**Resiliency – What It Is and Isn’t**

**Amy House, Ph.D., Alex Mabe, Ph.D., Michael Rollock, Ph.D.**

**Department of Psychiatry and Health Behavior**

**Let’s begin with a better understanding of well-being.** Absence of psychopathology is not equivalent to positive well-being. The two continua model holds that mental illness and mental health are related but distinct dimensions. While one continuum indicates the presence or absence of mental health (e.g., languishing versus flourishing), the other continuum represents the presence or absence of mental illness (e.g., depression, anxiety, relationship instability). A point of emphasis here is that well-being is not just the absence of mental disorder. For in the mental health continuum, a state of well-being can be possible when the individual:

* realizes his or her own potential,
* can cope with the normal stresses of life,
* can work productively and fruitfully, and
* is able to make a contribution to her or his own community.

Thus we may be living without any diagnosable mental illness and yet live with poor mental health (that is, with behaviors, thoughts and emotions that make us feel miserable). In contrast, this model contends that well-being can be enhanced, even when a mental illness is present.



Keyes, 2007, 2008; Lamers et al. 2011

1. **Resilience refers to a *dynamic process encompassing positive adaptation within the context of significant adversity(Luthar, Cicchetti, & Becker, 2000)*.** Therefore, it can be viewed as a very important component of the mental health continuum of well-being as it enables one to cope with the normal stresses of life, but also relevant to the continuing of mental illness in that resilience can help the individual prevent and recovery from mental illness.
2. **Why is this relevant for training in medicine as well as the practice of medicine?** Being a doctor can be difficult – long word days, high caseloads, time pressures, poor sleep, high performance expectations, fears of competency, changing roles, and challenging patients. The work inevitable deals with suffering and even death, and mistakes will be made. A 2012 survey of physicians indicated that the most common physician stresses are: (a) Long work hours with no time to relax and to take care oneself, (b) work/life imbalance, (c) paperwork, (d) financial concerns, (e) not enough sleep, and (5) internal conflicts (Rosenstein, 2012). Not surprisingly, 54% of U.S. physician experience symptoms of burnout (loss of enthusiasm for work, feelings of cynicism, low sense of accomplishment) – twice the rate of the general population (Shanafelt et al., 2015).

 Moreover, physician stress has been associated with important adverse outcomes for the patients that they serve: (a) physician irritability and anger with staff and patients,( b) poor patient satisfaction and adherence to medical recommendations, (3) reduced standards of care (e.g., more likely to prescribe inappropriate medications, reports of increase in medical errors), and (4) worse clinical outcomes.

1. **A survey of physicians not experiencing physician burnout reported a number of resilience strategies that included:** (a) Found job-related sources of gratification, (b) leisure time activities to reduce stress, (c) cultivation of relationships with colleagues, family, and friends, (d) defining boundaries and limiting work hours, (e) proactive engagement with the limits of skills, complications, and treatment errors, (f) cultivating professionalism, (g) self-organization practices, (h) personal reflectiona nd useful attitudes, and (i) spiritual practices (Zwack & Schweitzer, 2013).

**References**

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development, 71*(3), 543-562.

Rosenstein, A. H. (2012). *Physician stress and burnout: prevalence, cause, and effect.* Paper presented at the American Academy of Orthopedic Surgeons.

Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sinsky, C., Satele, D., Sloan, J., & West, C. P. (2015). *Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014.* Paper presented at the Mayo Clinic Proceedings.

Zwack, J., & Schweitzer, J. (2013). If every fifth physician is affected by burnout, what about the other four? Resilience strategies of experienced physicians. *Academic Medicine, 88*(3), 382-389.

**REVAMP Your Professional Experience**

Michael Rollock, Ph.D.

**Relationships**

Intimate Relationships
While medical school (and often the medical profession as a whole) leaves little time to do anything besides work and sleep, prioritizing social connections and engaging in mutual self-improvement with close partners can enhance our well-being.

* Confide in loved ones
* Cultivate relationships with family & friends outside of the medical landscape
* Avoid toxic, unhealthy relationships.

Workplace Relationships

In medical school, there are complex relationships between students, trainees, practicing physicians, and others. Forming positive workplace relationships contribute to a healthy workplace, patient safety, and the well-being of team members.
Research demonstrates that *high-quality relationships* in the workplace are formed when there is mutual positive regard that enlivens colleagues. High-quality relationships exist when there is:

* *Respectful engagement*—reinforce a person’s value and worth
* *Empowerment*—delegate tasks and enable a person to achieve success
* *Trust*—convey your belief in a person’s success and work ethic
* *Play*—find ways to have fun, even in serious environments

Relationships with Ourselves

As medical students and professionals experience the pressures of faultless performance, meticulous attention to detail, and the highest levels of competency—both inside the classroom and in the clinical setting—self-compassion is just as important to becoming doctors as is the compassion we show for our patients. Self-compassion entails three main components including:

* Self-kindness versus self-judgment
* Common humanity versus isolation
* Mindfulness versus over-identification with other’s suffering

Self-compassion involves taking a balanced approach to negative emotions; allowing ourselves to fully experience our emotions, while being mindful and objective. Studies show that self-compassion buffers against anxiety in self-evaluative situations, and reduces self-criticism, depression, anxiety, rumination, thought suppression, and neurotic perfectionism.

**Engagement**

Live in the Now—Engage Your Well-being

The ability to live in the present moment is integral to experiencing well-being. Three ways to find optimal engagement—based on the science of Positive Psychology:

* Create a daily work flow
* Practice mindfulness
* Find your key strengths—and use them.

Flow
Flow is a psychological state that enhances a person’s life and work experience. It is reached when people are able to match their challenges with their unique skills. People who find flow, can fully concentrate on their goals and tasks because they have found a balance between arousal and boredom.

From conducting physical exams to participating in rounds, medical students and professionals need to be fully engaged with assignments and develop a work flow to be successful in their careers.

Six tips to achieving flow:

* Create clear goals for yourself.
* Ask for immediate feedback.
* Take on challenging tasks.
* Get in the zone and work free of distractions.
* Step outside of yourself.
* Work on purposeful activities that are intrinsically meaningful to you.

Mindfulness
Mindfulness in medicine is associated with:

* Greater physician well-being
* Higher quality patient care
* Improved medical decision-making

Stop. Take a Breath. Observe without judgment. Proceed.

 Character Strengths

When we focus on our unique character strengths, we are positively impacting our lives, by becoming more conscious of our personal well-being and how we engage with our colleagues and patients. Before you’re able to apply your unique strengths to medicine, you need to identify what they are. One way to discover your unique character strengths is by using a self-assessment tool like the Values In Action (VIA) Inventory of Strengths—used by researchers and practitioners worldwide. <http://www.viacharacter.org/www/>

After completing the VIA survey, you may see that your strengths are not fixed traits across settings and time. Instead, they are malleable, subject to growth, and based on context. For example, you may see yourself as a risk-taker in your personal life, but when treating your patients, you may be highly cautious and reserved.

Try this exercise to channel your top professional strengths:

* Set aside 15-20 minutes and complete the VIA Survey of Character Strengths.
* Review your results.
* Reflect: Do any of your top strengths surprise you? What about your lower strengths? What would your life look like if you were unable to use your top strength? Do you think that it would be more beneficial to focus on your using top strengths or improving your lesser strengths?
* Find three new ways to use your top strengths this week and write about your experience. Can you use your top strengths to become a better student? A better doctor? A better friend or family member? To overcome some obstacle? To create a positive experience?

Optional: Focus on a lower strength. How does it feel to exercise a strength that may not come as naturally to you?

Optional: Invite a friend, classmate, or family member to take the VIA. Before he/she completes the test, try to identify what you think his/her top 5 strengths will be. After he/she takes the test, debrief the scores together. Were you right about your predictions? In what situations do you notice this person using his or her top strengths in daily life?

**Vitality**

Vitality—A Boost in Your Well-being

Vitality is what enables people to feel awake, alive, and able to thrive in everyday life. Vitality specifically refers to deliberately taking care of our physical bodies and minds through regular physical activity, a healthy diet, and ample sleep. As with relationships and engagement, improving medical professionals’ vitality is a worthy personal goal that may also have important effects for your patients. Since medical care entails helping patients to change their habits and make better decisions about health, including diet, exercise, smoking habits, and sleep, physicians who serve as role models for their patients may be more effective at improving their patient’s health.

Physical Activity
Start moving.
Physical activity is just as important for your physical health as it is for your mental health. The U.S. Department of Health and Human Services recommends that for substantial health benefits, adults need to achieve at least 150 minutes per week of moderately intense aerobic exercise, or 75 minutes per week of vigorously intense aerobic activity. Among other things, increased activity contributes to:

* Lower cases of depression
* Enhanced executive function

Nutrition
Medical professionals are aware of the importance of good nutrition. Nevertheless, you still may have difficulty eating the way you should, because of your on-the-go lifestyles and constrictive budgets. However, developing healthy eating habits now is an investment both for our own health, as well as for our future patients. Research shows that physician’s personal habits are strongly correlated with their tendencies to counsel patients about health practices.

Natural super-foods that are filled with antioxidants and other nutrients are ideal for medical professionals’ working brains. Foods such as cumin, garlic, onions, broccoli, blueberries, pomegranates, spinach, and beets, repair our cells and trigger beneficial stress responses within the body. Foods rich in healthy fats, such as unsaturated fats and omega-3s, which are found in fish (i.e., salmon, cod, and tuna) may be excellent for physical health and brain function, and can lower blood pressure, cholesterol, and neuronal inflammation. Further, vitamin B and folate, found in dark leafy greens such as spinach, citrus fruits and berries, lentils and beans, seeds, cauliflower, nuts, and avocado, are associated with improved memory and processing speed. Vitamin D, important for absorbing calcium and strengthening bones and has many other benefits, can be consumed in fish, as well as in eggs, dairy products like low fat yogurt, and tofu.

Sleep
Sleep is the third factor for maximizing medical professionals’ vitality. Although medical professionals in their pre-clinical years may not be experiencing chronic sleep deprivation that is prevalent among their senior colleagues, classroom work, extracurricular demands, and achievement anxieties may keep you awake at all hours of the night. Now is the time to start working on developing a routine of healthy sleep habits.

In one study, fatigue was cited as a cause of 41 percent of 254 internal medicine residents’ most significant medical mistakes, with a third of those mistakes resulting in patient fatality. Surgical residents have been found to make up to twice as many errors during simulated laparoscopy following an overnight call, and anesthesia residents have demonstrated sleepiness on par with narcoleptics even when not on call in the preceding 48 hours. Overall, after extended periods without sleep, physicians have demonstrated declines in the quality of performance as well as emotional well-being and cognition.

To counteract chronic sleep deprivation, medical professionals and trainees must use their time away from work to improve the quality of their sleep. Research suggests that you disconnect from the digital world (cell phones, televisions, and computers) for at least one hour before bed and sleep in a completely dark room. Artificial light, such as that of 100-watt light bulbs and LED backlight have harmful effects on sleep quality: they disrupt the production of melatonin, which regulates our sleep and circadian rhythms.

Additionally, spending daytime hours in natural sunlight may be just as important as turning off lights during sleep to harmonize our body’s circadian rhythms. Taking a walk outside in the morning while drinking your first cup of coffee may be a great way to jump-start your body and mind. Further by being self-aware about your energy levels and speaking up to supervisors if you are feeling sleep-deprived and unable to perform certain tasks, may be crucial for ensuring patient safety. While caffeine use and napping may be helpful countermeasures to medical professional exhaustion, improving your sleep quality at night is the most effective way to achieve vitality.

Finally, due to chronic sleep deprivation, medical professionals and trainees can develop a sleep and/or anxiety disorder which prevents them from restoring the quality of their sleep. If you think that you might be suffering from a sleep disorder, or if you have anxiety about falling asleep that prevents you from sleeping, it’s important to get assessed and begin addressing these problems. Now is the time to start prioritizing your sleep. It is one of the best gifts that you can give to yourself, your colleagues, and your patients.

**Accomplishment**

Accomplishment and reflecting on Accomplishment builds positivity, strengthens resilience and gives us an idea of what we are good at. If we reflect on past or anticipated accomplishments we can easily experience gratitude, which leads to an upward spiral of positivity for ourselves and others.

Here are a couple ways that Accomplishment contributes to well-being and Resilience:

Savoring Accomplishments Leads to Strengths Identification

Positive Psychologist David Pollay observes that when you reflect on the most significant accomplishments in your life, it is easy to spot which of your top strengths helped you achieve those successes. This makes it possible for you to see a pattern in your life: you will discover that many of your greatest achievements were made possible by engaging your top strengths. Accomplishment helps you to spot the underlying patterns of your personal strengths and how they have contributed to your successes in life. This is dynamite insight about yourself and your abilities - yours to freely use for the next challenge and goal to be accomplished.

Projected Appreciation as a Tool for Goal Achievement

Projected Accomplishment is an excellent energy source for achieving future goals. Yeager writes that people who scrapbook their future goals with illustrations, photos, articles, give themselves a little bit of 'Achievement-savoring-in-advance'. This may help to energize the person to go ahead and better achieve their goals. Similarly, people who scrapbook about past accomplishments give themselves permission to explore and examine their remembered pleasures in their journey. Accomplishment is also about keeping something in store for the times when in-the-moment positivity is difficult to find.

**Meaning**

*“Nothing is more motivating than progress in meaningful work” - Teresa Amabile*

Meaning is the human desire to belong to, connect with, or contribute to something larger than the self. There is a general consensus that meaning has at least two major components: the Cognitive Processing component involves making sense of and integrating experiences; the Purpose component is more motivational and involves actively pursuing long-term goals that reflect one’s identity and transcends narrow self-interests.

While greater meaning and purpose do not always translate into greater happiness (in the sense of positive emotions), they often do, and significantly contribute to a greater sense of overall well-being. Further, engaging in work that one finds personally meaningful has been found to be a protective factor against burnout, helping people to commit to difficult tasks over long periods of time.

The medical profession is perhaps one of the most inherently meaningful vocations that exist. But this often gets lost in mundane, everyday tasks such as focusing on insurance issues, the electronic health record, grant writing, and other tasks that do not tend to feel as meaningful as patient interaction, teaching, research and clinical work. Even when your work is characterized by a sense of mastery and marked by several achievements, it is easy to begin to feel disconnected and even cynical if you for WHY you are doing the work and how such achievements fit with your valued goals or mission.

Here are some ways to promote and maintain a sense of meaning & purpose in your work:

* Attend to the progress you are making on personally meaningful tasks, no matter how small.
* Make sure you understand how your part of the work contributes to the larger mission of your department, the hospital, the healthcare system.
* Create a space where you and your colleagues can openly and regularly discuss the most meaningful aspects of your work, and how these might be expanded upon.
* Bring personal values into your job description. If you’re unsure there is much you'll be able to do to change your daily routine, tasks or projects, then you can find other ways to ignite your feelings of purpose and fulfillment. Think of the things you value the most in life. What are they? Once you have thought about these things, how can you bring them into your work?
* Consider what tasks you are saying “yes” and “no” to and why. While every task will not be or feel personally meaningful or contribute to your sense of purpose, there are some that will actively go against your values or detract from your perceived purpose. Be mindful of the commitments you make.

**Positive Emotions**

Resilience is defined as the ability to grow and thrive in the face of challenges and bounce back from adversity. A range of observational and longitudinal studies support the association between resilience and positive emotions. This suggests that resilient people have optimistic, zestful, energetic approaches to life and are curious and open to new experiences. Resilient people are able to successfully cope with adversity because they use positive emotions to their advantage. For instance, resilient people use techniques like humor, creative exploration, relaxation, and optimistic thinking as ways of coping, all of which rely on the ability to cultivate the positive emotions of amusement, interest, contentment, and hope. Additionally, resilient people are not only skilled at cultivating positive emotions within themselves, but they also tend to be skilled in bringing out positivity in others.

Negative emotions are an inevitable part of the human experience—and certainly medical care. When we rely on positivity in the face of adversities, though, we can protect ourselves physically and mentally against the strains of daily life, including the practice of medicine. Medical professionals should never deny, suppress, or ignore the negative emotions induced by personal circumstances or the daily grinds of work, as they are a necessary part of the human experience. Instead, practice cognitive strategies to cultivate positive emotions so that you can learn and grow from your difficulties.

Here are is an activity to bring about positive emotions when you’re stressed out:

“Three Good Things”

The Exercise:

* Each night for a week before going to sleep, write down three things that went well that day.
* After each positive event on the list, answer in your own words, “Why did this good thing happen?”
* Pay attention to whether your outlook about life events changes as they happen.
* Reflect on whether this exercise made you more attuned to positive experiences as they unfolded.

**Reference:** Feingold, J. H. (2016). Toward a Positive Medicine: Healing our Healers, From Burnout to Flourishing. *Scholarly Commons* 07 October 2016

**Exercises for Increasing Resiliency:**

**Mindfulness and Connecting to What Matters**

Amy House, Ph.D.

**A Little on the Neuroscience of Attention and Awareness:1**

The mind’s default setting is not one of peace and tranquility. Left on automatic pilot, our minds tend to operate with “bottom-up attention” – a narrow form of awareness that arises from the limbic system, whose fundamental purpose is to detect threat in order to ensure survival. In this mode, our focus of attention shifts involuntarily from one perceived threat or unsolved problem to another. Have you ever tried to sit and enjoy a few quiet moments in your backyard, only to find your mind noticing the weeds in the garden and starting to mentally make a list of yard work tasks? This is an example of the natural tendency of our minds to automatically focus on the negative, ignore or minimize the positive, and move into problem-solving.

Another type of attention can be activated with effort. “Top-down attention” is thought to originate in synchronous activity in the thalamo-cortical loop and involves executive control functions of the dorsal anterior cingulate nucleus and dorsolateral prefrontal cortex. Top-down attention involves a high level of present-moment awareness, perspective-taking ability, and the ability to solve problems flexibly and effectively, in light of our values. For example, employing top-down attention allows us to intentionally redirect our awareness in the backyard toward the flowers in bloom, the smell of the tea olive, the sound of bird song, and to reflect on what we appreciate about having a garden.

**Be Here Now: Focusing on Your Breath**

Mindfulness practices are an excellent way to strengthen one’s ability to deploy “top-down attention.” Developing this flexible form of awareness is also essential in being able to regulate the negative emotions that arise in response to stress. Practices involving focusing attention on the breath facilitate this skill. One way to practice:

* Breathe in slowly, 4-5 seconds on the inhale. Hold it briefly, and then exhale. Pay attention to the sensations of your breath as you do. Importantly, notice when your mind wanders off and gently bring it back to noticing the breath each time. You may start with doing this for 3 minutes and build up to 10 to 20 minutes a day. Noticeable benefit is expected with 10 minutes of daily practice.
* Brief Option: Some clinicians have suggested this way of practicing mindfulness in a busy clinic: take three mindful breaths between each patient. On the first breath, notice your thoughts and feelings about the patient you just saw, and let them go. On the second breath, attend to your own body sensations. On the third breath, consider your intentions for the next patient encounter.

**Appreciative Inquiry2**

This exercise is about intentionally disengaging the default mode of your problem-solving mind, and practicing appreciation of your work life as if it is a sunset and not a math problem. Walk yourself through your work day, either in reality or in your imagination and note to yourself: What is going well? What enhances your well-being? What detracts from your well-being? When you notice your mind slipping into problem-solving, bring it back. Commit yourself to just noticing for these moments, and leave problem-solving for another time. See what you can find to appreciate in your work life. Ask yourself if you can accept weeds as a part of what happens when you garden.

**Welcoming Unwanted Guests3**

Often when difficult thoughts, memories, or feelings arise, our problem-solving minds often get to work trying to suppress, control, or avoid them. This struggle can deplete our energy and drive us into avoidance patterns that ultimately reduce our well-being. This brief exercise can help us practice allowing ourselves to have the inner experiences that we already have, without struggle, while behaving in ways that align with what’s most important.

1. Notice the thoughts, feelings, or memories that have shown up. Locate the feelings in your body and notice the sensations.
2. Name your thoughts as thoughts (“I’m having the thought that…) and your feelings as feelings (“I’m noticing a feeling of…)
3. Make room for these inner experiences. Just as you could choose to set a place at your table for a guest, even a guest you didn’t like, you can choose to make room for these inner experiences, without struggling to avoid or escape them. Imagine that you can breathe into the sensations in your body and make space around them, for them to be as they are. See if you can offer yourself some kindness in this moment when the thoughts and feelings are difficult.
4. Expand your awareness to what else is here in this present moment. Notice what else you are feeling in your body. Notice what else you can see, hear, and touch. Your thoughts and feelings are just part of what you are experiencing. Notice that.
5. Connect with what matters. Ask yourself, “What actions would I take now if I were behaving as the person I most want to be?”

**Recommended Reading**

*In this moment: Five Steps to Transcending Stress Using Mindfulness and Neuroscience*. (2015). By Strosahl and Robinson. New Harbinger.

*Real Behavior Change in Primary Care: Improving Patient Outcomes and Increasing Job Satisfaction.* (2011). Robinson, Gould, & Strosahl. New Harbinger

*Your Life on Purpose: How to Find What Matters and Create the Life You Want*. (2010). McKay, Forsyth, & Eifert. New Harbinger.