### CLINICAL SCIENCE INSIGHTS

August 2021

TAKE OWNERSHIP OF THE PROCESS OF OVERCOMING PROCRASTINATION

### HOW TO MAKE SENSE OF PROCRASTINATION

And Tips for Getting Started

by Kathleen W. Reardon, Ph.D.

Imagine sitting down to complete a task you've been putting off. Maybe it's a big task with lots of different parts; maybe it feels overwhelming, and you don't know where to start; maybe it's a task that feels mundane and that you have to do frequently. What emotions come up when you imagine yourself getting started on this task? What thoughts? One thing is for certain: We've all been in this situation, when the thought of starting a dreaded task is so unpleasant that we'd rather do something (anything!) else.

What we're talking about here is procrastination, which is broadly defined as delaying the performance of tasks despite the potential for negative consequences. Indeed, in the research literature, this type of pushing things off is often referred to as an *irrational* delay — that is, we know it's likely a bad idea to procrastinate on a given task and that continuing to delay will only cause more problems, but despite this knowing, we do it anyway. Many people struggle with procrastination. In fact, estimates suggest that somewhere between 20-25% of adults experience chronic procrastination across domains including social, academic, professional and financial (Balkis & Duru, 2009; Ferrari & Díaz-Morales, 2014). Strikingly, up to 50% of university students identify as having problems with chronic procrastination (Day et al., 2000). Researchers have identified several potential contributing factors for procrastination, including task aversiveness, low self-esteem, fear of failure, learned helplessness and perfectionism (Schubert & Stewart, 2000; Steel, 2007; Steel & Ferrari, 2013). Procrastination gets in the way of performance, both at work and at school (Steel, 2007). Patterns of chronic procrastination not only negatively impact our ability to get things done, but procrastination has been associated with chronic stress (Abbasi & Alghamdi, 2015), lower life satisfaction and overall wellbeing (Beutel et al., 2016; van Eerde, 2003), and increased symptoms of



RESEARCHERS EDUCATORS THERAPISTS YOU

anxiety and depression (A. L. Flett et al., 2016; G. L. Flett et al., 1995). Indeed, chronic procrastination has been linked to many different forms of maladjustment (Pychyl & Flett, 2012). In addition to mental health outcomes, procrastination has been linked to poorer physical health outcomes, including cardiovascular and other chronic illness (Sirois, 2015, 2016; Stead et al., 2010) and an increased likelihood of delaying needed medical treatment (Sirois et al., 2003). Procrastination can present a particular challenge for those with other mental health problems, like the executive functioning difficulties that are hallmarks of diagnoses such as attention deficit hyperactivity disorder (ADHD; Bolden & Fillauer, 2020). Problems with putting things off are also found more often in conjunction with anxiety disorders and personality disorders (Gustavson et al., 2017), and are most common in adolescents or young adults, with rates of procrastination declining somewhat with age (Beutel et al., 2016). There are several common misconceptions about how best to tackle procrastination and get started on the tasks that are most important to you. Before offering specific strategies for overcoming these challenges, it is important to address these misconceptions.

The first widespread misconception is that procrastination can't be understood (which may have come from the aforementioned referral to it as an irrational delay). However, research suggests that, viewed through a certain lens, procrastination is perfectly logical. In almost all situations, procrastination happens because it serves an important function, and understanding that function is an important first step to moving through a procrastination roadblock. One of the simplest examples of this might be in thinking

about how our brains respond to reward; contemplating doing a dreaded task may bring up anxiety or other unpleasant emotions, and deciding to delay this task for another hour or another day brings a sense of relief. This relief is a reward for your brain in that the relief feels much nicer in the short-term than the anxiety you were feeling just a minute ago. Procrastination can serve other functions, as well. Delaying the start of a task may be one way to exert some control over your environment, especially in a time when so many things may feel and may *actually* be out of our control. It is also important to acknowledge the downsides of getting started on a given task (e.g., the risk of making the wrong choice, feeling like you're not good enough, risking failure), as well as the upsides of continuing to put it off (e.g., avoiding unwanted internal experiences such as anxiety or self-doubt, being able to participate in a chosen leisure activity). Of course, the function of procrastination varies from person to person but also from task to task. It is critical to slow down when you notice procrastination getting in the way, and to ask yourself what function the procrastination is serving in each particular circumstance. This will help you engage in targeted and skillful problem-solving.

Another common misconception is that people who struggle with procrastination are simply bad at organizing themselves or managing their time; worse yet, they may be considered lazy, unmotivated or distractible. However, there is mounting evidence that, instead of simply being a problem of organization, procrastination is actually about having difficulty managing emotions (Pychyl & Sirois, 2016). Specifically, procrastination has been conceptualized as a strategy that provides short-term relief from THE FAMILY INSTITUTE

#### at Northwestern University

negative emotions (i.e., pushing off an aversive task feels good in the now). This explanation is important, because it shifts the target from one of organization to one of identifying difficult emotions. Is the task at hand unpleasant or tedious by its nature? Or does it bring up unpleasant emotions related to our ability to complete it (e.g., feelings of insecurity, anxiety, self-doubt)? Procrastination has been linked to low levels of the personality trait conscientiousness, a trait responsible for self-regulation, including emotional regulation (Boysan & Kiral, 2016; Schouwenburg & Lay, 1995). There is evidence that those who are high in conscientiousness are able to avoid falling into the trap of procrastination partially due to their ability to structure their environment to set them up for more likely success, a strategy even those low in conscientiousness can learn to emulate. Along these lines, teaching students emotion regulation skills was found to significantly reduce procrastination (Eckert et al., 2016). If we learn to identify the difficult emotions that come up around a given task, we can apply skills to better regulate those negative feelings and allow for progress.

# WHY TALK ABOUT PROCRASTINATION NOW?

Alarmingly, the widespread transition to less structured school and work arrangements in response to the global COVID-19 pandemic has made this problem feel even more insurmountable for many of us. Several useful tools that provide ways to stay on task and tap into ongoing motivation have become unavailable. The quiet solitude offered by a private office may have been traded for the busy family environment of the kitchen table, for example. Additionally, for those who had learned to rely on community and accountability from supervisors or peers for maintaining focus (e.g., study groups, weekly writing groups, working or studying in a bustling coffee shop) this new virtual reality can feel much less engaging. To compound the lack of structure, we are living in a time defined by overwhelming and stressful news updates, political unrest and a global pandemic — all of which can make it incredibly hard to devote focused attention to necessary school and work tasks. For all of us, and especially if you are someone who struggles with executive function challenges or ADHD, this can make functioning from day to day incredibly hard.

The good news is that there are short-term, teachable skills you can implement to structure your and your family's environment and regulate negative feelings that may arise. The most up-to-date science offers helpful approaches, too. One of the most effective strategies for overcoming procrastination involves finding ways to reduce the pressure we put on ourselves to maintain "productivity" in exactly the same ways that may have worked in another context, and to focus instead on doing what works in response to the situation we find ourselves in right now. Importantly, before I begin discussing concrete strategies for dealing with procrastination, I want to emphasize that not all tips or tricks fit for everyone. In fact, a quick internet search will turn up directly conflicting advice (e.g., start with the most dreaded task to get it over with vs. start with a smaller, more manageable task to get warmed up). This highlights how important it is for you to be able to take ownership of this process by figuring out what works for you and leaving the rest. I have provided several different suggestions below in the

spirit of encouraging this kind of "doing what works" experimentation; it is not my intention that any one person would implement all of them.

# WHAT DOES SCIENCE TELL US ABOUT WHAT WORKS?

Although procrastination is a problem that many people struggle with, research typically hasn't focused on treating it. However, the existing research suggests that one of the most helpful forms of treatment may be Cognitive Behavioral Therapy (CBT). This therapy approach is skills-based and problem-focused; it aims to teach clients to become their own therapist and more effectively manage their thoughts and behaviors to improve mood. Two meta-analyses (a type of study that gathers and summarizes results from many others previous studies) suggested that CBT is one of the most effective kinds of treatment that has been evaluated using research (Rozental et al., 2018; van Eerde & Klingsieck, 2018). In particular, one Randomized Control Trial (RCT; a type of study that compares two treatment types) found that a CBT treatment including education about procrastination paired with behavioral and cognitive techniques was effective in significantly reducing procrastination, an effect that was maintained for several months after the end of the treatment (Otermin-Cristeta & Hautzinger, 2018). It is important to note that there are many other forms of treatment that may be effective but are not currently represented in the research literature (e.g., interpersonal or relational approaches). With all of this in mind, what are some of the specific strategies from CBT and related approaches that individuals struggling with procrastination can apply to their own lives?

#### **GATHERING ACCURATE INFORMATION**

One important strategy for beating procrastination and overwhelm is making sure you have accurate information about what procrastination is and is not (e.g., Rozental et al., 2018) — hopefully, this article will already have helped with this! Therapists who practice CBT refer to this process as psychoeducation providing the client with a thorough understanding of the problem and how the solutions are likely to work (i.e., the theory behind the solutions). With regard to procrastination, there are some important facts that can be helpful to keep in mind as you try different strategies:

**1.** *Getting started is the hardest part.* Learning to manage procrastination is about managing in a new way the emotions that show up before you start a task. It's not only about the latest time management app or about work ethic, willpower, or having a better calendar system.

2. Efficiency matters less than motivation. Although time management and efficiency strategies can be helpful, the real challenge is to find a way to prioritize the things that matter to you, and to be able to stay connected to the why of any given task. That is, although balancing your budget spreadsheet may not feel exciting, thinking about the special trip you can save up for if you manage your finances more effectively may provide a jolt of motivation that helps you tackle that spreadsheet.

**3.** Organization helps. I know I just said organization isn't everything, but especially for folks with ADHD and other executive functioning

difficulties, basic organization and time management strategies are often a very helpful place to start. Gathering some good, accurate information about how to keep a calendar, how to create a to-do list, and how to utilize reminders can set you up for success and provide a solid foundation on which to layer other strategies.

#### SELF-COMPASSION

One challenge that comes up for folks with a long history of struggling with procrastination is that a lot of self-judgments come up when they think about finally getting started on something they had been putting off ("If only I had started this sooner, I wouldn't be so stressed out!"). However, although it may be natural to experience regret and judgment, being a harsh taskmaster to yourself can make the whole experience worse, and it can pile on yet more negative feelings to muddle through in order to get started. Specifically, selfcompassion can decrease psychological distress, which is a key ingredient for exacerbating procrastination (MacBeth & Gumley, 2012). Relatedly, many people feel the urge to compare themselves to others in these moments, or to beat themselves up about how difficult they find something when it appears that others may find it easier. Next time you're faced with these kinds of thoughts, try a different approach. Research shows that forgiving ourselves for past procrastination can actually be helpful, because that forgiveness enables us to move forward without the additional baggage of all our past acts (Wohl et al., 2010). See if you can find a way to move away from those judgments or comparisons and lean into self-compassion as a way to ease the friction of getting started.

#### MINDFULNESS TRAINING

Mindfulness, or the skill of anchoring your attention with singular focus in the present moment, is another strategy that can be useful in tackling procrastination and overwhelm (Cheung & Ng, 2019). Although there are likely others, three specific ways that mindfulness training may help with procrastination include:

1. Foster curiosity. One of the challenges in working through procrastination is noticing the urge to put something off. Mindfulness can aid us in fostering a sense of curiosity about our moment-tomoment experiences, and it can help us sense when the urge to procrastinate comes up. In addition, leaning into curiosity around our experiences is one way to stay away from judgments; genuine curiosity about what might be driving the urge to procrastinate may lead you to helpful information about what emotions you may be up against and even provide clues about how to address them.

2. Maintain focus. Another benefit of mindfulness training is that it can increase one's ability to maintain focus and sustained attention on a task (e.g., it helps to reduce mind-wandering). This sustained attention is of course helpful for actually completing the task at hand, but another benefit is that it means having to get started fewer times. Each time your mind wanders or you get distracted from a task, you then face the challenge of re-engaging with the task, and as discussed above, getting started really is the most difficult part. So, reducing the number of times you need to exert effort to get started because you are able to stay on task will increase your productivity in the long run.

**3.** *Stay in touch with WHY.* I have already mentioned that staying in touch with your motivation for doing a task in a big-picture way can be a very helpful strategy, and mindfulness is one way to accomplish this. That is, using mindfulness strategies can allow you to hold your "why" in mind as you complete your task, providing that needed boost of motivation. Try taking a few moments before getting started on an aversive task to really reflect, with all of your attention, on why this task is important to you. See if that makes getting started feel easier.

#### **BEHAVIORAL EXPERIMENTS**

Experience provides one of the most powerful tools for our brains to learn new things. Behavioral experiments are a structured way to provide your brain with helpful new experiences in a specific way (Rozental & Carlbring, 2014). Although they may feel difficult at first, the good news about these strategies is that you can get used to a new way of doing things — and they don't feel nearly as effortful the further along you get. Here are three specific ways you can set up situations to provide helpful learning experiences related to getting started on important tasks:

1. *Build mastery*. This one is about teaching yourself that your thoughts do not control you (although sometimes it may feel that they do). As an example, even though we can think the thought "I can't raise my arm," thinking this thought has no effect on our actual ability to raise our arm. In fact, we can be thinking that thought and raise our arm at the very same time. Thoughts about procrastination

act the same way. Although you may think "This is too hard, I can't do it," you can prove to yourself that you can do it in spite of that thought by getting started and simply seeing what happens.

2. Increase exposure. Sometimes, when feeling overwhelmed by the size or duration of the task leads to negative feelings that fuel procrastination, it can be helpful to break the task down into smaller pieces. That is, even if doing the whole task feels unimaginable, could you convince yourself to put up with the negative feelings that might come up around the task for one minute? Three minutes? Ten minutes? No matter how small to start, some time is better than none. This strategy works because you are able to gradually increase the amount of time you spend in contact with those unpleasant thoughts or feelings, and you are simultaneously building confidence as you successfully tolerate a short exposure, then a longer and longer one. An added benefit of this strategy is that many people find once they have gotten over the initial barrier to getting started, even if the plan is only to work for two minutes, they are naturally inclined to keep going and take advantage of the momentum.

**3.** Notice contrast effects. If there are some tasks on your list that you prefer and some that you find much harder to get started, be thoughtful about the order you choose. That is, doing a preferred task immediately before the dreaded one may actually make the dreaded one feel even worse because of the contrast between them. It may be better for you to start with the most dreaded task to get it over with, and then reward yourself for your effort by

allowing yourself to do the preferred task at the end.

#### STIMULUS CONTROL

Stimulus control can mean a lot of things, but at its simplest, it describes the idea that living things behave one way when a stimulus (a thing or event) is present and another way when it is not present. As an example, your dog may be motivated to do tricks when a treat is present but less cooperative when there is not food to be had. In this way, it can be said that the stimulus (food) controls the behavior (tricks), and humans are no different. We can use this to our advantage by recognizing that stimuli can influence us to do something or not to do something. Try these approaches:

1. Remove distractions. If your cell phone is nearby, you are likely being influenced by it (e.g., when your notification chime goes off, you are likely to stop what you are doing and check it). What other distractions in your environment are likely to influence your behavior in unhelpful ways when you are trying to work on a task you've been putting off? In the context of working or completing schoolwork from home, this may mean thinking carefully about setting up a space that is as free from distractions as you can make it, or employing additional strategies (e.g., noise-canceling headphones) to minimize distractions when quiet and privacy may not be a realistic option. Coming back to our example of the cell phone, rather than relying on your willpower to resist the urge to check your notifications, you are much more likely to be successful at staying on task if your phone is silenced and put away in a drawer or another room so that you never hear the chime at all. Remove temptations altogether when possible.

2. Offer yourself rewards. Much like our canine companions, humans are also very motivated by rewards. This is often referred to as contingency management (CM), which is a specific version of stimulus control. CM is a behavioral strategy where individuals are reinforced, or rewarded, for positive behavioral change. This reinforcement or reward is helpful on several levels because it can motivate you to do the task in the first place. It feels good to receive a reward, and it makes the positive behavior (getting started on a hard task) more likely to occur again in the future. Rewards can take many different forms and work best matched to each individual. This is a strategy that can easily be adapted for children, as well. Consider using a favorite snack or treat, an inexpensive purchase or small monetary contribution toward a larger purchase, or time to do a favorite activity. The important thing is that the reward is small/feasible, and something highly desirable. Feel free to get creative!

#### THERAPY

Finally, seek therapy. Although many people who struggle with chronic procrastination may come to therapy for other reasons, including marriage difficulties, depressed mood or work problems, they may find their struggles can be helped by addressing their patterns of procrastination. Additionally, some mental health professionals have noticed an increase in clients seeking treatment explicitly to work on procrastination. In the context of the COVID-19

pandemic, teletherapy is a viable option for many folks who found it difficult to make time for therapy previously. There are three particular benefits that working with a mental health professional can bring to bear when dealing with procrastination. First, having a regular appointment to discuss these issues creates structure. A common feature of CBT, in particular, is behavioral "homework" assignments that clients work on throughout the week. In having a specific assignment and then a deadline by which to complete it, this can create a helpful structure for getting started on implementing some of the strategies listed above. Second, therapy for procrastination provides accountability. Having someone inquire about your goals week to week and bear witness to your struggles and your progress can provide a helpful boost of motivation for following through on tasks, especially in the beginning. Indeed, a goal for therapy may be to work toward learning strategies for being accountable to yourself, and it is true that having someone else

checking in with you can be a very helpful way to get started. Finally, evidence shows that "in-person" therapy with a mental health professional may offer longer lasting benefits than self-help (Malouff & Schutte, 2019).

Overall, I am hoping that reading this article may have begun to alleviate a sense of frustration or helplessness that can often accompany longstanding struggles with procrastination. There can also be feelings of embarrassment or shame; in discussing the prevalence of this problem and addressing some common misconceptions, there will hopefully be less stigma around procrastination. Finally, try incorporating the concrete and actionable strategies to improve your ability to structure your time and environment, manage difficult emotions, and begin to experience the benefits of positive behavior change. Now is the time.

#### REFERENCES

Abbasi, I. S., & Alghamdi, N. G. (2015). The prevalence, predictors, causes, treatment, and implications of procrastination behaviors in general, academic, and work setting. *International Journal* of *Psychological Studies*, 7(1), 59–66. https://doi. org/10.5539/ijps.v7n1p59

Balkis, M., & Duru, E. (2009). Prevalence of academic procrastination behavior among pre-service teachers, and its relationship with demographics and individual preferences. *Journal of Theory and Practice in Education*, 5(1), 18–32.

Beutel, M. E., Klein, E. M., Aufenanger, S., Brähler, E., Dreier, M., Müller, K. W., Quiring, O., Reinecke, L., Schmutzer, G., Stark, B., & Wölfling, K. (2016). Procrastination, distress and life satisfaction across the age range – A German representative community study. *PLOS ONE*, *11*(2), e0148054. https://doi. org/10.1371/journal.pone.0148054

Bolden, J., & Fillauer, J. P. (2020). "Tomorrow is the busiest day of the week": Executive functions mediate the relation between procrastination and attention problems. *Journal of American College Health*, *68*(8), 854– 863. https://doi.org/10.1080/07448481.2019.16263 99

Boysan, M., & Kiral, E. (2016). An investigation into the interactions between positive and negative aspects of personality, perfectionism, coping, and locus of control: A latent profile analysis. *Sleep and Hypnosis -International Journal*, 53–64. https://doi.org/10.5350/ Sleep.Hypn.2016.18.0116

Cheung, R. Y. M., & Ng, M. C. Y. (2019). Being in the moment later? Testing the inverse relation between mindfulness and procrastination. *Personality and Individual Differences*, *141*, 123–126. https://doi. org/10.1016/j.paid.2018.12.015

Day, V., Mensink, D., & O'Sullivan, M. (2000). Patterns of academic procrastination. *Journal of College Reading and Learning*, *30*(2), 120–134. https://doi.org/10.1080/10790195.2000.10850090 Eckert, M., Ebert, D. D., Lehr, D., Sieland, B., & Berking, M. (2016). Overcome procrastination: Enhancing emotion regulation skills reduce procrastination. *Learning and Individual Differences*, *52*, 10–18. https://doi.org/10.1016/j.lindif.2016.10.001

Ferrari, J., & Díaz-Morales, J. F. (2014). Procrastination and mental health coping: A brief report related to students. *Individual Differences Research*, *12*(1), 8–11.

Flett, A. L., Haghbin, M., & Pychyl, T. A. (2016). Procrastination and depression from a cognitive perspective: An exploration of the associations among procrastinatory automatic thoughts, rumination, and mindfulness. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 34(3), 169–186. https://doi. org/10.1007/s10942-016-0235-1

Flett, G. L., Hewitt, P. L., & Hallett, C. J. (1995). Perfectionism and job stress in teachers. *Canadian Journal of School Psychology*, *11*(1), 32–42. https://doi. org/10.1177/082957359501100105

Gustavson, D. E., du Pont, A., Hatoum, A. S., Rhee, S. H., Kremen, W. S., Hewitt, J. K., & Friedman, N. P. (2017). Genetic and environmental associations between procrastination and internalizing/externalizing psychopathology. *Clinical Psychological Science*, *5*(5), 798–815. https://doi. org/10.1177/2167702617706084

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*(6), 545–552. https://doi. org/10.1016/j.cpr.2012.06.003

Malouff, J. M., & Schutte, N. S. (2019). The efficacy of interventions aimed at reducing procrastination: A meta-analysis of randomized controlled trials. *Journal of Counseling & Development*, 97(2), 117–127. https://doi.org/10.1002/jcad.12243

Otermin-Cristeta, S., & Hautzinger, M. (2018). Developing an intervention to overcome procrastination. *Journal of Prevention & Intervention in the Community*, 46(2), 171–183. https://doi.org/10.1080/1 0852352.2016.1198169

Pychyl, T. A., & Flett, G. L. (2012). Procrastination and self-regulatory failure: An introduction to the special issue. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *30*(4), 203–212. https://doi.org/10.1007/ s10942-012-0149-5

Pychyl, T. A., & Sirois, F. M. (2016). Procrastination, emotion regulation, and well-being. In F. M. Sirois & T. A. Pychyl (Eds.), *Procrastination, Health, and Well-Being* (pp. 163–188). Elsevier.

Rozental, A., Bennett, S., Forsström, D., Ebert, D. D., Shafran, R., Andersson, G., & Carlbring, P. (2018). Targeting procrastination using psychological treatments: A systematic review and meta-analysis. *Frontiers in Psychology*, 9(1588). https://doi.org/10.3389/ fpsyg.2018.01588

Rozental, A., & Carlbring, P. (2014). Understanding and treating procrastination: A review of a common self-regulatory failure. *Psychology*, *05*(13), 1488–1502. https://doi.org/10.4236/psych.2014.513160

Schouwenburg, H. C., & Lay, C. H. (1995). Trait procrastination and the Big-Five factors of personality. *Personality and Individual Differences*, *18*(4), 481–490. https://doi.org/10.1016/0191-8869(94)00176-S

Schubert, W. L., & Stewart, D. W. (2000). Overcoming the powerlessness of procrastination. *Guidance & Counseling*, 16(1), 39–43.

Sirois, F. M. (2015). Is procrastination a vulnerability factor for hypertension and cardiovascular disease? Testing an extension of the procrastination-health model. *Journal of Behavioral Medicine*, *38*(3), 578–589. https://doi.org/10.1007/s10865-015-9629-2

Sirois, F. M. (2016). Procrastination, stress, and chronic health conditions: A temporal perspective. In F. M. Sirois & T. A. Pychyl (Eds.), *Procrastination, Health, and Well-Being* (pp. 67–92). Elsevier.

Sirois, F. M., Melia-Gordon, M. L., & Pychyl, T. A. (2003). "I'll look after my health, later": An investigation of procrastination and health. *Personality and Individual Differences*, *35*(5), 1167–1184. https://doi. org/10.1016/S0191-8869(02)00326-4

Stead, R., Shanahan, M. J., & Neufeld, R. W. J. (2010). "I'll go to therapy, eventually": Procrastination, stress and mental health. *Personality and Individual Differences*, 49(3), 175–180. https://doi.org/10.1016/j. paid.2010.03.028

Steel, P. (2007). The nature of procrastination: A metaanalytic and theoretical review of quintessential selfregulatory failure. *Psychological Bulletin*, *133*(1), 65–94. https://doi.org/10.1037/0033-2909.133.1.65

Steel, P., & Ferrari, J. (2013). Sex, education and procrastination: An epidemiological study of procrastinators' characteristics from a global sample. *European Journal of Personality*, 27(1), 51–58. https://doi. org/10.1002/per.1851

van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, 35(6), 1401–1418. https://doi. org/10.1016/S0191-8869(02)00358-6

van Eerde, W., & Klingsieck, K. B. (2018). Overcoming procrastination? A meta-analysis of intervention studies. *Educational Research Review*, 25, 73–85. https://doi.org/10.1016/j.edurev.2018.09.002

Wohl, M. J. A., Pychyl, T. A., & Bennett, S. H. (2010). I forgive myself, now I can study: How self-forgiveness for procrastinating can reduce future procrastination. *Personality and Individual Differences*, *48*(7), 803–808. https://doi.org/10.1016/j.paid.2010.01.029

### **AUTHOR BIOGRAPHY**



Kathleen W. Reardon, Ph.D. is the Madigan Postdoctoral Clinical Scholar Fellow at The Family Institute at Northwestern University. She has experience addressing a wide range of problems with children, adolescents and

adults. Dr. Reardon takes a problem-focused, skillsbased approach informed by scientific evidence. She works flexibly to tailor her services to her clients' needs, and she often incorporates mindfulness and acceptance based approaches in her work.



The Family Institute at Northwestern University brings together the right partners to support families, couples, and individuals across the lifespan. As researchers, educators, and therapists, we work with our clients and **PARTNER TO SEE CHANGE**.

For more information on The Family Institute or to make an appointment, please call 847-733-4300 or visit www.family-institute.org.