

The Science of Spirituality: Mental Health, Resilience, Fitness and Readiness

Transcript: US Army Resilience Directorate Outreach Webinar

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Presenter:

Lisa Miller, Ph.D. Spirituality Mind Body Institute, Columbia University

- Host: [00:00:01](#) Good morning, Dr. Miller. Good morning, it's so nice to be here. Thank you. It is. I'm glad you're on and we can hear you and we can see you on the, your webcam. And we'll get started in just about two minutes. Thank you.
- Dr. Lisa Miller: [00:00:19](#) Great. Are our, is our audience with us?
- Host: [00:00:24](#) Our audience is with us right now. We have 113, 114, numbers are going up as we speak. We'll have a few folks joining us as we approach the top of the hour. So if you, if you want to go ahead and just put yourself on mute and then you'll hear me come in with the intro in just a couple of minutes. Welcome to the Army Resilience Directory outreach webinar for September. We'll be discussing spirituality with Dr. Lisa Miller. At this time, all participants are in a listen only mode. However, you can ask questions at any time by placing them in the chat box. There'll be several opportunities for questions throughout the webinar and we'll have time at the end as well, but don't wait, ask your questions at any time. Please know the views of ARD outreach webinar presenters are their own and are not endorsed by the department in the Army or the Department of Defense.
- Host: [00:03:17](#) This month our special guest is Dr. Lisa Miller. Dr. Miller is the New York times bestselling author of "The Spiritual Child" and a professor in the clinical psychology program at Teachers College, Columbia University. She is the founder and director of the spirituality mind body Institute, the first Ivy league graduate program and research Institute in spirituality and psychology and has held over a decade of joint appointments in the department of psychiatry at Columbia university medical school. Her innovative research has been published in more than 100 peer-reviewed articles and leading journals, including cerebral cortex, the American Journal of Psychiatry and the Journal of the American Academy of Child and Adolescent Psychiatry. Dr. Miller's the editor of the Oxford University press handbook on psychology and spirituality, founding co-editor in chief of the APA Journal, Spirituality in Clinical Practice, and elected fellow

of the American Psychological Association and the two time president of the APA Society for Psychology and Spirituality. A graduate of Yale University and the University of Pennsylvania, she has served as a principal investigator on multiple grant funded research studies. Dr. Miller speaks and consults around "The Awakened Brain" and "The Spiritual Child" for the US military, businesses, including tech, finance, human resources, and sales, personal development, faith-based organizations and universities, and for mental health and wellness initiatives. Please join me in welcoming Dr. Miller to today's ARD outreach webinar. Dr. Miller, good morning.

- Host: [00:05:05](#) I think you're on mute.
- Dr. Lisa Miller: [00:05:07](#) Good morning, it is a delight to join you. Thank you for including me today.
- Host: [00:05:14](#) And good morning. Great.
- Dr. Lisa Miller: [00:05:19](#) So, I'm very honored to be included. I think what you're doing is such a high impact important forum. So I'll jump right in. I join you as a clinical scientist and in particular for 25 years, I've looked at the impact of human lived spirituality on other realms of our lives: our health, our performance, our wellness, our ethics, as well as our mental health. So today I'm going to talk about taking the lens of science and shifting it, rotating it, to look quite specifically at those threads of lived human, spiritual life that have been shown through these two decades of science to have the greatest degree of impact on the rest of our lives. And they are, of course our personal spiritual life in connection to our higher power, no matter what word that may be and that our connection to our higher power, God, Hashem, Allah, the universe might be shared into the two dimensions of lift spirits for life.
- Dr. Lisa Miller: [00:06:27](#) Let's start by defining our terms. Where are we? Where are we right now? We are in an epidemic. We are in an epidemic of what might be called the diseases of despair. The rate of death by suicide has surpassed the rate of death by auto accident in the United States. We have never faced as elevated rates of addiction, depression, anxiety in all decades of life, but in particular, in late adolescence and emerging adulthood, the 18 through 25-year-old. Now, particularly as accentuated by COVID, but even before, is drawing on very, very, very difficult conditions unprepared. So as we have seen this sharp acceleration in inner suffering, so too we have seen an equally sharp decline in personal spirituality in family faith tradition,

and the two indeed, statistically, go hand in hand creating what I might call the perfect storm.

Dr. Lisa Miller:

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For the 18 through 25-year-old, how do we help him or her get up on top of this tidal wave and instead of being swallowed and pulled under, learn to be curious, navigate, and actually surf on top. What do we know through the lens of science? Again, let's define our terms. Here's our epidemic, what are our inner resources? Well, our culture about 40 years ago in the very good attempt to be inclusive threw, if you will, the spirituality out with the bath water, when we silenced most talk of religion in the public square. Now religion and spirituality are not the same thing. Many people will say I am spiritual and religious in the United States, about two-thirds of people will say, I, my deep spiritual life, my connection with my higher power and that it might be shared. My sense of love and unity and deep transcendent awareness is held in the prayers, the ceremonies, the community, the text of my faith tradition. Two thirds of people in our country may say that about 30% of millennials and fewer with each older generation will say, well, I am spiritual.

Dr. Lisa Miller:

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They're in the yellow and only yellow zone here. I am spiritual, but I am not religious. For me my spiritual life is felt in nature, in music, with my family, whether or not someone is religious, the extent to which there is any of the gray here represented in gray bubble, religion in and around and embracing their spirituality. What the science tells us is that every single person is born with an innate capacity for spiritual life. How do we know this? We look at twins raised together, twins raised apart, and we factor out the degree of commonality as a function of shared genes, shared environment, temperament, whether we're reactive or laid back, whether we're introverts or extroverts. Temperament is about half innate, half socialized. The capacity through which we experience spiritual life is one-third innate. It is a biological endowment on day one. Every baby is born a spiritual child, and yet two-thirds socialized means the extent to which our parents, our grandparents, our community, our pastor, priest, Amman, Rabbi, those in the first two decades of life helped cultivate our natural endowment has a great deal of impact.

Dr. Lisa Miller:

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Now where this capacity, and I'm going to go back one more time to our overlapping Venn diagram. So we see here, the spirituality represented in yellow, this is our birthright. Now many people will say, well, I don't know if I'm so spiritual, well, we are endowed with this capacity. It has neural correlates, which we'll see it has enormous impact on our lives, but the two-thirds embrace can really lay this muscle, if you will, to

atrophy. One of the ways that our natural spiritual core can be embraced is by religion. Religion over here, in the gray bubble is 100% environmentally transmitted. It is the gift of our ancestors, it is the gift of our community, it is taught. Religion can be part of that rich embrace of the spiritual core, but I'm emphasizing this because after so many decades of being a non-conversant society, we were truly silenced when it comes to spiritual and religious life in many settings.

Dr. Lisa Miller:

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Our culture perhaps has been a bit tone deaf on the difference. And I want to emphasize that today here, now we are speaking about spirituality, whether or not someone has a personal embrace of religion in their life. Many people prosper enormously from the embrace of religion. Many people experience spirituality, independent of religion. So forward we go, what can the scientist then say about spiritual life and the human course? Well, scientists of course are not theologians. We cannot comment on the deep structure of spiritual reality, but clinical scientists have many methods through which we can indeed explore the impact of lived spirituality on the human life. We have MRI studies, we have genotyping studies, long-term clinical course studies, high-risk stories, many, many different lenses, if you will, that we can take to examine how spiritual life affects us.

Dr. Lisa Miller:

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The 18 through 25-year-old is a great, you know, as you're well aware, highly represented in the Army. The 18 through 25-year-old has never faced, as we've talked about, this storm this perfect storm of the diseases of despair, and yet the challenges that the Army faces right now around mental health and wellness, the challenges around suicide, the challenges around relational ethics. Whether you're talking about the harmful behavior represented through SHARP or through extremism and racism, relational ethics. All of these challenges that are faced in the Army are not the Army's challenge alone by any stretch. The Army has a slice of American pie, and these are our American common challenges in every generation. We have faced challenges and found a way through. Right now, we are seeing whether we're talking about higher education entry-level jobs, these very same challenges. I work for a large national company and they say the fragility in our entry-level employees 18 through 25 is so great that we can't even get them to turn in their weekend reports on what worked and didn't because it's so annihilating for them. It's so painful for our young adults to not do well. That failure really speaks to the very core of who they are better to even be fired or not even try than to try and be seen to not do well.

Dr. Lisa Miller: [00:14:26](#) Another example, higher education. We had nine suicides on our own campus of Columbia University in one year, nine publicly represented suicides. This was not the case in other decades. And so, whereas in the past, it has not been the business or the call of institutions that receive our young adults to engage the spiritual core. It is now a necessity to simply have a functioning healthy and performing young adult that our institutions transform from transactional to transformational relationships that one's boss, one's colleagues, one's fellow coworkers at every care, but certainly around entry-level positions, need to support adult development because the young adult comes not yet grown up.

Dr. Lisa Miller: [00:15:20](#) The Army is doing this. The Army is leading the way with data-driven, science-based approaches to supporting the spiritual core. Just as we have physical fitness for the physical core, the Army has identified paths to spiritual fitness for the spiritual core, so that we might get up stream of decision-making of relational ethics, of personal performance and identity, and even mental health and wellness. In this sense, we are very, very far upstream of what could otherwise be downstream, the harmful behaviors. Army has done something quite innovative, which is use the roadmap of the science, this roadmap of the science to make meaningful institutional transformation. And how has the Army done this? It's not for another program. No one's being asked to administer program X and then check the box along point 1, 2, and 3. This is not another program. Through educating and equipping and empowering each member of the Army and his or her own professional zone of contribution, so that each professional's acumen and training might be that much more expanded to be empowered and authorized to engage the spiritual core.

Dr. Lisa Miller: [00:16:47](#) Through a roadmap based on science, again, a data-driven approach. So let's get back to this roadmap of science, you know, the first and most important point, the big yellow S circle, the spiritual core, is a biologically based human capacity as we are physical, emotional, and cognitive beings. So too, we are spiritual beings. How does the science now, this roadmap, address the crisis of young adults in our country? Our shared American challenge. Here's very good news. 18 through 25 marks a window of rapid growth, a biological clock goes off. And just as we start to look very different when we are 25, as compared to how we looked when we were 18, physically, we fill out, we're stronger, our face changes. So too, we rapidly change spiritually.

Dr. Lisa Miller: [00:17:45](#) The two go hand in hand. We know this through the lens of twin studies, once again, longitudinal twin studies that look from middle to late adolescence into emerging adulthood and show a 50% increase in the heritable contribution. There's a surge from the inside out. And the young adult wants to know what is my meaning? What is my purpose? Actually, what is the meaning, the purpose? And everything you ever told me, mom, dad, pastor, priest, Amman, this process of emergence, is it really true? These questions of my head, as I might test them against the knowing of my heart, my own inner spiritual compass. This process of the "booting up" of spiritual awareness is known across cultures. Whether we're talking about confirmation, bar and bat mitzvah, the Inipi, the sweat lodge, every culture through time marks spiritual emergence as a time of coming of age of coming into full adulthood.

Dr. Lisa Miller: [00:18:46](#) We now know, through two decades of science, that just as through time, our human wisdom has shown us to support the spiritual core during this high impact time of rapid growth. When the spiritual core is supported, there is nothing in the clinical or social sciences as profoundly protective against the diseases of despair, addiction, depression, and even suicidality. A teen, a standard deviation, a young adult, a standard deviation above as compared to below the mean and the tendency to say my personal spirituality, the yellow S circle, perhaps within their faith tradition, perhaps outside their faith tradition. Whether they are Jewish, Hindu, Christian, Catholic, Muslim, or spiritual, but not religious. My personal spirituality is highly important to me is 80% less likely to meet DSM criteria for addiction. 80% less likely to become addicted going through the window of risk for lifetime course of addiction onset emerging adulthood, late adolescence, 60% less likely to have major depression, major depression, as you know, is not just being sad.

Dr. Lisa Miller: [00:20:11](#) Major depression is defiant, hard to take orders edgy with one's fellow Soldiers, less likely to take risks. And in a study of studies, a meta analysis, a study of studies by Wuhan colleagues over 2,000 tragically completed suicides and 5,000 matched controls match for demographic diagnosis. There was a 62% decreased relative risk of completed suicide when there's a strong personal spirituality, and that goes up to 82%. And four-fifths less likely to complete suicide when spiritual life is shared, whether through the squad fellowship, the minion, the Sanga shared spirituality is foundational to formation of the spiritual core for the emerging adult and young and adolescent. We adjust physical fitness for the physical core, just so we need spiritual fitness for the spiritual core. There is nothing that's

robustly protective against the diseases of despair. If you told me there was a pill at the Walgreens that I could get to protect my Soldier from taking his or her own life to protect my Soldier against addiction, I would line up, I would sleep out all night.

Dr. Lisa Miller: [00:21:35](#) I'd sleep out for a week for that pill and yet this in our birthright, if realized. And we know through the roadmap of science ways to support the spiritual core. Where the rubber hits the road, of course, is in coping with trauma. In a study of 3,000 plus that by science colleagues, TSAI, we see this pattern along the X axis of increased, increased, increased levels of trauma. Everyone in this study, every vet in this study met criteria for PTSD. Increased trauma along the X axis up the Y axis are units of growth, trauma and growth go hand in hand, in fact, 75% of vets to meet criteria for PTSD at the same moment report meaningful growth. But that said, what do we notice about the shape of this curve? Well, in the first half to two-thirds, the more struggle, the more growth. We don't get better and then grow, but it is through struggle that there is an invitation for growth, a catalyst for spiritual awakening.

Dr. Lisa Miller: [00:22:52](#) And in fact, Tdeschi and colleagues identified the four factors that helped get us up on top of that curve. And they were indeed access to the trauma and that we can put it in words. The ability to share the experience, and then fourth and foremost shine the spiritual light of personal, whether we say, God, Hashem, Allah, the universe, shine the illumination of spiritual awareness onto the old, painful, regurgitated memory. And with the spiritual awareness, the spiritual comes a reshuffling of meaning and a renewal that speaks oftentimes more deeply to our heart. Currier and colleagues, Currier himself served, identified what post-traumatic spiritual growth. When we bring the spiritual core, we see not only recovery from trauma but renewal. We are more able to look in the eye, those people who before we felt unworthy before our parents, our children, our spouse, our fellow Soldiers. When we bring this spiritual core, remember the fourth essential pillar to not just resilience, but renewal through trauma, we actually can grow closer to our higher power and appreciate our lives more.

Dr. Lisa Miller: [00:24:13](#) There's a series of studies. I refer you to Currier has done a number, Pargament has done some, but all of them show that recovery and renewal through trauma is for many people, a process of post-traumatic, spiritual growth. Can we, knowing that, build our arc before it rains? Can we in a path of prevention and wellness, support the spiritual core so that after for instance, a design failure or a tough day, a commanding company commander sits down and says today was tough. Or

the chaplain says in a universal way, "Today was tough, Soldier, what does your spiritual core say about this?" And in this way, he or she can start to give voice, remember the spiritual life is present and that it might be shared in a way that is inclusive, pluralistic, each person speaking in the first person, it's not a theology discussion.

Dr. Lisa Miller:

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It's a, what does your own heart share? And in this way, we have found a way to embrace spiritual diversity. We have inclusion around race, around gender, around orientation. The Army is leading the way in using science to have inclusion around spiritual diversity. First person, I want to get to know you, what does your spiritual core say? And with that comes protection against trauma and the pathway to renewal. Where is the spiritual core and then we'll pause. We published this in JAMA Psychiatry in 2014. The broad and pervasive regions you see here in red are effectively the neural docking station of spiritual awareness. They are regions of perception, reflection, and orientation. They growth thick. They effectively have a stronger muscle. There's greater cortical thickness against these regions and people with a sustained spiritual life day in and day out building the habit of seeing into life.

Dr. Lisa Miller:

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When difficulty comes, when disappointment comes, when trauma comes building the muscle, the spiritual response to suffering. And what we see is when people recover through times of despair, depression, trauma, through developing stronger cortex across these regions of spiritual awareness, they are neuroprotected against subsequent episodes of depression. So we are talking about realizing our innate human endowment for spiritual awareness through times of suffering or through prevention that will allow us new strength. It arms us against deep episodes of depression and trauma. And after we have a moment to converse, we'll see that it is actually foundational what I'm calling awakened awareness to our development, wholeness and performance. In part two, we'll talk about performance. To recap, part one, we have a natural endowment for spiritual life it surges in late adolescence and emerging adulthood. It can be supported and if it is, it is our greatest source of resilience and protection against the most prevalent diseases of despair, addiction, depression, and even suicidality. There is a neural seat of awareness, I call it awakened awareness. It's a seed of transcendent, spiritual awareness. It grows strong like a muscle by way of analogy marked by cortical thickness. And when this happens, we are neuroprotected against subsequent episodes of depression. Girded and armored against the next precipitant of an unwanted event. And we'll

see in the next section, life is far more expansive and we are far stronger and more capable to perform. Questions? Discussion.

Host: [00:28:14](#) Folks, this is a great time, if you haven't already, to place a question in the chat box on the first half of the presentation. Dr. Miller, as we're going along, and some of the slides cited the research and I know that you've been a big part of much of this research. But there are a couple of questions just if you could unpack that a little bit, you know, what interested you, what started you out on that research? What were you looking at to come to these conclusions? And then specifically some of the key studies or the key insights, those "aha" moments for you. I don't want to go down a rabbit hole, but several people were asking about the actual studies themselves.

Dr. Lisa Miller: [00:28:51](#) Wonderful. So the very specific studies are all referenced in "The Awakened Brain," in the back, it is very clearly referenced. And I, and I quite deliberately raise that point here because you can go on Medline or Google Scholar and pull up the precise study and read the prime. You know, the first published article in 2014 on the neural correlates of spirituality and its protective effects against subsequent depression. You can go on Google Scholar and pull up our 2012 article greatest, and I will answer your question, showing the impact of spirituality and the lifetime course of clinical depression. So in the back of "The Awakened Brain" are a number of references as well as their stories and practices and other things, too. But the science is documented. And I'll answer your question in the time we have here, which is to share the path into this work.

Dr. Lisa Miller: [00:29:50](#) I was a student of Marty Seligman at the University of Pennsylvania. He was my mentor, my doctoral mentor, and I absolutely loved Marty. We would walk once or twice a week for an hour around West Philadelphia, right at the time he was developing the positive psychology movement. And it would often, after an hour of thought and reflection, culminate in sitting down and having a cinnamon bun. We were very, very good colleagues and friends to this day. And one of the things that Marty emphasized so beautifully is that we have a choice in how we use our brain. We have a choice in our, he at the time focused on optimism versus pessimism or the engagement of our character strengths and values. We have a choice in how we cultivate ourselves. So that was a very deep form of learning that led me to think, well, we do have a choice in how we put our hand on the gearshift and choose to engage our inner life.

Dr. Lisa Miller: [00:30:48](#) And it seemed to me that that same hand in that same gearshift could be used to move over into a seat out of what is really a

important side of our lives, which is tactical and strategic. What I call achieving awareness, the ability to implement into an expansive form of transcendent awareness that is held and understood by our faith traditions that is evoked by great music and art that is part and parcel of a deeper connection into a common thread and then through all life. And so I very much a student of Marty's at that time carried forward into my postdoc at Columbia in the next 25 years of research as a Columbia professor, this notion that we have a choice in how we deploy our inner life. There is a hand, there is a chairman of the board, the higher, you know, there's the commanding general, there's a part of us up there that can choose how we engage, our neural mechanisms, our inner life.

Dr. Lisa Miller:

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And I took on as a postdoc, the question of what then are these ways. I was, my first several papers looked at risk and resilience. And in particular, I was interested in what could change the course of our whole lives if we implemented or engaged risk or resilience factors going through the window of onset, the window of risk, which was late adolescence and emerging adulthood. Most disorders that are lifetime with us for most people start in late adolescence emerging adulthood. There's very few addicts that didn't start early and there's a lot of depressives have their first experience in you know 16 to 26, whenever onset. And I was, as I was examining parenting and bonding and the character strengths and virtues and many different forms of risk and resilience, I noticed at the very same time down the hall, in my clinical work, that those teens who had a spiritual response to suffering who had lost a parent or suffered, I worked on 168th Street and Broadway at Columbia Medical School.

Dr. Lisa Miller:

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Many of them had faced enormous trauma, the murder of their parents, but some were refugees. When there is a spiritual connection, connection to God, the higher power, whatever that family's tradition might be, or just a deep, deep, spiritual connection into the unit of thread, through life loving guiding presence through life, the path of recovery was entirely different. And having seen that plain as day in my patients, I went back down the hall to my lab and I took the lens of science and I shifted it over and asked the question through standard risk and resilience, epidemiology research at the time. This is in "The Awakened Brain." I tell these early stories in the beginning and you saw the protective benefits were just blinding. You don't see something four-fifths protective. Normally we jump up and down and we publish an article because there's a 10% decreased relative risk, maybe 15, the protective benefits of spiritual life are three, four times.

- Dr. Lisa Miller: [00:34:04](#) Those of anything else that is normally examined in clinical science. And so it occurred to me that yes, this work was essential to a comprehensive, complete engagement of the whole person. And the spiritual core simply could not be disintegrated from the patient or what you had indeed with disintegration was unhealthy. Perhaps even though, as iatrogenic harm by leaving spirituality out of treatment and recovery, were patients being deprived of their greatest resource and a look into a whole life could the spiritual course Currier and Pargament went on to show really be the missing piece in how to move simply out of this sort of chronic, you know, five years, 10 years, 15 years in, in revolving door treatment to a deeper relationship with life that is whole, that is buoyant. So that's how I got into this. And since then technology caught up with us and we were able to do MRI studies.
- Dr. Lisa Miller: [00:35:05](#) In "The Awakened Brain," my favorite study, the real breakthrough study was when we could take that finding from epidemiology, which is of all the dimensions of spiritual life. It's a personal connection. I talked to God and I feel and know an answer. I look into nature and I know I am one with all life, whether it's in a unit of sense or a dialogue with God or in our rich indigenous traditions, I feel God's presence or spirit. And then through crow and wind and water. The neural seed of awareness, the red brain, as you saw, it is the most protective of all our human capacities. When we could take that finding from epidemiology and operationalize it, this was just done in the past few years together with my colleagues at Yale Medical School, we took that finding and we basically created a task and a scanner, so that live action.
- Dr. Lisa Miller: [00:36:00](#) We can see someone in deep engagement with their higher power and see what the neural correlates were, see what their awakened brain looks like, see how their choice to put their hand on the gear shifting. The engagement to higher power evoked, the neural correlates of the awakened brain. We were able to see, you know, all the different lenses, the levels of analysis and science come together. That's really, that's about two-thirds, three-fourths of the way through "The Awakened Brain." But that study was the study that put epidemiology into live action fMRI research and allowed us to know at the level of our inner equipment. What indeed that red brain, the neural docking station is that is so powerful, 80% decreased relative risk of addiction suicide in terms of our health and our wellness.
- Host: [00:36:56](#) Thank you, Dr. Miller. The color-coded, the brain charts speaking about that, you know, a number of Soldiers between Afghanistan and Iraq have suffered injuries, including traumatic

brain injuries, you know, suffering from injuries from IEDs. And have you seen anything when that when a Soldier has a TBI that can affect, or how to assist with development of spirituality in those Soldiers?

Dr. Lisa Miller: [00:37:22](#) So there is so much research in need, and I would be more than honored to join the Army in doing this. Looking at recovery from trauma and from TBIs, so that there's much needed research, but we can connect the dots on what data we have. There is research done that when the specific regions and in particularly the parietal within the red brain, undergoes surgery, there is snap degenerates, sort of new neurons are made and spontaneously people start to have, again, the antenna, the equipment to have spiritual experiences. So someone may have really been quite atrophied in the muscle of spiritual awareness and yet when there is regeneration or stimulation of the parietal, they start to develop once again, the equipment, the docking station, and spontaneously start to have spiritual experiences. Your question also seems to carry the question of what happens when the brain is severely injured and damaged.

Dr. Lisa Miller: [00:38:23](#) And as we know, there are ways in which we regenerate and ways in which regeneration can be very slow or incomplete at times. So, the general principle of course applies, but that said, there is some evidence that there is a regenerative capacity in spiritual engagement that is quite pronounced. And there are other regenerative capacities too, but the one around spiritual awareness is quite pronounced. And it really gets into a much bigger, profound discussion about what is the brain. Is it a docking station for consciousness? Is it one in the same with consciousness? A very outdated 20th-century view is that it is only a machine, just like an automobile factory from the 20th century that sort of builds thought. And well, certainly the brain can build thought that is only one use of the brain. The brain can also receive it can, it can, you know, there's a much, very big discussion here, which I'm so grateful, that you've tapped on because "The Awakened Brain" is not a case for biological reductionism.

Dr. Lisa Miller: [00:39:29](#) It does not say the brain makes spirituality uh-uh. What this says is there a neural correlates that go hand in hand with spiritual awareness and whether this is a docking station or an antenna of spiritual awareness, whether it is a materialization or reification of spirit or consciousness. Now there is absolutely nothing that neuroscience has done to be sure of any of these models, but there is enough evidence to know that the notion of the brain is merely making thoughts, biological reductionism, that is an outdated model. There's enough evidence. I'll give you

a study, in some by Echteroff. Echteroff put a patient in one MRI and then down the hall in intern at another building, there was a second MRI with the spiritual healer. This was a traditional healer. And as the traditional healer started to do his or her work, a predictable pattern came on the MRI, a certain pattern.

Dr. Lisa Miller: [00:40:25](#) And then within an instance at the other location, the patient showed the identical pattern in his or her MRI. It was a case for non-locality of consciousness. It was a case for the brain as an antenna or a docking station of consciousness. This has been looked at by other people. Andy Newberg shows that if nine people are in a state of deep prayer and a 10th walks in, remember that spirituality should be shared, the 10th person more rapidly moves into a state of prayer as marked by mirror neurons. And he shows this through MRI studies, he freeze frames that moment and puts them in the MRI. So, there is enough science to know that, that we are conductors. We hold, when we pray together, when we're in meditation together, when we are a squad, when we act with great sacrifice and brotherhood and sisterhood and love, we are invoking a spiritual presence that is shared.

Host: [00:41:27](#) Thank you, Dr. Miller. I think in the interest of time, we've got a number of questions, but I'd like to save them for the end of, and perhaps you'll answer some of them in the second half of the presentation, but we'll capture all of those for the end.

Dr. Lisa Miller: [00:41:43](#) Forward we go. Okay. So, we have looked at the innate capacity for spiritual life. We have seen its neural correlates and its great impact when there's cortical thickness or strengthening of this muscle on health and wellness and recovery resilience. Let's now look at the upside. Okay. And to do this, I'm going to invite you into a reflection of the character strengths and virtues, grit, optimism, the qualities that both have inherent value. It is a virtue to have grit, it is a virtue to have optimism and also provide good traction with performance, with success. When we persist, we succeed. When we're optimistic, we have more opportunities. And I want you to consider a Soldier, maybe a junior Soldier, 18 through 25, who's had enormous optimism. And now a Soldier with great commitment. And now one with grit. How many Soldiers are you thinking of?

Dr. Lisa Miller: [00:42:52](#) Very often people say one, although they've known many fantastic hardworking Soldiers or someone who pops, he or she was loaded up with all the character strengths and virtues. And this is why the person you were thinking of is up here on the blue line. As we look across the x-axis, meaning grit, optimism, gratitude, forgiveness, and these inductively derived organic

categories. For those who love details, we use latent class analysis to generate organic categories across 5,500, 18 through 25-year-olds. We saw that the very same people here in blue that are high in meaning, they're high in grit and in optimism and high gratitude, they're high in everything. So the character strengths and virtues might best be understood as a singular entity of virtue of character. And similarly in red, we see people who are low in everything and we need that Soldier to perform just as much.

Dr. Lisa Miller:

[00:43:56](#)

And we need to count on that Soldier just as much in the squad. The green folks are in the middle. Whether I am on the blue, green or red line, I am high, medium or low in character. It is a broad foundational. Now there might be variants. I might have a little more grit than I have optimism, but I am basically high in character and virtue. And to the extent that I am high in character, that I am a person of deep character and you know me, you know, yes, that woman is a woman of character, that man is dependable. True, of course he persists. Yes, he is great, he's a man of character. For 85% of young adults we have as much character as we have daily spiritual awareness. Spiritual awareness and character go hand in hand. Why? This is on page 246 of my other book, "The Spiritual Child," which also has referenced this in the back. Let's look at coming of age with, and without the spiritual core. Who am I? Well, without the spiritual core, I am the smartest in my squad. I scored 96. No one else was over an 85 on that last test. Who am I? I'm the strongest in my squad. I benched 210, no one else benches over 180. Who am I? Actually, I'm not the smartest. I'm not the strongest. I am my performance. Who am I? I am my parts and my pieces, I am my abilities.

Dr. Lisa Miller:

[00:45:20](#)

Well, the problem with that is that I might be the strongest, but today I gave it everything and I wasn't strong enough. And I failed my squad or I am the strongest and today I gave it everything and I was injured and I'm not so strong. Maybe I'll never be so strong. Who am I? And this very shallow view of oneself is only being our performance, parts and pieces. It's very, it's mechanistic. It's hardcore materialism. I am no more than the pieces of my machine is one of great fragility. And hence, I get to the 18 through 25-year-old, who won't even submit his or her past week's performance because it's better to be fired than to be unworthy. There is nothing in the germ of my being worthy if I have failed. Or I might even avoid trying, I might not even give it my all or engage because to fail would be so annihilating.

Dr. Lisa Miller: [00:46:16](#) Let's tell the story another way. What if who you are is you are a soul on Earth. You have a spiritual core, you have inherent dignity. You are made of life itself. You are a child of God. Whatever language you may be, what is it to be strong? What is it to be smart? Those are endowments through which to carve my calling, my contribution, my purpose, but that is not who I am. So on the day that indeed I'm strong, but I wasn't strong enough that is profoundly disappointing. I did fail my squat and I am deeply bereft, but it is not annihilating of who I am. It is noise on the larger trajectory of my calling, my purpose of service. My calling, my purpose to protect. My calling, my purpose and brotherhood or sisterhood. It is an unfortunate day. It is noise along the trajectory.

Dr. Lisa Miller: [00:47:13](#) Let's take this again outside of the Army, per se. This is our shared American challenge. In Palo Alto, right along the train tracks, following a cluster of suicides right outside of the high school a fence was put up. Because if you can delay a young adult for five minutes from taking his or her life, they are unlikely to do it. The fragility in our American challenge facing young adults and emerging adults adolescents is so pronounced that we have had to institutionally get ahead of this, put up fences. Well, can we get further upstream as the Army is doing in this data-driven approach and build the spiritual core? Let's talk about relational ethics. If I'm a soul on Earth, then you're a soul on Earth. And our relationship is about interest, encouragement, brotherhood, sisterhood. I am not particularly looking at your zipped up by a body suit.

Dr. Lisa Miller: [00:48:12](#) I'm interested in your unique experience. We are magnificently, richly diverse, and we want to know each other, but how can we hear each other's stories through the common human heart? We are both unique and different. And we are one, we are both our own passer on of stories and we are Army family, sisters and brothers cut from the same cloth. So this capacity, it's actually the parietal putting in and out hard boundaries in the red brain, is the ability to feel and know each other as souls on Earth, sisters and brothers go to the mat for each other, more loyalty, more devotion, more sacrifice. And at the same time, of course embrace our magnificent diversity. This is an understanding that to really know you and care to know you, we use one heart and I do want to hear your story of how you're different and what you've experienced. But I want to know that as my sister and as my brother. This is a pathway of unit of ethics. It is so far upstream from racism and extremism. It is so far upstream from sexism and sexual assault. This is a realization that we are both one and distinct, profoundly protective against the harmful behaviors.

Dr. Lisa Miller: [00:49:31](#) So what is the spiritual core? It's the force multiplier we've seen. It is protective against addiction, depression, and even suicidality. It is foundational to not just recovery, but renewal. It is the seat of persistence, grit, optimism, character. It is the shared awareness of sisterhood and brotherhood in relational ethics, very far upstream of the harmful behaviors. And it is something that we can build in one another by listening, taking an interest and using relational culture. It is not another program to support the spiritual core. Equip, educate every single Soldier in his or her band of professional expertise so that the challenges and the opportunities can be faced at the level of the whole Soldier, FM 722, the whole Soldier. This is spiritual readiness. And again, we all have this science-based. If it is developed in the 18 through 25-year-old in this highly sensitive developmental window of impact, it is his or hers for the rest of their life. With 90% stability, it is there for the rest of his or her career in the Army. And when they go out into the country, you have seeded our country with whole, ethical, healthy people. Thank you.

Host: [00:51:12](#) Thank you, Dr. Miller. As folks are typing in additional questions, if you have them in the, I want to get to this one first, just to make sure we cover it. The first it's it's kind of a two-part question first, you know, why is discussion of spirituality, it seems to be so difficult in any kind of public or, you know, interpersonal communication aspect? And then given that some ideas, some thoughts then on the best way to broach and discuss it with Soldiers and DA civilians and family members as well. I mean the greater Army family.

Dr. Lisa Miller: [00:51:54](#) Fantastic. Thank you. So the Army is at an advantage, a great advantage, which is the spiritual readiness initiative, as you know, is driven from the top. Our first stop was with the Four Stars, the Vice Chief, the Chief and the Secretary of the Army. So it is coming from the top that this map of science is of great significance to the whole Soldier fitness and readiness. So you are authorized that is greatly to your advantage. Now, why is it awkward? Well, because as a country we're a little bit rusty and out of practice when 40 years ago, as we started to explore, religion was thrown out of the public square again in the good effort to be inclusive, we threw the spiritual baby out with the bath water, and we now have a spiritually non conversant society. The reason I spent five minutes with the yellow and the gray intersecting Venn diagram to show that spirituality and religion are indeed two things which can go hand in hand for many Americans, but can also be distinct for other Americans.

Dr. Lisa Miller: [00:52:59](#) 30% was because I will give this exact talk. I've been sharing science for about five years and after an hour, I'll be out by the water cooler and someone will pull me over and say, what's the difference again between spirituality and religion? So why this is a smart person. This is a caring person it's considered so cast out of mainstream public discussion that it's awkward. We're not practiced, but this science is a beautiful road map. It is a mirror of who we are. This is our endowment. This is our birthright. We are innately spiritual beings and the Army, once again, as you've so many times have been for our country is leading the way, the Army is moving the needle and saying science says we are naturally spiritual beings that when the core is strengthened, we are fit and ready to perform. We are less ill.

Dr. Lisa Miller: [00:53:52](#) We are more ethical. Let's make the Soldier whole, that is our job. The Army has authorized this, and I think the Army will move. The needle will for the rest of our country. You know, you've done this so many times, you are the first, truly racially integrated institution. And then the country caught up, you know, the Army can lead the way. And once again, this is a form of whole inclusivity. Knowing each other, loving each other, being sisters and brothers, this is essential to our nature and there's no greater test and challenge of course, than when you lead the way in service in the military. So this is essential for the Army. Oh, you asked me how. There's a number of ways, some of them are in "The Awakened Brain." One that Chaplain Soldier emphasizes, Chief of Chaplains, very much is in relationship that when the Soldier knows you truly care, the move from narrowly transactional to transformational relationships, the Soldier knows you truly care.

Dr. Lisa Miller: [00:54:53](#) He or she truly knows you have their best interest in mind. They, you see them into whole brain. And at the same time you demand so that they become strong and fit and ready and can perform that being seen and cared about is a form of relational spirituality. And in fact, if you have all the dimensions of lived spiritual, life of love of neighbor and altruism, brotherhood, and sisterhood is one of the most impactful on the strengthening of the cortex, the building of the muscle. Another way is allowing each Soldier to speak in his or her own voice. We really want to hear where you, what did you experience today? And we were out there, it was a real failure. What does your spiritual core say now? We do this in my class at Columbia University. And one person will say, you know, my grandma, she tattooed me.

Dr. Lisa Miller: [00:55:44](#) And when she did, she linked me to all my ancestors through time. So today out there I knew my ancestors were with me and that we would not perish. And the next person says, yeah, I get

that because my grandma taught me to pray. And so now when I think of God it's kind of God and my grandma all rolled up. And today when we were out there, I felt God in my grandma. And the next person says, yes, matter can never be destroyed, I get that. So just like your grandma's with you still, there's something in life itself that was with us there today. And one person talks about Jesus and the next about Hashem. Just like I say, I am from Cincinnati and I am from El Paso. This is a way of knowing each other and this is a way of being who we really are.

Dr. Lisa Miller: [00:56:25](#)

Young adults are riveted to know each other more deeply more honestly and the depth of that bond is much stronger when we offer our spiritual core. Third piece is by putting it into words, it is built. There's been a number of lovely studies that when we talk and share, we lock into language, we lock in this real. Yes, we talk about this here, it matters. The primacy of spiritual awareness of awakened awareness. And so it is there for us when we face challenge, when we push beyond. And I know that I can talk to you, my Commander, you, my therapist, my chaplain, you, the Commanding General, I can talk to you about this it's authorized, and I know how to talk about it. And that feeling that was just kind of like a flood or something's going on, has taken form. And I have a way to connect into awakened awareness, whether prayer, meditation, reflection, I have the access. The window of development 18 through 25 is literally a time of paving the highways.

Dr. Lisa Miller: [00:57:30](#)

Myelinating the tracks that allow us access to this deep understanding of life. And when we use our awakened brain, we saw through the MRI, it doesn't matter if I'm Catholic, Jewish, Hindu, Muslim, spiritual, but not religious. We have the same neural correlates of spiritual awareness, and they let us see and know that we're loved, held, guided, and that we are never alone. This is a deep seat of awareness. That is a form of human knowing and perception. Just as we were held as children in our parents arms, the bonding network comes on. And we know that life itself, or God holds us. The parietal puts in and out hard boundaries. And we know that just, you know, as you have your stray and I have mine, there's one common human heart. We moved from very important for the Army. A top-down dorsal attention network got to get out the red door.

Dr. Lisa Miller: [00:58:26](#)

We've planned, we've strategized tactically, we're ready to go. We're out the red door but the red door is blocked. We can't get out the red door. What do we do? Well in those moments, tactical, achieving awareness is insufficient. It doesn't square with the dynamism of real life, with the flux. And so we can put our hand on the gearshift, move into a state of spiritual

awareness, awakened awareness, and suddenly instead of top-down dorsal use bottom up ventral attention. And suddenly we have far more data information available to us. And many people say the right answer, pops, yellow door. We've got to get out the yellow door, never would have seen it if I'd just been dorsal red door, red door, achieving awareness with awakened awareness. I say a prayer. I'm moving to that state. I put my hand on the gearshift. I open myself up to that familiar myelinated path because we talked about it because I know it's real. And there in that instant. I see the yellow door, come on, let's go. Many people call that a sense of guidance. We know we're loved, held, guided, and never alone. When we use the neural seat of awareness, awakened awareness, it's all of ours. It just needs practice. The muscle has to be built.

- Host: [00:59:47](#) Thank you, Dr. Miller. Much of the discussion is focused on our young Soldiers, 18 to 25, but we've got a number of organizations that are more experienced shall we say. Do some of the same things hold true? Are there nuances with discussions and bringing this into organizations that may have a little more experience or a little bit older?
- Dr. Lisa Miller: [01:00:12](#) David, could you say a bit more about that question? I want to make sure I hear it just right.
- Host: [01:00:17](#) Well, yeah, much of our discussion has been on the 18 to 25-year-old population, but many of our organizations are not in that age group at least, you know, the average age. And so do all of the same things apply? The same techniques, the same approaches. Are there nuances in dealing with those that are older, not in 18 to 25, or are there some nuances in dealing with those that didn't have this development you need to, you know, their juvenile or younger years?
- Dr. Lisa Miller: [01:00:49](#) I understand. Thank you. So just as there is a window of acceleration with middle to late adolescence and emerging adulthood a biological clock, again at midlife right as many people assume a mantle of great responsibility and our decisions impact many more people at midlife, there's again, a surge and oftentimes deeply spiritual people will start to feel with this augmented vessel, a half empty glass of spirituality. They'll say, have I really used my life as God intended for me? Have I really made the most of the contributions I could have made for the Army for our country? Have I been a good parent? Existential questions come with midlife and we see that once again, there's a time of rapid growth marked by developmental depression, just as the teen has the surge. What is my meaning?

What is my purpose? Developmental depression yields to formation of spiritual awareness with midlife.

Dr. Lisa Miller:

[01:01:52](#)

The struggle of have I used my life well, have I really followed my path? Have I been good to those around me? This process carries with it adult developmental depression, it's misnamed midlife crisis or nicknamed midlife crisis, but it has deep existential and spiritual growth inherent. Certainly it is an invitation to deep existential and spiritual growth. And the decisions we make are much better if we honor this growth, it is an opportunity to assume the mantle of care and leadership. You know, the second half of life we're handed the globe here, take this, do a good job with it. The second half of life we become guardians and we must care for those in an all natural life around us. Well, that mantle is led conducted far better if it's from an awakened perspective, it's from a deep unit of sense of life, where we are one where we are loved and held and guided where we are never alone.

Dr. Lisa Miller:

[01:02:55](#)

And we need to show up and be that for one another. We need to be loving. We need to be guiding. We might never, we should never leave anyone alone. That spirituality is experienced, that spirituality is shared and lived. So, the bottom line is midlife adults need support to make good decisions so that midlife crisis doesn't lead to things like narcissistic inflation or depressive destructive decisions. Very, very important. Okay. Other ways it affects an organization. One, decision-making all the way through. And when we can both have awakened and achieving awareness and toggle between the two, we make better decisions. When we look through an MRI, what we see is that people who avail themselves of multiple forms of knowing, logic, empiricism, and intuition, mystical awareness, and bring those forms of knowing and dialogue, literally have myelinated tracks between regions of the brain. They have a fuller functioning, more integrated brain and better brain from the view of neuroscience to address challenge.

Dr. Lisa Miller:

[01:04:01](#)

So we make better decisions when we integrate awakened in achieving awareness, some people use a little more awakened awareness than others, and they need to be honored at the table. It could be a man it could be a woman. Very often it is women who say, I just have this deep knowing in my gut or I had an experience, which is too non-probabilistic to happen by chance. And it really tells me where I had a mystical experience, that's knowledge. She will bring her very best knowledge home to make important family decisions. Don't you want that for your organization? Are there any awakened experiences at the table? Can we integrate them? Okay. Decision-making, all the

way through organizations top to bottom right now is addiction and depression. And an awakened organizational culture can really help support the spiritual core at all decades of life.

Dr. Lisa Miller:

[01:04:52](#)

Relational ethics are a concern for all organizations. We've never had such elevated rates of sociopathy, using people as means not ends. And when we look through the lens of science, indeed it is actually in highly resourced communities and in advanced leadership positions that there is 17 times the national rate of sociopathy. So that is prevented when there's a strong spiritual core. It goes hand in hand. It has prevented a spiritual core mitigates usury. Why? Because you are my brother, you are my sister. So whether you're talking about decision-making, ethics, wellness, or bringing on the young adult or promoting the mid-career adult at every point, you have a whole person, you have a whole employee and he, or she needs support for the spiritual core, as much as they need support for their next step of tactical or technical or professional expertise, they need to grow as a person. And that includes the spiritual core. That is not merely a skill that is their whole being needs to be realized and it happens to relational culture. It's not a program, it's knowledge in everyone's hand that allows us all to engage each other through the lens of whole personhood. That includes the spiritual core.

Host:

[01:06:21](#)

Dr. Miller and I think that since we're over time, I think that is a great place to stop. And I really appreciate it. Thank you for joining us. Thank you for being so gracious with your time. I know you're very busy with all of the things that you have going on, but this is just a really interesting and worthwhile discussion. And I think that you've certainly opened some eyes to some ways to go about and to bring this spirituality into our formation. So thank you very much for that. I really appreciate it. And folks, thanks to all of you for joining us, really appreciate your participation in this month's webinar. Very shortly you'll see a webinar survey slide for those of you that participate all the time. You know, the webinar survey slide at the end, we ask that you put that well we're, it should be coming up shortly.

Host:

[01:07:13](#)

It was just the final, it was the last slide in the slide deck, but it'll be up and there it is in the chat as well. And we just ask that you participate in our survey to get the feedback on this webinar and others. If you have interesting topics or other presenters, you'd like to hear these, please feel free to indicate that these surveys and feedback is given to the ARD leadership and they look at those. And speaking of future webinars guests, over the next couple of months, next month will be Ms. Janine Latus, who will be talking about relationship abuse and sexual assault.

Future guests include the SHARP Academy and Men Can Prevent Rape organizations. So again, thank you for your time, Dr. Miller again, thank you very much. And folks as usual, I will stick around for a few minutes to answer any administrative questions or follow-ups from this webinar. Thank you and have a great day.

Dr. Lisa Miller: [01:08:13](#)

An honor to join you, thank you.

Host: [01:08:17](#)

Thanks, Dr. Miller. Folks, if you have any questions, go ahead and type them in the chat box and I will answer them as they come up.

Host: [01:09:44](#)

All right, folks, the slide is back. There you go, that's easier. So we'll engage with Dr. Miller. The original agreement was the slides would only be available during the webinars, but I'll ask again, if we can send those out. Much of this is proprietary information, as you know, and so some presenters, while they're willing to share a little bit different just to hand out or give out things, but we'll ask about this and all that stuff to Miller, if she will agree to that. And so most of you that received the invite, my email is on the bottom, my email is on the bottom of the slide as well. So if you'd like to follow up and see about getting a copy of the slides, please go ahead and email me. That's the easiest there at david.m.gerkin@ctratmail.mil. And I will respond. Mr. Peterson, same thing with the video. There will be a replay this afternoon at 2:00 PM, 1400 Eastern Standard Time. So if you can share with anyone or get back on at that point, and we'll again, engage with Dr. Miller about sharing the presentation to a wider audience.