The use of information and communication technologies (ICT) has increased multitasking in the workplace despite the problems associated with intensive multitasking such as decreased productivity, low levels of critical thinking, frequency of high error rate, decreased concentration (Crews & Russ, 2020). According to Holdsworth (2020), “Delays in parenting are concurrent with an intensification of multitasking activities, with women in particular combining motherhood with labor market commitments, as well as increasing caring responsibilities for older care responsibilities” (p. 681). It requires companies and organizations to redesign work environments that help women to mitigate the busyness that leads to multitasking. As unavoidable as multitasking is in the workplace, not all workers are good at it and employees need training to make informed decisions about preferences to task completion. We suggest several ideas that may help to reconfigure work environments.

Flexible Work options and Scheduling

A study conducted in India using 250 employees from banking, hospitality, and information technology to test the relation between work from home (WFH) and employee productivity during the COVID-19 pandemic revealed that productivity in general decreased but women tended to benefit more as the scheduling allowed them to attend to both work and family responsibilities although productivity for men did not change (Farooq & Sultana, 2021). Corroborating the men's advantage during the pandemic, research productivity among women faculty in top research universities decreased compared to male faculty (Cui et al., 2021). The gender gap in productivity may have been caused by women striking a balance between work and family while males might have used the pandemic to concentrate on research productivity as Holdsworth (2020) stated:

[M]ale authored accounts of time management assume family as a source of fulfillment, rather than responsibility and the challenge is to make time for family, rather than acknowledging how family practices are time consuming activities that need to be coordinated with others (p. 691).

The assertion by Holdsworth suggests women still carry the burden of household chores, child and elderly care responsibilities. Post pandemic work restructuring and redesign should include policies that mitigate multitasking for women such as giving them work from home options if the nature of the job permits. Other options include having day care centers within the workplace, equitable salaries with men to avoid

financial stress, and requiring workers to work from the office once or twice a week or bi-weekly.

Collaboration and Communication

Different units should collaborate and communicate to avoid working in silos as this causes fragmentation and mistrust when working towards a common project or goals. Communication that utilizes vertical, horizontal and organic approaches should reflect priorities and the press for urgency. Deadlines must be clear and shared in advance to give workers time to plan and to have autonomy of their own schedules. Too often, sudden and short deadlines put employees into hyper multitasking mode and may lead to sub-par performance, higher rates of error, high levels of stress, poor product quality, malaise, and leaving employees overwhelmed. There must be regular check-ins by managers to capture snapshots of what is happening with employees and to target support needed to deal with workforce stress. Women faced with competing tasks in the home and work environment may find work-life balance impossible to sustain and will resort to high multitasking which compromises their work, family and health. In high pressure jobs, failure to complete tasks should not necessarily be equated with incompetence alone, but with a flawed work environment that fails to cater to the needs of employees.

Employee Training

While multitasking is considered a requirement in many job descriptions, training on worker monochronic and polychronic preferences is a must to make informed decisions about worker productivity. Employees must be aware of the consequences of multitasking, perceived advantages and disadvantages to help them exercise self-regulation and discipline to ensure task completion. Considerations should be given to monochronic individuals, who might struggle on heavy workload and unplanned work days. Polychronic workers might perform better under high pressure. For example, scenarios and targets could be given in training and a comparison of work quality and time of task completion can be made between monochrats and polychrats so that employees are intentional about their preferences given task completion demands, deadlines and quality of work. In addition, data on multitasking needs to be shared, especially the negative impact of task switching on the brain functions and productivity and the general cost of multitasking on the economy. For example, work interruptions take an average of two hours of the working day which is equivalent to \$588b annually to the US economy (Spira & Feintuch as cited in Crews & Russ, 2020). Organizations should listen to the needs of workers, implement solutions with fidelity to harmonize organizational and staff needs. Bearing in mind worker idiosyncrasies in multitasking, managers and supervisors must set realistic targets and time frames to complete tasks. Additionally, knowing employee monochronic or polychronic preferences helps to better chart ways for collaboration, inclusivity, and empowerment in the workplace.

Holistic Performance Appraisals

Companies and organizations hire people to perform mandated tasks and jobs. Given that multitasking is a necessary evil for women, and promotions are based on merit, therefore, to increase productivity in the workplace, organizations need to empower women by creating structures and practices that promote women's participation, promotion, and chances of career mobility and advancement. When women are in positions where they have power in the workplace, then they can influence workplace decisions that better address the needs of women, especially for those with young families and elder care responsibilities. Such practices will pay off as this may lead to increased productivity, commitment, loyalty and relational trust. The negative effects of multitasking suggest that organizations should evaluate employee productivity holistically by appraising every aspect of staff well-being and to retain talent.

Conclusion

Despite the high prevalence of multitasking in everyday life, it is an unavoidable coping tool in task completion, but needs to be mitigated because it negatively affects performance. Furthermore, it is not an effective strategy because it reduces productivity by up to 40% (American Psychological Association, 2006), bleeds the economy in billions of dollars (Drew & Russ, 2020), and gives a false sense of productivity (Cabrera, 2016). Task switching places extra demands on cognitive processing and slows response time. In the workplace, employers use productivity as one of the measures for continued employment. It becomes imperative for the individual to assess their multitasking abilities especially in high pressure jobs. Depending on the situation, it might be better at times to perform one task at a time, a practice called mindfulness, to avoid a decline in productivity. Women may potentially improve their productivity if they reduce multitasking both in their personal and professional lives. They need to implement strategies such as sharing household chores with family members. Women and men should learn to relinquish traditional household roles and tasks to alleviate stress. The constraints imposed by gendered labor jeopardize chances of career advancement and ultimately cause stress and negatively impact health and well-being. Organizations should use research on multitasking to train employees about the consequences on worker productivity, adopt evaluation protocols that are holistic, and formulate workplace standards and regulations that address the needs of all employees.

References

- American Psychological Association. (2006). *Multi-tasking and switching costs*.
<https://www.apa.org/topics/research/multitasking>
- American Psychological Association (2010). *Stress in America*. 1-5
<http://www.apa.org/news/press/releases/stress/2010/gender-stress.pdf>
- Amichai-Humburger, Y., & Etgar, S. (2016). Intimacy and smartphone multi-tasking: A new oxymoron? *Psychological Reports, 119*(3), 826-838.
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of labor. *Social Forces, 79*(1), 191-228.
- Bellet, C. S., De Neve, E., & Ward, G. (2022). Does employee happiness have an impact on productivity? *Management Science, 1*-24.
<https://doi.org/10.1287/mnsc.2023.4766>
- Bregman, P. (2010). How and why to stop multi-tasking.
<https://hbr.org/2010/05/how-and-why-to-stop-multitasking>
- Bryson, A., & Alex, G. (2016). Are you happy while you work? *The Economic Journal, 127*(599), 106-125.
- Buser, T., & Peter, N. (2012). Multi-tasking. *Experimental Economics, 15*, 641-655.
- Cabrera, B. (2016). Women need more mindfulness than men do. *Harvard Business Review, 2*-4.
<https://hbr.org/2016/06/women-need-mindfulness-even-more-than-men-do>
- Chrousos, G. P., Gold, P. W. (1992). The Concepts of Stress and Stress System Disorders: Overview of Physical and Behavioral Homeostasis. *Journal of the American Medical Association, 267*, 1244-1252.
<http://dx.doi.org/10.1001/jama.1992.03480090092034>
- Crews, D. E., & Russ, M. J. (2020). The impact of individual differences on multitasking ability. *International Journal of Productivity and Management, 69*(6), 1301-1319.
- Cui, R., Ding, H., & Zhu, F. (2020). Gender inequality in research productivity during Covid 19 pandemic. *Manufacturing & Service Operations Management, 24* (2), 707-726. <https://doi.10.1287/msom.2021.099>
- Farooq, R., & Sultana, A. (2021). The potential impact of the Covid-19 pandemic on work from home and employee productivity. *Measuring Business Excellence, 1*-19.
doi:10.1108/MBE-12-2020-0173.
- Hall, E. T. (1959). *The silent language*. Doubleday.
- Healy, M. (2004, July 19). We're all multi-tasking, but what's the cost? We're not wired to do so much at once as stress and mistakes show. *The Los Angeles Times*. Available <http://www.latimes.com/features/health/la-he-multi-tasking19jul19,1,2049254.story>
- Hibel, L. C., Mercado, E., Trumbell, J. M. (2012). Parenting stressors and morning cortisol in a sample of working mothers. *Journal of Family Psychology, 26*(5), 738-746. Advance online publication. <https://doi:10.1037/a0029340>
- Holdsworth, C. (2020). Gender temporalities of everyday family practices: An analysis of Anglo-American Self-help literature on busyness. *Gender, Place and Culture, 27*(5), 677-694.
- Kirchberg, D. M., Roe, R. A., & Van Eerde, W. (2015). Polychronicity and multitasking: A diary study at work. *Human Performance, 28*, 112-126.
- Larsson, C. A., Gullberg, B., Råstam, L., & Lindblad, U. (2009). Saliva cortisol differs with age and sex and shows

- inverse associations with WHR in Swedish women: A cross sectional study. *BMC Endocrine Disorders*, 9(16), p. 1-11. <https://doi.org/10.1186/1472-6823-9-16>
- Nadler, R. (2009). What was I thinking? Handling the hijack. <https://www.psychologytoday.com/files/attachments/5483/handling-the-hijack.pdf>
- Rosli, N. A. M., Suhaimi, H., Saari, Z., Siwok, S. T., Latif, A. A., Masroom M. N., Yusof, S. K. S., & Othman, N. (2020). Happiness in Islamic perspectives among multi-tasking Women in Malaysia. *International Journal of Islamic and Civilizational Studies*, 6(3), 125-137.
- Rubinstein, J. S., Meyer, D. E. & Evans, J. E. (2001). Executive control of cognitive processes in task switching. *Journal of Experimental Psychology: Human Perception and Performance*, 27, 763-797.
- Offer, S., & Schneider, B. (2011). Revisiting the gender gap in time use patterns. *American Sociological Review*. 76(6), 809-833. <http://journals.sagepub.com/doi/pdf/10.1177/0003122411425170>
- Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Psychological and Cognitive Sciences*, 106(37) 15583-15587. <https://doi-org.proxy006.nclive.org/10.1073/pnas.090362010>
- Royall, D. R., Lauterbach, E. C., Cummings, J. L. et al. (2002). Executive control function: A review of its promises and challenges for clinical research. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 14, 377-405. <http://neuro.psychiatryonline.org/doi/pdf/10.1176/jnp.14.4.377>
- Srivastava, J., Nakazawa, M., & Chen, Y. (2016). Online, mixed, and offline media multitasking: Role of cultural, socio-demographic and media factors. *Computers in Human Behavior*, 62, 720-729.
- Stoet, G., O'Connor, D. B., Connor, M., & Laws K. R. (2013). Are women better than men at multi-tasking? *BMC Psychology*, 1, 1-18. <http://dx.doi.org.proxy006.nclive.org/10.1186/2050-7283-1-18>
- Sullivan, O., & Gershuny, J. (2013). Domestic outsourcing and multi-tasking: How do they really contribute? *Social Science Research*, 42, 1311-1324
- Szameitat, A. J., & Hayati, M. (2019). Gender difference in polychronicity. *Frontiers in Psychology*, 19, 597, 1-8. doi: 10.3389/fpsyg.2019.00597
- Vyas, R. (2013). Managing the dimensions of ethos, pathos and logos of change through transformational leadership. *The IUP Journal of Soft Skills*, VII(3), 7-22.