Positive Disruption: The Art and Science of Transformational Thinking

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Abstract

This study explores the process of transformational thinking and the characteristic traits of transformational thought leaders. While there is a substantial amount of research on transformational leadership and creative problem solving, there is a gap in the literature explaining how leading thinkers develop and share ideas. Based on the data derived from interviews and utilizing the grounded theory analysis conventions, this paper presents a conceptual model that also includes an integrated framework for the process of transformational thinking that includes six interdependent steps: awareness, curiosity, passion with a purpose, ideation, perseverance, and pliability. Additionally, it highlights six characteristic traits that transformational thought leaders share. They are inquisitive, optimistic, values-driven, insightful, determined, and relational. Integrating research from related fields in positive psychology, creative thinking, and complex problem solving, this study offers a starting point for better understanding the process of transformational thinking and explores future implications for how leaders can create work environments that cultivate and foster creativity, innovation, and transformation.
Dedication

I grew up in a household where education, kindness, and generosity were guiding values. Education was emphasized largely because my parents, Leon and Hanka Kent, were both children survivors of the Holocaust. They lost almost everything— their homes, family members, friends, and any resemblance of a “normal” childhood. In spite of that, they never lost their love of learning or the power that comes from being able to choose your attitude. In my formative years, they would tell me that the only thing that cannot be taken away from a person was their knowledge and the freedom to choose their attitude. Perhaps that explains their reverence for learning, resilience, and their remarkable ability to embrace hope and an optimistic outlook. They practiced “Tikkun olam,” which is the Hebrew word that means to repair the world. Their acts of kindness and generosity were boundless. It was their way of restoring social justice, embracing the best of humanity, and making the world better.

This study, which is on the characteristics of transformational thinkers and the framework they follow to create transformational outcomes, is a way to honor them and the values they stood for. They showed me through their actions and their love that it is possible to create something extraordinarily beautiful even when burdened with unbearable restraints. They demonstrated the merit of discipline, the perseverance required for pursuing worthwhile endeavors, and the value of believing in oneself. They lived by their values and pursued life affirming professions. My father became a neurosurgeon and my mother went into teaching. They never stopped
learning and pursuing meaningful goals. They believed that learning cultivates
tolerance and tolerance leads to acts of humanity, kindness, and a more just world.
This work is dedicated to them and their fierce belief that anything is possible when
we are willing to have the courage to open our minds and our hearts.

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A special thank you to all the members of my cohort, who made this entire experience extraordinary, rewarding, and unforgettable. They enhanced the learning experience
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I want to acknowledge and thank two dear friends, Lisa Caplan and Lori Bachman, who supported me every step of the way through this program. They were by my side when I first entertained the thought of pursuing a doctoral degree. They cheered me on with every paper written and class completed. They reminded me of the worthiness of this endeavor when I had a hard time seeing it through the stacks of books and journal articles. They supported me through all the logistics and stressors of getting out to Chicago once a month over a two-year period and were there at the finish line to celebrate. They were my lighthouses that kept the light shining.

Most of all, I want to thank my son, Jackson, along with the two members of my family that have four furry legs each, my dogs, Tanner and Tucker. They kept me company, went for walks when I needed a break, offered plenty of ways to get distracted, and provided nuzzles of encouragement when I needed it most. Jackson was the inspiration to pursue this degree. My hope for him is that when he is ready to enter the workforce, there will be far more values-driven leaders. There will be leaders and followers that appreciate the value and know the importance of creating
work environments with cultures that promote flourishing at all levels. Engaging in this program gave me a chance to model for Jackson that it is never too late to embrace a life dream and pursue a meaningful goal. When I think about the parenting legacy I want to create for Jackson, I want to teach him to be curious and tenacious. I want him to dream big and have bold ambitions. I want him to be confident in his abilities, speak with conviction of the heart, and fiercely pursue his passions.

If Jackson ever has a question about his ability to do something, I want him to trust the process and jump in with both feet. There is tremendous value being able to look back without regrets because we know we gave something our all and did not hold back. That is one of the best ways to find out what we are made of and get clarity on our values. I want to extend a huge heartfelt “thank you” to Jackson for supporting my desire to be a continual learner and giving me a unique opportunity to discover a little bit more about what I am made of!
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Foreword

Tinker Bell

When I was growing up, I was absolutely mesmerized by Tinker Bell (Barrie, 1911). In the Walt Disney version of Peter Pan (1953), she was a feisty fairy who could fly and flitter about, and each time she waved her wand, sparkling fairy dust would appear. An illuminating glow and twinkling, magical-sounding music always accompanied her. I loved her tiny stature, slender hour-glass figure, adorable elf-like ears, and baby blue eyes. In my mind, her green strapless dress with its handkerchief-cut mini-skirt was couture fashion at its finest.

There was so much to love about Tinker Bell. She was cute, kind, and could be very helpful when she wanted to be. Like many women I know, she was very transparent with her emotions. She could be hot-tempered, stubborn, and opinionated, and when angered, her face would turn fiery red. I loved her independent spirit, sassiness, and fierce loyalty to those she loved. And, as if that was not enough to be enamored with her, she was a gifted and talented tinker fairy who could produce fairy dust that allows others to fly.

When I would go to Disneyland as a child, I waited with baited breath to see Tinker Bell fly across the evening sky with her magic wand to let everyone know it was time for the fireworks to begin. Her flight time was less than a few minutes, but the sense of intrigue and amazement she stirred stayed with me long after she disappeared into the black sky. And even when I was older and could tell that she was hooked up to a wire, it never tarnished the affection I felt toward her. To me, Tinker Bell epitomized the sense of wonderment and magic synonymous with Disneyland.
Tinker Bell was an integral part of my childhood imagination and I adored everything about her. One of the best holiday presents I ever received was a pair of Tinker Bell slippers. They gave me the feeling that I was Tinker Bell’s earthly companion. I wore them everywhere and held on to them far too long. It was only after the white fluffy pompoms had fallen off, the soles were full of holes, and the green velvet fabric was shredded that I was finally able to let them go. It was hard to part with those cherished slippers that had become such a precious and treasured part of my childhood. My parents would read me bedtime stories of Tinker Bell and her adventures with Peter Pan and his new-found friends, Wendy, Michael, and Peter. I was regaled with stories about Captain Hook, the Lost Boys in Never-Never Land, and the crocodile—they all have a special place in my childhood memories. Those memories of being tucked in bed with my mom or dad lying beside me and reading out loud as I turned the pages with those signature colorful, animated Disney illustrations are heartwarming.

Last year, a scientist being interviewed on NPR was explaining the poignancy behind childhood memories. The essence of his explanation was that, as children, we do not yet have many memories formed and stored in our brains, which is why those earlier memories of holidays and vacations are so vivid and pronounced. The interview resonated with me. I began to recall certain heart-endearing childhood memories that were integral in shaping my personality, relationships, and orientation to the world. I wondered what it took as an adult for experiences to stand out with the same degree of vividness, intensity, and poignancy that I had as a child. Surely there have been times as an adult where I have been completely captivated by something in the same way I was captivated by Tinker Bell as a child.
Captivation and Transformation

What is it about being captivated that is so intoxicating? The experience of being mesmerized and enthralled with something or by someone. The awareness of being completely present because, for the moment, time is completely suspended. Something is presented to us in a way that forever changes our perspective, cognitions, and behaviors. I believe there is a connection between captivation and transformation. When a provocative idea or compelling problem grabs a person’s attention, it has the potential to lead to something innovative or transformative. Like a dog with a bone that refuses to let it go, the intense intrigue of an idea or calling for a problem to be solved perseverates to a point where one is compelled to act. As a child, I was fascinated with ideas, people, and events that captivated my imagination. That intrigue inspired me to pursue this area for my research as an adult. Intuitively, it made sense that captivation could be a seed crystal for cultivating transformational thinking.

For my research, I am defining a transformational idea as one that was previously unknown or somewhat obscure and, because of going through different developmental stages, has become mainstream. I want to know “in my bones” what it takes to generate a transformational idea that has the power to spark a global conversation and positively influence the way we think about and lead our lives. I want to look more deeply into the process of creating, cultivating, and nurturing transformational ideas. I want to have a better understanding of the art and science that drives positive “disruptive innovation” (Christensen, 1997) in our thinking, conversations, and shared points of reference.

I wondered what captivated the people who have been credited with transformational ideas, such as Cirque du Solei’s circus experience, Airbnb’s hospitality experience, and Fed-Ex’s promise of
delivering packages overnight. Jean-François Bouchard, Chief Creative Officer and Creative Guide of Cirque du Soleil, states the following:

Through creation, Cirque du Soleil tries more than ever to push the limits of the imagination, to amaze and to continually surprise the viewer. Innovation and creativity have always been at the heart of our shows and will continue to transcend our future productions.

Cirque du Soleil transformed the circus experience because they were committed to their mission of “dreaming the unimaginable” and “creating the unexpected.

Airbnb was able to get us to reimagine travel with their global travel experiences. What gripped Airbnb’s founders so deeply that they took on the entire hospitality business was that they saw value and excitement in experiencing a place as a local inhabitant rather than the typical tourist who sees things from a more of an arm’s distance. To do this, they lured travelers from hotels to homes and became a disruptor in the hospitality business.

The story of FedEx is that in 1965, Yale University undergraduate Frederick W. Smith wrote a term paper in which he addressed the logistical challenges of accommodating time-sensitive shipments such as medicine, computer parts, and electronics using passenger route systems. Smith proposed using a system specifically designed to deliver time-sensitive packages that would be more efficient. While his teacher was not that impressed with Smith’s innovative solution, the business world was. Smith saw an innovative solution that transformed package deliveries. He was captivated by the idea that there had to be a better, more cost effective, and more efficient way to deliver packages carrying important items.
Were they geniuses or were they overnight successes who rose from obscurity to rock star status because they had a TED talk that went viral, were featured on Oprah, or the cover of a well-known magazine? Were they ordinary people who, like the professor in the *Wizard of Oz*, hid behind the green velvet curtain and had a larger than life presence? Were they humble and non-assuming and completely shocked to find themselves on the cover of *Time* magazine’s special edition of the most influential people of all time? Did they have a hunger in their soul that could not be satisfied until they felt heard and understood?

What was it about these transformational thinkers and their ideas that was so gripping? Timing and readiness for people to hear and accept transformational ideas has a place in the process. Branding and marketing can take an idea from obscurity to rock star status overnight. The slow evolution of an idea that is accepted by a few early adopters (Rogers, 1962) can create a tipping point of critical mass, enabling certain ideas to become mainstream.

All these questions began swirling around in my head as I started to think more deeply about the topic of transformational ideas and the people and processes that drive them. I started to scan my own environment for examples of people and ideas that illustrated what I was thinking about. It did not take long before I was able to identify several events and people that exemplified what I was trying to articulate. “This is a think tank-style, interactive gathering.” The primary focus of Wisdom 2.0 events is interacting with other participants to make meaningful, lasting connections, bringing new ideas, communities, and innovations into the world long after the event has ended.
Events and People of Influence

In 2009, the Wisdom 2.0 conference explored the integration of technology and mindfulness. Founded by Soren Gordhamer, Wisdom 2.0 began as a small gathering of about 325 people in 2009; annual conferences have now grown to over 2,300, with regional events year-round in New York, Boulder, San Francisco, and Europe. The Wisdom 2.0 (n.d.) website states that their mission is to address “the great challenge of our age: to not only live connected to one another through technology, but to do so in ways that are beneficial to our own well-being, effective in our work, and useful to the world.” The conference is an interactive think tank designed to transform the way we think about technology. As Wisdom 2.0 prepared for the conference at Google’s Foundry in Dublin’s Silicon Valley, Gordhamer (2014) shared this sentiment: “There is little question whether the external technologies of our age, from computers to cell phones and beyond, will continue to advance,” The more vital question is whether our ‘internal technologies’ of wisdom and compassion will advance along with them.” Infusing mindfulness with technology was an innovative platform and Gordhamer was one of the first to spark the conversation. With his interest in mental, emotional, physical, and spiritual wellbeing, it makes sense that mindfulness would be an integral part of the conference. There are many breakout sessions that focus on practices to enhance mindfulness such as loving kindness meditation, silent meditation centered breathing, and yoga. While attending the conference in San Francisco, it occurred to me that while mindfulness as a concept and practice is now considered mainstream, that was not always the case. As a result, the introduction of mindfulness to mainstream consciousness seems to be a transformational idea.

Jon Kabat-Zinn (1994), Professor of Medicine Emeritus and creator of the Stress Reduction Clinic and the Center for Mindfulness in Medicine, Health Care, and Society at the University of
Massachusetts Medical School, has been exploring mindfulness through practice and research since 1971. Kabat-Zinn (1994) has defined mindfulness as “the awareness that arises through paying attention, on purpose, in the present moment, non-judgmentally” (as cited in Szalavitz, 2012). He has believed that the simple practice of mindfulness could improve the wellbeing of his patients who experienced chronic pain. Kabat-Zinn (1994) was largely responsible for bringing the therapeutic benefits of mindfulness to America’s consciousness. Many people were skeptical about the benefits of mindfulness to help patients manage chronic pain. When he first began using mindful meditation to help alleviate chronic pain, many professionals in the medical field were skeptical. Now there is much scientific and quantifiable evidence on the physiological, neurological, and emotional benefits of mindfulness that is considered quite conventional. The practice of mindfulness has made its way into the daily fabric of corporate wellness programs, private business practices, classrooms, and our homes. Mindfulness has its origins in Eastern religions and has been around for thousands of years. Kabat-Zinn (1994) did not invent mindfulness, but he did create a transformation with a tipping point of interest by bringing the practice into a clinical setting. He helped transform this practice with Eastern religious roots into a modern-day activity with a secular presence in Western science.

Other examples of what I consider transformational ideas that have become mainstream include Brené Brown’s (2007, 2010a, 2010b, 2012, 2013, 2015, 2017) work on vulnerability, David Cooperrider’s (Cooperrider & Srivastva, 1987; Cooperrider & Whitney, 1999) discovery of appreciative inquiry, Simon Sinek’s (2009) model that begins with the power of asking “why,” and Malcom Gladwell’s (2000) work on outliers and tipping points. Enterprising companies like Amazon, Google, Facebook, Zappos, Ben &Jerry's, and Tesla have transformed the way we
think about business, customer service, and the environment. Their transformations are embedded in the way we interact in the world and engage with others.
Chapter 1: Introduction

Transformational Ideas
Transformational ideas have the power to shape organizational cultures, society, and our future. I find the topic of transformational thinking compelling and complex. The outcomes of transformational ideas have profound impact on many facets of our lives, such as relationships, cognitions, and behaviors. They influence how leaders lead, how we conduct business, how we play, how we use tools, how we interact with the environment, and how we heal from sickness. This topic is enormous in scope and offers infinite research possibilities.

Like Maria in the Sound of Music, I believe in starting at the very beginning. My version of “Do-Re-Me,” as it relates to this topic, is to aim my research at exploring the “how,” “who,” and “what” of transformational thinking. Specifically, my dissertation focuses on the variables that create, nurture, and cultivate transformational ideas that lead to positive disruption.

The Experience of Transformational Thinking
The first step in the research is to detect if there is a standard process or formula that leading thinkers use to create transformational ideas and concepts. I label this process the “how” of transformational thinking. Are there are certain elements within a process that can be readily identified even though there may be fundamental differences between how people have developed their groundbreaking ideas? Initial research indicates at least three catalysts for transformational ideas:
• Some argue that transformation ideas happen in a magical moment. The flip gets switched and the light bulb turns on.

• Others say the experience is more analogous to the compulsive need to scratch a nasty mosquito bite; something that is constantly begging for attention.

• Some compare it to having a pebble in their shoe that is not very irritating at first but, as time goes on, it becomes more noticeable. Eventually, the pebble must come out to move forward.

_The Transformational Thinkers_

Transformational people have skills, talents, and abilities to be pioneers in their field, to explore unchartered territories, or, in many cases, to have the good fortune of being the single drop that creates a watershed moment. There is something about them that gives them the strength, courage, and, in some cases, the sheer moxie to stand on a precipice facing the big unknown and jump in. They do not seem easily intimidated by others and are willing to boldly defy conventional wisdom.

This dissertation seeks to explore the “who” of transformational thinking—the personalities, emotions, backgrounds, and elements integral to the lives of transformational thinkers, such as Brené Brown, Steve Jobs, and Cirque Du Solei founders Guy Laliberté and Gilles Ste-Croix. It will broach subjects such as the defiance of conventional wisdom and the comparative/contrasting traits of others in their field.

Many transformational thinkers talk about their work as a “calling” because it is so intrinsic to their values and they simply believe they have no other choice but to heed the call. Do they see themselves as Michelangelo (n.d.), who said, “I saw the angel in the marble and carved until I set
him free.” Are these thinkers chipping away, little by little, until they’ve transformed something ordinary into something extraordinary? Perhaps they see themselves as miners, looking for that one “eureka” moment; toiling away day after day and shifting through debris to find that one magnificent gem. Maybe they simply consider themselves lucky because they happened to be at the right place at the right time. Like the Coin Pusher game in the arcade, their idea was laid on top of many others that came before it. Fortuitously, when their idea landed and became known, they reaped the reward. Their idea garnered all the attention and they became synonymous with the idea and credited as the transformational thinker, even though it would not have happened if the foundational ideas were not there to build upon. I seek to find what these people have in common that sets them apart.

**The Qualifications of a Transformational Idea**

I believe the root of transformational ideation lies in asking “what if” questions, because the answers to those questions require critical thinking. According to Blane (2017b), a globally recognized performance expert hired to help organizations solve challenging business issues and author of *7 Principles of Transformational Leadership: Create Mindset of Passion, Innovation, and Growth*, transformational thinking comes from the art of asking better questions. In a subsequent article featured on the *Industry Week* website, Blane (2017a) contended that “what if” questions set the stage for transformational work. Blane (2017a) cited some brilliant business examples to illustrate the power of asking “what if” questions:

Asking questions with the words “what if” challenges our predetermined thinking patterns and requires us to think differently. It did for Roger Smith when he asked, “What if we could deliver small packages on a regional basis faster and more reliably?” It did when James Dyson asked, “What if a vacuum cleaner used cyclone technology to clean carpets instead of suction?” Asking “what if” questions created a FedEx valuation of $52 billion and a personal net worth for James Dyson of over $4 billion.
The key to transformational thinking, according to Blane (2017a), has less to do with creativity and more to with letting go of limiting beliefs, preconceived notions, outdated ideas, and erroneous assumptions.

When I searched, “How to create transformational ideas” on Amazon.com, there were no matches. “Creative Thinking” generated 5,192 titles, but when I defined it further by using the search words “transformational ideas,” the list was quickly reduced to 58 titles that ranged from transforming one’s body to selling tacos in Africa, from healing past-life memories to fueling a loving relationship with customers, from literacy to strategies for wealth, power, and happiness.

My search rapidly expanded when I started using more business-like terms. For example, the words “transformational leadership” yielded 730 books, the words “problem solving” generated 47,912 books, and the word “innovation” produced 78,557 results. It is interesting to note how many subcategories there with the word “innovation”:

- Management
- Strategic Planning
- Decision Making
- Business & Money
- Strategy & Competition
- Leadership
- Decision-Making & Problem Solving
- Systems & Planning
- Entrepreneurship
- Customer Relations
• Science & Math
• Engineering & Transportation
• Reference
• Self-Help
• Education & Teaching
• Health, Fitness & Dieting
• Medical Books
• Arts & Photography
• Biographies & Memoirs
• Children’s Books
• Christian Books & Bibles
• Comics & Graphic Novels
• Computers & Technology
• Cookbooks, Food & Wine
• Crafts, Hobbies & Home
• History
• Humor & Entertainment
• Law
• Literature & Fiction
• Mystery, Thriller & Suspense
• Parenting & Relationships
• Politics & Social Sciences
• Religion & Spirituality
At first, I was taken aback by how many subcategories there were for the word “innovation,” but the more I thought about it, the more it made sense. Each of those categories has experienced some degree of innovation and improvement over the years.

Therefore, in determining what qualifies as a transformational idea and facing Amazon’s “creative,” “innovative,” “problem-solving” literacy landscape, a researcher (a) looks up the difference between “innovation” and “transformation” and (b) comes up with a definition that supports the spirit, intention, and focus of her research.

In Deb Smallwood’s (2016) blog on the Strategy Meets Action website, the author has suggested that the difference between innovation and transformation lies in the scope and breadth of the change that occurs:

We often use innovation and transformation synonymously. Both words evoke thoughts of change and modernization. Both innovation and transformation are important outcomes of the change management life cycle. We know that innovation is occurring all around us, and in simple terms, it is finding new ways to improve or change something that already exists for the better. Alternately, transformation is the result of moving from one state to another.
Innovation is about the rethinking, repurposing, reimagining, and reinventing that leads to change. With innovation, one has a preconceived idea of where they want to go, what they want to build, and what specific outcome they plan to achieve. It is the process of turning possibilities into action and action into outcomes.

Transformation, on the other hand, is about an exploration that takes something or someone to a different place. Smallwood (2016) described transformation as “the evolution or journey from a current level to a different and better future state….The journey of transformation is the tangible process, structure, or building block for future success even if a project fails or takes a different shape.” Therefore, one way to think about transformation is to consider it like a butterfly. The transformation that the caterpillar undergoes to become a butterfly is a metamorphosis accompanied by dramatic changes so that the new reality has little in common with its original state.

For my research, I am exploring three aspects of transformational thinking:

- The process of developing novel ideas.
- The characteristics of transformational thinkers.
- The social contagion of their ideas.

I want to gain a better understanding of the intricacies and nuances of transformational thinking and develop a profile of the characteristics and traits of transformational thinkers. Ultimately, I would like to present an integrated framework and model for transformational thinking that explains how transformational ideas are generated, highlights the common traits among
transformational thinkers, and illuminates the role tipping points and social networks, which help transformational ideas, make their way from boardrooms to town hall gatherings, classroom discussions, conversations with colleagues at work, outings with friends, and talks with our families around the kitchen table.

**Objectives**

I believe that having a better understanding of what it takes to create and cultivate transformational ideas will be beneficial to individuals, organizations, and society at large. The world needs transformational ideas, now more than ever, to provide creative solutions to complex and daunting problems, and to create positive changes to make the world a better place. The hope is that this study will help create a better understanding of the following:

- Transformational idea generation as a skill set.
- The behaviors and attitudes that can enhance transformational thinking.
- The environmental and organizational cultural conditions conducive to transformational thinking.
- The type of leadership, mentoring, and/or coaching that is most beneficial to transformational thinking.
- The social contagion of transformational ideas.
- A behavioral-based framework of transformational idea generation and social contagion.
- The types of characteristics and personality traits that are needed for transformational ideas to take hold.

I went into this dissertation with so many questions about the creation and social contagion of transformational ideation. I have had the experience of being transformed and transfixed by
leading thinkers, entrepreneurs, innovators, artists, scientists, authors, environmentalists, politicians, leaders, and social activists during my life. This dissertation has given me a deeper understanding and appreciation for the process that drives big, bold, audacious ideas. I see this dissertation as an invitation to a gathering for those who want to learn more about the process of creating ideas that can positively influence the course of human events; an invitation to transform the world.
Chapter 2: Literature Review

Preliminary Literature Review

My first attempt at researching the topic of transformational thinking felt a bit like Alice in Wonderland going through the rabbit hole. I kept typing in key words that I thought would take me where I wanted to go, but it felt like my search was distorted and that most articles were not at all what I was expecting to find. I then began to realize that the word “transformation” can be used in many contexts and that is partly because the word is often used interchangeably with “innovation” and “change.” I was going after something very specific, which required that I redefine the problem statement. I put together the following list of key words and started to conduct my literature search using Benedictine University’s library database:

- Transformational Ideas
- Positive Disruption
- Social Contagion
- Bold Ideas
- Cultivating Ideas
- Creative Ideas
- Stickiness Factor
- Tipping Points
- Social Networks
- Innovative Ideas
- Adoption of Ideas
I gathered 163 articles that struck me as being at least remotely related to my topic and created a reference list in Endnotes that I titled “Dissertation Articles.” It was a start, and I felt I at least had my bearings straight. However, a lot of what I was initially looking at just did not feel like it was hitting the mark. I quickly realized that I desperately needed some guidance. My passion started to wane a little, and I wondered whether I had decided to research something that was too obscure or difficult to study. I reached out to Benedictine University’s head librarian, Mr. Kent Carrico, and he was extraordinarily helpful. Mr. Carrico expanded my key word search by adding “divergent thinking,” “creative ability,” “originality,” and “innovative behavior.” One would have thought those words were the key to the Magic Kingdom because they opened the door to the type of literature I was hoping to find—seminal works in the field of the thought process that can lead to transformative ideas.

All the while that I was going on this path to conduct my preliminary research review, I could hear Alice’s companion, the White Rabbit, frantically uttering those famous words, “I’m late, I’m late, for a very important date,” and I felt that I needed to continue moving forward if I wanted to make it to the ceremony on time. At this point, the best way to move forward was to refine my question, which, in turn, would help me to refine my literature review.

**Refine the Problem Statement**

The first unedited versions of my questions were, “How do those people figure out to think the way they do?” and “How do they come up with those really big ideas that become mainstream?” Those questions were big, broad, loose, and messy. The next set of questions were still designed to go after the same thing but were a bit refined. I created the statement, “Positive Disruption: The Process of Creating, Cultivation, and Nurturing Transformational Ideas.” I went from a
question that felt big and messy to one that felt too contrived, too constricting, and too cumbersome with all those words. I had my Goldilocks moment when I found something that felt “just right.” I liked the notion of “positive disruption” since that is what I believe transformational ideas do. I also liked the notion that there was an art and a science to the process. I combined the two and redefined my statement as, “Positive Disruption: The Art and Science of Transformational Thinking.” I had found exactly what I was looking for—a statement that created space to explore with a clear focus.

I had to ask myself time and again what I was really trying to research and discover. I knew that by asking that question, I would be able to generate a list of people whom I thought would have the answer. I also knew that having a definition of transformational thinking would help guide me with my literature review as well as who to interview.

**The Definition of Transformational Thinking**

One of the challenges with the literature review was determining how best to research this topic since there was so little literature that emerged under the topic of “transformational thinking.” My initial search began with Amazon.com and, when I typed in the words “transformational thinking,” a total of 73 books emerged. Of those books listed, only five were related to transformational thinking in a business or leadership context. Most of the books on transformational thinking were about personal transformation, healing, and recovery from psychological and emotional challenges. There were a few books on transformational thinking tied to specific professions, such as teaching and caregiving. These books touted activities designed to “transform” the classroom or the nature of one’s role as a caregiver. The books on personal transformation were instructional on how to lead a happier, more satisfying, and blissful
life. I wanted my research to lead to a better understanding of the process of transformational thinking, the characteristics of transformational thinkers, and the types of environments and situations that were conducive to transformational thinking.

The first step was finding a definition of transformational thinking aligned with the parameters of my research. My initial thoughts about transformational thinkers led me down a path of hugely well-known individuals—people who have had a significant impact on the course of life events because of their transformational ideas. People whose names came to mind included Albert Einstein, Madame Curry, Benjamin Franklin, Steve Jobs, Bill Gates, Elon Musk, Jeff Bezos, and Oprah. I thought about people who had won lifetime achievement awards and Nobel Peace Prizes for their contributions to making the world a better place.

But after reflecting on transformational thinking, I began to question if there was a better way to think about it. I started to think more deeply about what it takes to positively influence the lives of others and change the course of human events. We can find examples of transformational thinkers all around us, and transformations can start out in small ways, such as being inspired by something in nature or having a conversation that causes us to see an opportunity or a situation in an entirely different light. I found that orientation towards transformational thinking far more interesting because it propelled a list of questions:

- What drives transformational thinking?
- Does transformational thinking happen in an “aha” moment or slowly over time?
- Can we build our transformational thinking abilities?
- What can we do to strengthen our transformational thinking abilities?
• Can we be transformative thinkers over multiple disciplines?
• Is there an “art” or “science” to sharing transformational ideas?

These questions shaped my literature review to better understand the process of transformational thinking and characteristics of transformational thinkers. What I ultimately found in my literature review was that there was a lot of divergence in the answers to my questions.

In the book, *SNAP: Seizing Your Aha Moments!* Ramsland (2012) suggested that everyone, not just a few select geniuses, can have big, meaningful, and important “Aha” or “SNAP” moments. Ramsland (2012) suggested that we can even learn to improve our ability to have SNAP moments just as we can with other behaviors and habits that we focus on and practice. Ramsland (2012) contended that SNAP moments happen when we apply momentum and action to our insights. Ramsland (2012) shared stories of people from diverse disciplines, illustrating examples of having SNAP moments and demonstrating mental agility and flexibility. Ramsland (2012) suggested that the key to having SNAP moments lies in our ability to scan the environment for opportunities and ideas, shift our perceptions and mental maps, and solve problems using our intuition, which allows us to become adept at evaluating risks.

In juxtaposition to Ramsland’s (2012) perspective of SNAP moments is Johnson’s (2011) perspective. In the book *Where Good Ideas Come From: The Natural History of Innovation*, Johnson (2011) suggested that “eureka” moments are very rare. Johnson (2011) suggested that the concept of having a eureka moment has become overused and oversimplified. Johnson’s (2011) work draws on the previous work of Kevin Dunbar, a McGill University psychologist who decided to study molecular biologists working in their labs. The idea was that, by studying
people while they were working, Dunbar could better observe the actual “eureka” moments rather than hearing the scientists’ accounts of how they happened. Johnson (2011) concluded that fertile environments, where a group of people can come together and potentiate each other’s ideas, are what lead to innovation. Rather than having a breakthrough moment—often depicted by a lightning bolt, light bulb, or a slap on the forehead—creative and innovative ideas happen over time and are more comparable to the process of distilling a fine wine. According to Johnson (2011), creating the fertile environment requires time for ideas and hunches to be cultivated, nurtured, remixed, dispersed, and tested. This type of divergent thinking among researchers suggests that there is more work to be done with respect to understanding the process of breakthroughs and “aha” moments.

Given the challenge of finding an agreed upon definition of transformational thinking, it is not surprising that there are so many experts and researchers who have different opinions and theories about the art and science of transformational thinking.

Dennis (2015) has defined transformational thinking in the following way:

An approach to life, work, and play, which is based on personal accountability, authenticity and vision. Its basic tenets are simple, seemingly universal, truths which enable individuals and teams to create generative change, build sustainable success, and perform at their optimum, in any circumstances.

On one hand, I like this definition because it solidifies what intuitively started to make sense to me. It affirms my belief that transformational thinking can take place within each one of us. The key components to this definition are all about action. It is not enough to have a vision but one must “create,” “build,” and “perform.” Whether one wants to be a transformational leader or just transform one’s own life, creating transformational change relies upon having a vision, being
personally accountable, and taking action. In my search for definitions of transformational thinking, I had found one that was aligned with my dissertation research. My research was driven by a desire to better understand the positive disruption created by the art and science of transformational thinking. The lens that I used in my literature review was focused on how leading thinkers develop and share ideas that resonate with people around the world, spark global conversations, and positively transform the ways we think and act. The transformational thinking definition provided by Dennis (2015) coupled with my definition led me down a literature review that included four areas:

2. The process of generating transformational ideas.
3. Environmental conditions conducive to transformational thinking.
4. The social contagion of transformational ideas.

**Transformational ideation**

One of the challenges with the literature review was determining how best to go about the research since there was so little under the topic of “transformational thinking.” What did emerge were two topics closely related to transformational thinking: innovation and creative thinking.

**Innovation**

Although the words “innovation” and “transformation” are often used interchangeably, there is an important distinction between them. Innovation is about making incremental improvements over shorter periods of time. Transformation is about an elevated level of change where the product, service, or experience is completely different than its original state (Bushe & Paranjpey, 2015; Campbell, 2015; Curtis & Cerni, 2015; Dundon, 2002; Edwards-Schachter, García-Granero, Sánchez-Barrioluengo, Quesada-Pineda, & Amara, 2015; Smallwood, 2015).
Smallwood (2016) described the difference between transformation and innovation in the following way:

We often use innovation and transformation synonymously. Both words evoke thoughts of change and modernization. Both innovation and transformation are important outcomes of the change management life cycle. We know that innovation is occurring all around us, and in simple terms, it is finding new ways to improve or change something that already exists for the better. Alternately, transformation is the result of moving from one state to another.

Another characteristic that distinguishes innovation from transformation is the amount of time that is required for change to occur. Transformation typically occurs over a longer period of time. One can think of it in terms of revolution versus evolution. Smallwood (2016) suggested that one way to understand the difference between innovation and transformation is to consider it analogous to the difference between revolution and evolution. Revolution, like innovation, is something that occurs over a shorter period of time. Evolution, like transformation, takes longer and ultimately evolves to an entirely different state. Smallwood (2016) contended that innovation happens in incremental steps and within a business context it impacts “rethinking, reimagining, and reinventing the business.” It is about the improvement process. The example Smallwood (2016) used to illustrate this concept is insurance. Innovations in an insurance company, according to Smallwood (2016), would impact new products, services, distribution systems, customer relations, and investments in technology. We see innovation in customer relations across industries with online purchasing, extended hours of operation, price policies, tailored communications, and access to information immediately through business apps. Transformation is a conversion to a different state that leads to different outcomes. Smallwood (2016) described transformation as “the evolution or journey from a current level to a different and better state.”
Another way I metaphorically visualized the difference between innovation and transformation was as a house. An innovation to a house would be making incremental improvements over time. It might mean renovating the kitchen with the latest energy-efficient appliances or installing a computerized thermostat. Transformation in a house could be one of two things. It could be building an entirely new house with an entirely different design and going from a traditional model to one that is ultra-modern. Or, it could be what we are seeing in the tiny-housing movement characterized by home that are 400–600 square feet compared to the average American home of 2600 square feet. These tiny houses are portable homes powered by solar energy and oriented towards low maintenance and a simple lifestyle. Tiny housing represents an evolution from a home needing to be stationary with a minimum of three bedrooms and two baths. There are differences between the outcomes of innovation and transformation; however, they have some of the same attributes because they both require creative thinking, problem-solving skills, and are influenced by life events.

Creative thinking
According to the Oxford dictionary, creativity is “[r]elating to or involving the use of the imagination or original ideas to create something.” A search on Bing.com (2018) yielded the following definition:

The use of the imagination or original ideas, especially in the production of an artistic work. Synonyms: inventiveness, imagination, imaginativeness, innovation, innovativeness, originality, individuality, artistry, expressiveness, inspiration, vision, creative power, creative talent, creative gift, creative skill, resourcefulness, ingenuity, enterprise

Acar, Burnett, and Cabra (2017) identified which factors are paramount to the creative process. Their empirical study yielded a deeper understanding of the main ingredients most crucial to creativity. They cited “originality, value, surprise, and the aesthetics in the context of 3 types of
ideas (ideas, everyday products, and socially organized recognized products)” as most critical to creative thinkers (p. 133). Among the literature I reviewed, most of the articles and books were about some aspect of creative cognitions: creative thinking (Acar et al, 2017; Heath & Heath, 2007; Johnson, 2011; Ramsland, 2012), creative imagery abilities (Dziedziewicz & Karwowski, 2015; Jankowska & Karwowski, 2015), creative processes (Miller, 2014; Mumford, Medeiros, & Partlow, 2012; Wimmer, 2016), creative intuition (Kolańczyk, 2012), insight (Martinsen, Furnham, & Hærem, 2016), imagination (Curtis & Cerni, 2015), cognitive flexibility (Lee & Therriault, 2013; Nijstad, De Dreu, Rietzschel, & Baas, 2016; Smith & Ward, 2012; Vartanian, 2016), positive thinking (Frunza, 2017), innovative thinking (Campbell, 2015; Edwards-Schachter et al., 2015; Gabora, 2016), intelligence (Silvia, 2015), emotional intelligence (Parke, Seo, & Sherf, 2015), and mindfulness (Baas, Nevicka, & Ten Velden, 2014; Batalo, 2012; Matiz, Fabbro, & Crescentini, 2017; Lebuda, Zabelina, & Karwowski, 2016; London, 2013; Ostafin & Kassman, 2012; Schairer, 2011). The creative process is complex because there are so many variables that contribute to our ability to be creative.

In the book section “Creativity” in the Oxford Library of Psychology parent book series, Simonton and Damian (2013) not only provided guiding questions to help better understand creativity, but the authors also suggested that creativity is best understood within the context of looking at the uniqueness or novelty of the idea and its functionality or utility (Ritter et al., 2012). They suggested that creativity is a quantitative element that can be studied from three different perspectives: the product, the person, and the process. It may be that we are just now in the process of better understanding creativity in all its richness and complexity.
While much of the literature that I read focused on the qualitative aspects of creativity, Turner (2014) suggested that our ability to innovate rapidly and over so many domains is what makes us unique, compared to other species. Turner (2014) claimed that our ability to generate creative sparks evolved over time as our minds became more sophisticated. Humans developed the capacity to blend two or more ideas and create something new through the blending process.

There may never be one “right” way to understand the creative process. That said, the various perspectives that I found in my literature review suggest that there is an art and a science to understanding transformational thinking that involve a dynamic interplay among our creative processes, intelligence, and mindset.

It is interesting to note that the articles and books I found, which emerged from a word search using the words “creative thinking and transformation,” were all written within the past eight years. Additionally, the topic that populated the most of the literature was about the relationship between mindfulness and creativity. In the United States, the mindfulness movement was associated with “hippies” in the 60s and 70s. Dr. Kabat-Zinn brought mindfulness into the more traditional American landscape by using the technique to help patients manage chronic pain. In the early 90s, Bill Moyers interviewed Kabat-Zinn in a 40-minute segment that was part of a five-part PBS series, and that catapulted the mindfulness movement into America’s living rooms, making it a mainstream phenomenon (Wylie, 2015). The literature on the connection between mindfulness and creativity seems to have emerged within the last eight years, just like the literature on “creative thinking and transformation.” This highlights that the study of transformational ideation is relatively new and that there is an opportunity for further research. There appears to be a gap in the literature whereby much of the research has been focused on
creative processes, such as problem-solving, cognitive processing, innovation, and transformational leadership, but very little in the specific domain of transformational thinking.

**Creative processes**
There is growing interest and research in the processes associated with creative thinking. That said, there is still a lot of ambiguity and difference of opinions among researchers and theorists about what enables us to develop new and useful ideas that allow us to problem-solve. In *Cognitive Processes Underlying Creativity at Work*, authors Palermo and Moneta (2016) stated that advances in research are helping us identify the core processes that bring about creative thought. According to Palermo and Moneta (2016), the processes involved in creative cognition include problem finding, information gathering, incubation, idea generation, idea evaluation, and idea implementation. Their findings represent the umbrella that covers the topic of creative processes. Many of the elements that are part of the processes associated with creative thinking were found throughout the literature. While I did not find one absolute, definitive model for the creative process, most of the articles and books highlighted several core cognitive processes.

Mumford et al. (2012) stated that the basis of creativity is found in our ability to generate well-defined, original, and high-quality solutions to problems that are characterized by ambiguity, complexity, and uniqueness. They suggested that one’s cognitive capacities are directly linked to their ability to engage in creative problem-solving. What is valuable about their research is that it helps us better understand “what it is” that enables people to generate elegant and creative solutions to complex problems. Mumford et al. (2012) suggested that earlier theories (Merrifield, Guilford, Christensen, & Frick, 1962; Parnes & Noller, 1972; Sternberg, 1986) looked at assumptions about the role of cognitive processes in relation to creativity. Mumford et al. (2012)
looked to other researchers in the field (Baer, 2003; Finke, Ward, & Smith, 1992; Mumford, Olsen, & James, 1989; Mumford, Schultz, & Van Dorn, 2001; Rich & Weisberg, 2004, as cited in Mumford et al., 2012) and created a model based on three essential propositions: (a) problem solving must be based on knowledge, (b) the required knowledge must be recombined and reorganized in order to generate new knowledge and unique ideas, and (c) the ideas must be evaluated and viable so they can be used to guide and direct work on a creative project. From this assertion, a model emerged which was based on the premise that problem definition is the genesis for creative thinking (Csikszentmihalyi, 1999). Mumford, et al. (2012) suggested that there is a sequential order to the steps involved in the process of creative thinking and problem-solving:

Problem definitions, in turn, lead to information gathering and selection of concepts used to understand this information. These concepts then provide a basis for conceptual combination. The new knowledge emerging from conceptual, in turn, allows for idea generation and evaluation of ideas. Following selection of viable ideas, implementation planning begins with people actively monitoring the outcomes of their actions as they implement their plans. (p. 32)

They argue that this is a dynamic process and that failure to comply with executing the steps in the right order requires people to go back to the beginning steps of the creative process model, presented in Figure 1. In addition to developing a model for understanding the creative process, Mumford, Antes, Caughron, Connelly, and Beeler (2010) took it a step further and found that certain critical operations and types of information had more impact in certain areas. For example, they found that “information gathering was particularly important in the biological sciences, while conceptual combination was particularly important for performance in social sciences” (p. 34). In addition to understanding the types of information that were conducive to
the creative process, researchers began to study what strategies proved most effective in executing the creative problem-solving processes (CPSP).

![Figure 1. Creative Process Model](image)

**The relationship between intelligence and creativity**
My research led me to several articles that explored the relationship between creativity and cognition (Baas, Koch, Nijstad, & De Dreu, 2015; Capurso, Fabbro, & Crescentini, 2016; Nijstad et al., 2010), cognitive flexibility (Nijstad et al., 2010), mental states (Capurso et al., 2016) and the impact of one’s environment (Oksanen & Ståhle, 2013). In the article “Conceiving Creativity: The Nature and Consequences of Laypeople’s Beliefs About the Realization of Creativity”, Baas et. al. (2015) suggested that the opinions about creativity among laypeople are very diverse. They range from viewing creativity as an innate talent, a personality trait, an outcome of circumstances, or something that can be cultivated, nurtured, and developed over
time. They include gender stereotypes, culture, and mental disorders as additional factors that influence the way laypeople think about creativity. What struck me as most profound was the observation that how we think about creativity can directly and indirectly influence our ability to be creative. The essence of their argument is as follows:

Importantly, lay beliefs may directly influence creativity and creativity judgments (Runco, Johnson & Bear, 1993). For instance, incremental (vs. entity) beliefs about creativity are associated with interest in creativity and improved creative problem solving (O’Conner et al., 2013). Beliefs about, and the desirability of characteristics and personality traits associated with creativity also shape how teachers and parents value and encourage children processing and displaying those traits and behaviors (Rudowicz et al., 2009, Runco & Johnson, 2002). Finally, lay beliefs act as standards that inform judgments and evaluations of others, (Stroessner & Dweck, 1998, Sternberg, 1995), including creativity judgments (Runco et al., 1993). (p. 340)

Baas et al. (2015) suggested that we still do not know a great deal about laypersons’ beliefs, specifically in the areas of processes, mind states, and circumstances that foster creative thinking. If we had a better understanding of how the layperson viewed these aspects of creativity, the authors contended that we could create relaxing environments that foster creative problem-solving, bring play-based education into schools, and coach leaders and managers on how to build organizational cultures that nurture employees’ creative abilities.

With respect to processes, Baas et al. (2015) proposed that there are three processes that contribute to defocused and task-focused attention, cognitive flexibility (the ability to engage in associative and divergent thinking and switching among categories) and persistence (the willingness and ability to invest cognitive resources.)
Baas et al. (2015) highlighted three variables that are conducive to creative outcomes: processes, activities, and mind states. Within the research, there are different perspectives regarding which processes facilitate creative thinking. Some have subscribed to the theory that defocused attention and task-focused attention generates creativity (Jung, Mead, Carrasco, & Flores, 2013; Martindale & Dailey, 1996) while others have suggested that defocused attention drives creativity (Nijstad et al., 2010), and still others have subscribed to the role of chance (Simonton, 2017; Sio & Ormerod, 2009). Emerging data suggests that people generate creative ideas through flexible thinking, which allows them to explore a vast variety of perspectives as well as more structured and systematic thinking, which then allows them to explore their perspectives more in-depth (Chermahini & Hommel, 2011; De Dreu, Bass, & Nijstad, 2008; Nijstad et al., 2010; Sagiv, Arieli, Goldenberg, & Goldschmidt, 2010). The significance of their work is that it broadens our ideas of how people generate unique ideas and suggests there is not one absolute process to encourage creativity. According to Baas et al. (2015), creativity can be heightened by cognitive flexibility: our ability to switch among categories, perspectives, and approaches. The authors suggested that persistence, which they define as “the extent to which people invest cognitive resources and focus attention and effort on the task at hand” (p. 314), also plays a role in our ability to be creative. Persistence is more disciplined and systematic in nature; it supports the process of a more in-depth exploration and singular focus on just a few categories. In this context, it moves past the idea that creativity happens in a flash of light or the microburst of an “aha” moment. Baas et al. (2015) explain it in the following way:

Persistence involves hard work and a systematic, effortful, and in-depth examination of only a few categories or perspectives (Boden, 1998; Finke, 1996; Newell & Simon, 1972; Rietzschel, De Dreu, & Nijstad, 2007). It leads to original ideas within a few categories after more accessible and common ideas have been discarded (Nijstad & Stroebe, 2006; Rietzschel, Nijstad, & Stroebe, 2007, 2014). Persistence, therefore, requires time to result in creative outcomes. It is facilitated
by focused attention (De Dreu, Nijstad, Baas, Wolsink, & Roskes, 2012; Oberauer, SüB, Wilhelm, & Wittmann, 2008), deliberate, effortful, and systematic probing of a few possibilities and perspectives (Rietzschel, Nijstad, & Stroebe, 2007), and is undermined when people are distracted while generating ideas and insights (De Dreu et. al., 2012; Roskes, Elliot, Nijstad, & De Dreu, 2013; Zhong, Dijksterhuis, & Galinsky, 2008). (p. 314)

Persistence requires the willingness and ability to reexamine failed efforts and attempts to arrive at a solution. It is the painstaking process of going back, reconsidering assumptions, and reevaluating erroneous beliefs. In the book, How to Fly a Horse: The Secret History of Creation, Invention, and Discovery, Ashton (2015) made the argument that to be creative is intrinsic to our human nature. Ashton (2015) used stories of well-known inventions and discoveries to illustrate that we often have no idea about the amount of hard work, grit, and perseverance that went into creating something; nor do we necessarily know all the people involved that had a hand in creating or discovering something. Often, the person credited with the invention or the original idea rode high on the shoulders of those that came before them; however, because of timing or serendipitous events, they received the credit. Given how hard it is to really comprehend and appreciate all that goes into the creative process, it is understandable that the notion of creativity happening in a moment of divine intervention is more believable and appealing than acknowledging that creativity is just as likely to happen when someone engages in deliberate, focused thinking, and that it requires discipline, hard work, and persistence to reach the desired outcome. According to Baas, et al. (2015), there are certain activities that have been proven to be conducive to creative thinking and creative problem-solving.

Creativity and activities
In pursuit of the answer to what types of activities are most conducive to creativity, Baas et al. (2015) suggested no single activity trumps all others. Travel, leisurely pursuits, work tasks,
imposed time constraints, working in groups, and working alone can all be conducive to the creative process. We see this in the evolution of work spaces and work styles—from open work stations where no one has an assigned office to flex time and working off-site in remote locations. Each one of these settings is primed to be conducive to certain creative activities. Baas et al. (2015) argued that our mindset, just like processes and activities, also plays a role in our ability to generate creative outcomes.

**Creative outcomes**
Baas et al. (2015) argued that moods and motivational states are largely influential in the creative process. Earlier research leaned toward the notion that positive moods were more likely to enhance creativity (Ashby et al., 1999; Lyubomirsky, King, & Diener, 2005, as cited in Baas et al., 2015). New research (De Dreu et al., 2008, Gilet & Jallais, 2011; To, Fischer, Ashkanasy, & Rowe, 2012, as cited in Baas et al., 2015) has suggested that all mood variances, including fear and anger, can contribute to creative outcomes, and that another important factor is the level of arousal. Baas et al. (2015) have suggested the following:

> Arousing moods, whether positive or negative, were associated with greater creativity. Interestingly, although the level of arousal appears to drive creative performance, a mood’s state’s valence determines the cognitive pathways that lead to creativity. Creativity emerges via flexible thinking when valence is positive and via persistence when valence is negative. (De Dreu et al., 2008; To et al., 2012). (as cited in Baas et al., 2015, p. 342)

If one believes that where their mind goes, their energy goes, then a person’s beliefs about creativity can have an influential role in creative outcomes. A person’s beliefs about creativity can help them to determine which type of cognitive processes, flexible or structured activities (whether work-related or leisurely in nature), and mindset are most conducive to their ability to be creative and generate novel results.
In the book *Flight from Wonder: An Investigation of Scientific Creativity*, Rothenberg (2015) delved deep to try to better understand the scientific nature of creativity. Rothenberg’s (2015) work helps delineate the cognitive processes in sequential order that lead to innovative, key formulations and discovery. Interestingly, this body of work is based on the exploration of autobiographies and working manuscripts of distinguished Nobel laureates, prize winning authors, and artists. Rothenberg’s (2015) research concludes that there are three interdependent and sequential cognitive processes that contributed to a person’s creative achievements. In addition to our being intentional about engaging activities, researchers also found that our imaginative influences our creative abilities.

**Creativity, imagination, and imagery**

Logic will take you from A to B. Imagination will take you everywhere.

~Albert Einstein

In the article “Measuring Creative Imagery Abilities,” Jankowska and Karwowski (2015) suggested that we need to have a better understanding of the interdependent relationship between creativity and imagination. Their interest led them to develop a new theoretical model, which was designed to create a better bridge between creativity and imagination. To gather data for their research, they incorporated a new psychometric instrument called “The Test of Creative Imagery Abilities” (TCIA), which was developed to measure a person’s creative abilities to develop images. Their research led to the identification of three interdependent characteristics of creative imagery abilities: vividness with respect to the level of detail, uniqueness or originality, and transformativeness. Given the gap in literature on transformational thinking and the
connection between transformational ideation and creativity, having valid and reliable
instruments to measure creativity will also help scientists better understand the nuances of
transformational thinking.

The terms “creativity” and “imagination” are often used interchangeably because, since they
share attributes, many people think they mean the same thing. While it is true that they are both
faculties of the mind, they are different. In the book *Out of Our Minds: Learning to be Creative,*
Robinson (2001) stated this of the imagination:

> Imagination is the primary gift of human consciousness. In imagination, we can
step out of the here and now. We can revisit and review the past. We can take a
different view of the present by putting ourselves in the minds of others: we can
try to see with their eyes and feel with their hearts. And in imagination we can
anticipate many possible futures. Imagination is the ability to bring to mind things
that are not present to our senses. We can imagine things that exist or things that
do not exist at all. (p. 141)

The importance of creativity and imagination cannot be emphasized enough. One of the most
popular TED talks of all-time was Robinson’s (2006) passionate plea to bring creativity back
into our schools because it is what he believes will enable us to be innovative and make a better
future:

> We may not be able to predict the future but by acting on the ideas produced in
our imagination, we can help to create it. The imagination liberates us from our
immediate circumstances and holds the constant possibility of transforming the
present. (p. 142)

Robinson (2001) made an important distinction between creativity and imagination. In
Robinson’s (2001) definition, “creativity is a process of having original ideas that have value”
(p. 2). Robinson (2001) has viewed creativity as a process that can be taught, which is why he is
such a strong advocate for creating a culture of creativity in our schools and organizations.
Robinson’s (2001) idea of creativity is something that is action-oriented with a valuable purpose, and it involves applying and putting your imagination to work. Robinson (2001) stated the following:

To call someone creative suggests they are actively producing something in a deliberate way. People are not creative in the abstract; they are creative in something: in mathematics, in engineering, in writing, in music, in business, in whatever…In a sense, creativity is applied imagination. (p. 142)

Robinson helped make the connection between imagination and creativity and their relationship to innovation, which he described as “the process of putting new ideas into practice” (p. 142). “Innovation,” stated Robinson, “is applied creativity and by definition, innovation is always about introducing something new, or improved, or both and it us usually assumed to be a positive thing” (p. 142). Relationships exist between creativity, imagination, and innovation. Another significant factor is the relationship between creativity and intelligence.

The relationship between creativity and different intelligences
Researchers have been interested in better understanding the relationship between creativity and intelligence. In the article “Intelligence and Creativity are Pretty Similar after All,” Silvia (2015) contended the following:

There is a deep connection between intelligence and creativity. New lines of work on creative thinking strategies, executive cognitive processes and abilities, and cognitive neuroscience have revealed that intelligence and creativity are much more closely linked than the field has thought. (p. 599)

Contributing factors to better understanding and recognizing the connection between intelligence and creativity is due in part to the development of more sophisticated statistical tools, improved assessment methodologies, and the emergence of new theories (Silvia, 2015). There were challenges in the creative research field of gathering data and sorting out convergent and divergent processes (Guilford, 1967). In their book, *Creativity and Intelligence: Exploration with*
Gifted Students, authors Getzels and Jackson (1962) conducted research with middle school and high school students. Their book was influential among creativity researchers because they looked at the correlation between high IQ and low creativity and low IQ and high creativity. While their research yielded problematic results because of poor validity, it did set the stage to start framing the relationship between creativity and intelligence.

In the book Modes of Thinking in Young Children; A Study of the Creativity-Intelligence Distinction, Wallach and Kogan (1965) also worked with assessments on school children, and their research had more validity because it presented a straightforward and objective scoring method. Wallach and Kogan (1965) claimed that “creative responses were unique responses—responses that no one else in the sample gave” (p. 600). Still, up until this time, the main perspective found in the creativity textbooks and assessments, according to Silvia (2015), was that creativity and intelligence were essentially independent cognitive abilities. Silvia (2015) contended that Kim’s (2005) article “Can Only Intelligent People Be Creative? A Meta Analysis” was pivotal among creativity researchers because Kim’s meta-analysis changed the direction of thinking about the relationship between intelligence and creativity. Now, instead of seeing those two domains as independent and dissimilar, Kim’s (2005) research showed that intelligence and creativity were in fact similar.

The work in better understanding the relationship between intelligence and creativity continues to evolve. Silvia (2015) suggested that research is discovering how intelligence influences creative ideas on multiple tasks and everyday activities, such as our choice of words, our ability to be humorous, our musical improvisation, and our ability to create metaphors and analogies.
Looking ahead, Silvia (2015) offered an exciting landscape in cognitive neuroscience: the ability to conduct scientific studies with sophisticated biotechnological tools.

In the article “The Cognitive Underpinnings of Creative Thought: A Latent Variable Analysis Exploring the Roles of Intelligence and Working Memory in Three Creative Thinking Processes,” Lee and Therriault (2013) suggested that there is a reciprocal relationship between higher-order cognitive thinking abilities and creativity. Their research looked at the interdependent relationships between intelligence, working memory, and three creative processes: associative fluency, divergent thinking, and convergent thinking. Associative fluency is the ability to create opportunities by seeing what is possible. It is being able to connect the dots and create new possibilities by combining different activities, ideas, or technologies. Divergent thinking is the ability to brainstorm and generate a lot of ideas by exploring as many opportunities and solutions as possible. Lee and Therriault (2013) claimed that all of these processes contributing to creative thinking require a degree of cognitive complexity and involve one’s working memory. Researchers also found that, in addition to cognitive intelligence, there are other types of intelligences that influence our creative abilities.

**Creativity and emotional intelligence**

Goleman’s (1995) book *Emotional Intelligence* brought the idea that we have multiple intelligences into American’s mainstream. The term “emotional intelligence” was first introduced in 1964 in a paper written by Michael Beldoch. In the book *Frames of Mind: The Theory of Multiple Intelligences*, Gardner (1983) introduced the idea that we have multiple intelligences, which include interpersonal intelligence (the ability to understand the motivations, desires and intentions of others) and intrapersonal intelligence (the capacity to understand our
own desires). In the article “Regulating and Facilitating: The Role of Emotional Intelligence in Maintaining and Using Positive Affect for Creativity,” Parke et al. (2015) contended that two aspects of emotional intelligence do indeed shape creativity: emotion regulation and emotion facilitation. Their study focused on managers who were early in their careers and worked in a variety of jobs. They proposed that “emotion regulation ability enables employees to maintain higher positive affect (PA) when faced with unique knowledge processing requirements, while emotion facilitation ability enables employees to use their PA to enhance their creativity” (p. 917).

Parke et al. (2015) suggested that employees who exhibit emotional intelligence, which includes the ability to effectively manage one’s own emotions and social relationships, are more likely to sustain higher levels of positive affect. This emotional regulation leads to increased energy, focused concentration, and more engagement, which Parke et al. (2015) argued has a positive impact on creativity. They add that emotion facilitation, which is defined as the ability to leverage one’s affective state for improved decision-making and problem-solving, also leads to enhanced creativity. Their theoretical model suggests that information and creative processing requirements impact a person’s positive affect, which then influences a person’s creativity, as shown in Figure 2.

It is important to provide a context for Parke et al.’s (2015) research because it focuses on an employee population engaged in managerial roles that require knowledge and information processing. I believe it would be worthwhile to test their model and hypotheses on employees engaged in different roles and various individuals in non-work-related environments. Their
research, along with Silvia’s (2015), suggests that complex problem-solving requires a certain degree of intelligence and creativity to come up with multiple solutions.

Source: Adapted from Parke, Seo, & Sherf (2015)

**Figure 2. Emotional Intelligence and Creativity**

In addition, there appears to be an overlapping relationship between intelligence and creativity in that they have similarities with respect to cognitive flexibility and problem-solving (Silvia, 2015).

The relationship between creativity and cognition  
In a desire to better understand the relationship between the cognitive processes that are associated with creativity, Miller (2014) conducted an empirical study, which is highlighted in the article “A Self-Report Measure of Cognitive Processes Associated with Creativity.” Miller (2014) argued that there was a need for more reliable and valid creativity assessment tools.
This finding led Miller (2014) to conclude that a self-reported measure of creative processes might address this problem and help minimize the current creativity research gap. Miller (2014) developed the Cognitive Processes Associated with Creativity (CPAC) to study the processes of brainstorming, metaphorical and analogical thinking, perspective taking, imagery, incubation, and flow. By conducting research using the CPAC self-assessment tool, Miller (2014) hoped the study would accomplish the following:

[To] expand the knowledge of the creative process through the creation of an instrument that specifically addresses the use of selected various routes incorporated into the creative process, and therefore can provide information on how individuals vary in their preferences for different strategies. (p. 204)

Miller’s (2014) study, which involved 226 participants filling out an online questionnaire and a laboratory follow-up, showed that the CPAC is a reliable and valid measure. Miller (2014) suggested that the tool could be administered to expanded populations such as gifted populations, and that the findings could be used to help develop curricula for creativity training programs. Additionally, Miller (2014) contended that, ultimately, having a better understanding of the cognitive processes associated with creativity could lead to more generalizable applications in various professional environments.

Proponents of multiple intelligences believe that we can improve certain types of intelligences such as our emotional and social intelligence and enhance our creative capabilities. Two other aspects of creativity that we have influence and control over are our willingness to pay attention to our intuition and our ability to choose our mind set.
Creativity and intuition
I once heard a metaphor that suggested that intuition and creativity are like dawn and dusk: fundamentally different, yet completely symbiotic in nature. They are a natural, interdependent phenomenon that we experience on a routine basis. Yet, while they are predictable events, they lack a certain preciseness, such as trying to provide a specific demarcation of time, or hues, or trying to describe the exact quality of the event. Intuition, like twilight, is something that we experience every day, yet it is hard to provide a concise definition of what it is and what it is not.

In the article “There's a Gut Feeling about this Whole Intuition Thing,” Peterson (2003) wrote that “Intuition has the endorsement of well-respected psychologists. Pioneering psychologist Carl Jung called it one of the four ways people function, along with feeling, thinking and sensing.” Intuition is direct. It is our internal knowing. We bring our attention to what is going on around us first and then bring it to our inner awareness. Intuition can be based in the present or it can be a premonition regarding a future event. It is an inner sense or wisdom about a person or a situation that resonates and reverberates within us. Most of us know what it feels like to have an intuitive sense about something. Some people can pinpoint a specific place in their body where they “feel” its tingle in their gut or a tightness in their chest. We often use our intuition to guide certain decisions, and we factor it into our judgment. Other words used to describe intuition include hunches, insights, clairvoyance, inklings, instincts, feelings, or a sixth sense. These are unobservable mental states. They are present in our lives and intuition can influence our creative processes. The relationship between intuition and creativity depends on our willingness to pay attention to our intuition and honor it as a viable source of information. We glean insights to important clues and data that can be used to determine how best to respond to certain problems.
and opportunities. Our intuition can help us tap into our creativity to develop unique solutions—we can use those insights to do things differently and better than we have in the past.

Not everyone agrees whole heartedly with this premise. In the book *Thinking, Fast and Slow*, Nobel Prize winner Daniel Kahneman (2013) posited that it is easier to recognize mistakes in others than it is in ourselves. This is due in part to our willingness to take our intuition at face value which can create certain vulnerabilities by allowing us to negate and minimize things we need to pay attention to. Additionally, Kahneman (2013) pointed out that, for most of us, it is difficult to study our own faults. Self-deception makes it difficult to see our faults and flaws. We cannot change the things we are not aware of. The famous story of the Hungarian physician Ignaz Semmelweis illustrates this beautifully. Dr. Semmelweis was an obstetrician in the mid-eighteenth century, and he worked at two hospitals on the maternity wards. Oddly enough, there were significant differences in the mortality rates of the hospitals, even though they used the same equipment and followed the same procedures. The only difference was that one hospital was a traditional institution and the other hospital was affiliated with the university and was a teaching institution. Dr. Semmelweis worked with cadavers when he taught his medical school students. It was not uncommon to teach a class and then go to the maternity ward to deliver babies. This occurred at a time before we understood the importance of hand washing to prevent the spread of diseases and viruses. Dr. Semmelweis was unknowingly transferring diseases from the cadavers to the mothers and infants at the University hospital, which directly contributed to their high mortality rates. For a long time, Dr. Semmelweis had absolutely no idea that he was the culprit. We can be blind to things that are obvious, as well as be blind our blindness. It can be difficult for us to take in new information because we are creatures of habit and comfort. Most of
us tend to gravitate to the path of least resistance and what we have become dependent upon (Morgan & Barden, 2015). We can easily be led to believe that a falsehood is true when we are exposed to frequent repetition (Kahneman, 2013). This is because it can be hard to distinguish familiarity from truth, and if we do not know something, we often prefer to go with a sense of cognitive ease and accept something at face value. One thing that we can count on is that life is unpredictable and, therefore, it is in our best interest to gather data from multiple sources when it comes to problem-solving.

Our creativity allows us to imagine and visualize images from the past and the present, and to project new visions of the future. According to Officer (2005), certain skill sets can enhance our intuitive abilities. Intuition allows us not only to visualize but to experience associated emotions with those images. We can use that insight, according to Officer (2005), to speculate and consider alternative outcomes.

Intuition plays with our instinct, our ability to use discernment and to judge whether a situation feels right or wrong. If we are not sure about what our intuition is trying to tell us, we can always dig deeper and explore the issue, concern, or opportunity further. The search for truth and meaning is fueled by our curiosity. Paying attention to our intuition requires being present and mindful so that we can be aware and decipher what is going on around us and within us.

**Creativity and the mind-body connection**
Researchers are learning more about the relationship between creativity and the mind-body connection. We know that cognitive flexibility, neuroplasticity, and other types of intelligences influence our ability to engage in creative problem-solving. It turns out that other activities such
as mindfulness and meditation, which have a positive effect on our neurochemistry and neuroplasticity, are also beneficial to creativity and innovative problem-solving.

**Creativity and mindfulness**

In today’s 24/7, fast-paced environment, where multi-tasking is the norm and we can get pinged, emailed, and informed that there is a call waiting all at the same time, it is no wonder there is a desire to find stillness and calm. Meditation and mindfulness have been around for centuries; however, it has only been within the last two to three decades that the term “mindfulness” has become part of the American mainstream.

In 1993, Bill Moyers did a PBS special series on *Healing and the Mind* and he featured the work of Kabat-Zinn, who was heading the Mindfulness-Based Stress Reduction Clinic at the University of Massachusetts Medical School (Wylie, 2015). Kabat-Zinn was teaching mindfulness practices to patients suffering from chronic pain, and the results were impressive. The participants in his clinic reported improvement in the quality of their sleep, increased levels of energy, and decreased levels of pain. His exposure on PBS sparked wide-spread interest in his work and in mindfulness (Wylie, 2015). When Kabat-Zinn’s 1994 book *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life* made it to the national bestsellers list, mindfulness made its way into board rooms, corporate retreats, hospitals, prisons, classrooms, and conversations around the dinner table. Suddenly, there was widespread interest in understanding the concept and application of mindfulness.

**Mindfulness defined**

Kabat-Zinn (1994) has described mindfulness as purposefully paying attention to the present moment. Mindfulness invites us to be curious about our thoughts, feelings, and observations
while suspending judgments about the experience. According to Wikipedia, mindfulness is, “the psychological process of bringing one's attention to experiences occurring in the present moment, which can be developed through the practice of mediation and other training.” My definition of mindfulness is the ability to live in the moment by focusing on the present and paying attention to what it currently going on around and within us. The key to mindfulness is being attuned to what is happening in the present. With the surge of interest in mindfulness, more research has been done to understand the benefits derived from mindfulness, and research is showing that mindfulness and creativity are significantly related.

Benefits from mindfulness
Research on mindfulness and its benefits has increased over the years. In the article “Mind Full of Ideas: A Meta-Analysis of the Mindful-Creativity Link,” Lebuda et al. (2016) conducted a multilevel meta-analysis of samples in studies published between 1977 and 2015 to better understand the relationship between mindfulness and creativity. As part of their research, Lebuda et al. (2016) highlighted many of the physical, emotional, interpersonal, and psychological benefits derived from mindfulness: higher brain functioning and cognitive flexibility; lower levels of stress, depression, and anxiety; enhanced concentration; clarity in perspective-taking; mitigated fear of judgment; reduced aversive self-consciousness; and improved divergent thinking (p. 22). Their study, along with other research, confirms that there is a direct correlation between mindfulness and enhanced creativity (Ball, 1980; Colzato, Ozturk, & Hommel, 2012; Davis, 2009; De Dreu et al., 2008; Langer, 2014).

Lebuda et al. (2016) highlighted several abilities that can be enhanced through practicing mindfulness, and many of those abilities are related to creative processes. For example,
mindfulness is associated with cognitive flexibility (Carson & Langer, 2006; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007, as cited in Lebuda et al., 2016) which is needed to switch perspectives and look at problem-solving through different lenses. Mindfulness improves working memory, which is needed for divergent thinking (Hedblom, 2013) and, as we know, is an integral part of the creative process. Working memory helps to facilitate creative insight and, according to Hedblom, Kutz, and Neuhaus (2015), it allows us to come up with new perspectives and insights so that we can solve problems. Mindfulness helps us to break free from habitual patterns of thinking, which is needed to generate new ideas (Moore & Malinowski, 2009). Mindfulness reduces fear and anxiety and can quiet our inner critic (Carson & Langer, 2006). Freedom from those restraints fuels creativity (Baas, De Dreu, & Nijstad, 2008; Nijstad et al., 2010). Chiesa and Serretti’s (2010) study demonstrated that a little mindfulness training goes a long way to promote creative thinking and provide physiological benefits. Participants in the study underwent neuroimaging while practicing mindfulness meditation, and the electroencephalographic images showed increased activity in their prefrontal and anterior cingulate cortex. Increased activity in these centers of our brains is known to enhance our ability to focus, decrease stress, and improve our overall sense of wellbeing. The study also found that certain types of meditation techniques influence how we think, our ability to be creative, and how we experience life events. In the article “Mindfulness Can Literally Change Your Brain,” Congleton, Hölzel, and Lazar (2015) found that participants who practiced mindfulness for eight weeks showed significantly noticeable increases in the density of their brain’s gray matter.

In the book *Start Here: Master the Lifelong Habit of Wellbeing*, authors Langshur and Klemp (2016) built an entire wellness program called the LIFE XT Training System. Their model was
built using evidence-based research from some of the world’s leading thinkers and scientists in neurology, biology, and psychology. The first part of their program begins with mindfulness because they believe it is the foundation of wellness and wellbeing.

**Mindfulness activities**

Mindfulness activities can be incorporated into almost any daily activity. In a 2016 report prepared by the editors of Harvard Health Publishing, Siegel and Allison discussed several everyday activities that people can engage in to bring more mindfulness into their lives. In the blog post “40 Ways to Bring Mindfulness to Your Days,” Beach (n.d.) listed such seemingly mundane activities as brushing one’s teeth, cleaning the dishes, and getting out of bed as ways we can practice bring our mindful attention to daily activities. The key is taking ourselves off auto-pilot and being mindful about the activity. Paying attention to our senses through touch, hearing, taste, and smell can become a mindful activity along with meditation, breathing, observing, and moving our bodies. In general, there is a plethora of information on meditation: the origins, different methods, and the various emotional and physiological benefits. While meditation techniques vary, they are all designed to enhance a sense of wellbeing. Most meditation practices fall within three categories: focused-attention meditation, mindfulness meditation, and loving-kindness meditation. The key to mindful practice is to be in the present, attentive, curious, and non-judgmental. As I started down the path of my literature on transformational thinking, I did not anticipate that I would be including a section on mindfulness. However, after digging deeper into the different components that are part of transformational thinking, it makes sense that mindfulness, which is known to enhance our neuroplasticity and physiology, would make its way into the literature review on creativity.
The benefits of meditation are plentiful: it improves our memory and ability to focus our attention, it reduces stress, anxiety, and depression, and it enhances our emotional well-being (Colzato et al., 2012; Ding, Tang, Deng, Tang, & Posner, 2014; Ding, Tang, Tang, & Posner, 2014; Ostafin & Kassman, 2012). Mindfulness and meditation also are known to enhance creative thinking and creative problem-solving.

**Creativity and problem-solving**

Part of transformational thinking requires innovative and creative problem-solving, so it is important to have a general understanding of what creative problem-solving entails. Velcro, Polaroid pictures, Post-it notes, White-Out, and Corning Ware are all examples of creative solutions to perplexing challenges.

The phrase “Think outside of the box” has become such a cliché that I find myself encouraging clients to “think inside the box” and get creative with the resources they have. Type in “Creative Problem Solving” on Amazon’s website and 4,000 titles instantly appear. Creative problem solving requires finding a novel solution to a problem in an imaginative and innovative way.

Alex Osborn (1953), who is credited with the word “brainstorming,” is the founder of the Creative Education Foundation and presented a model for creative problem solving in the mid-1940s. There is a specific methodology to creative problem solving. In the 1950s, Osborn and his colleague, Sid Parnes, founded the Creative Education Foundation and created a four-step model called the Osborn-Parnes Creative Problem Solving Process (CPSP), and it has four core principles: balance divergent and convergent thinking, ask problems as open-ended questions, defer or suspend judgment, and focus on “yes” or “yes, and” instead of “no, but.” There are
various models that offer a step-by-step process, and while the steps may differ, the core principles are the same.

One of the more useful models I came across in the research was called the Creative Problem Solving (CPS) model, which was based on the earlier work of Osborn and Parnes. The Creative Education Foundation (2015) developed a model based on the work of Osborn and Parnes as well as the work of Puccio, Mance, and Murdock (2011) and Miller, Vehar, Firestien, Thurber, and Nielsen (2011) (as cited in Creative Education Foundation, 2015). The Creative Education Foundation (2015) model has four stages and six process steps (see Figure 3). The four stages are clarifying, ideate, develop, and implement. Within each of those stages, the six steps that occur include exploring the vision, gathering data, formulating challenges, exploring ideas, and formulating a plan to implement. The model and process steps are based on two assumptions and four core principles. The assumptions are that everyone is creative and that creativity is a skill set that can be learned and enhanced. The core principles focus on divergent and convergent thinking, frame problems as questions, defer judgment, and focus on “yes, and” as opposed to engaging in more restrictive thinking.
Balancing divergent and convergent thinking

Creative thinking involves finding the balance between thought processes: divergent and convergent thinking. Divergent thinking is the process of exploring a broad range of possible solutions. Convergent thinking requires a narrower focus and takes a more systematic and logical approach to problem solving. Divergent thinking lends itself well when it works to have several good answers. Convergent thinking is useful when only one correct answer will do. Creative thinking requires a balance between both skill sets. The art is in finding a holistic view that appreciates the free-flowing, spontaneous nature of generating a lot of possible solutions with the precision and discipline that comes from working with a finite set of possibilities. In today’s business environment where more companies are invested in rapid prototyping and designs system thinking, I would expect to see more examples of divergent thinking. Case in point: companies such as Twitter and Facebook have been known to launch products before they completely understand their practical implications. They get immediate feedback from their customers and leverage that information to fix bugs and make improvements.
The balance of divergent and convergent thinking is not just for high tech companies of the twenty-first century. The astronauts in Apollo 13 had to figure out how to generate enough power to get the capsule back to Earth. They engaged in convergent thinking to work with several significant limitations and devise a solution that would get them back safely. Another famous Apollo 13 problem-solving issue demanded convergent thinking when a group of engineers had to fix the carbon dioxide filter within a short time period. As depicted in the film Apollo 13 (Howard, 1995), upon learning about the dire situation, Apollo 13 flight director Gene Kranz said to the engineers, “I suggest you gentlemen invent a way to fit a square peg into a round hole, rapidly.” The next scene showed the lead engineer telling the team, “We gotta a find a way to make this [a square box] fit into the hole [a cylinder], using nothing but that [a number of items laid out on the table].” This was a brilliant example of convergent thinking to creatively solve a challenging problem with significant constraints. In both scenes, the importance of framing problems as questions emerges (Howard, 1995).

**Framing problems as questions**

When we frame problems as questions, we open the door to ideation. A certain openness unfolds because, when we phrase problems as questions, it prompts us to be curious and explore possibilities. Phrasing challenges as open-ended questions present an invitation to generate many ideas, bring forth relevant and rich information, and ultimately produce multiple solutions (Cooperrider & Srivastva, 1987; Cooperrider & Whitney, 2011; Morgan & Barden, 2015; Treffinger, 1995; Watkins, Mohr, & Kelly, 2011). The challenge is to defer judgment during this type of brainstorming.
Defer or suspend judgment
This subject immediately brings me back to grade school when teachers would say, “There is no such thing as a dumb question.” The sentiment behind their claim was that they wanted to encourage students to take risk and ask more questions that would lead to future exploration: we would be willing to explore more by asking more questions. Facilitators leading brainstorming sessions will often remind participants that “There are no bad ideas.” They want to keep the process of idea generation going, and they know that judging ideas and solutions too soon tends to shut down the conversation. Words and phrases such as “can’t” and “yes, but” are also discouraged because they also impose limitations prematurely in the conversation.

The importance of psycholinguistics
The language we use creates a framework for how we think about, respond to, and solve problems. Focusing on “yes, and” rather than “yes, but” creates an entirely different mindset. The phrase “yes, and” has a positive inclination and tends to encourage people to expand upon their thoughts and generate more ideas. The phrases “no, but” and “yes, but” create a sense of limitation and negation and can act as a fire hose during a brainstorming session (Kulhan & Crisafulli, 2017; Leonard & Yorton, 2015). They are words that tend to shut the conversation down or diminish the spark of excitement and enthusiasm that come from “yes, and” conversations, which are more likely to be full of promise and possibilities. People are asked to judge and evaluate their ideas later in the process during the “convergence” stage.

Techniques such as brainstorming and mind mapping, which uses a diagram to visually organize information, are intended to engage in the creative problem-solving process. Within the four stages of the Osborn-Parnes CPSP model, there are four specific actions that need to occur: clarify, ideate, develop, and implement.
Steps for clarification
Clarifying the problem requires exploring the vision, gathering data, and formulating open-ended questions. Just as in the appreciative inquiry model (Cooperrider & Whitney, 1999), a lot of time and attention is spent up front defining the vision to ensure the right questions are being asked and examined. This is a critical step because the issues and objectives drive the rest of the process. Failure to do so could mean expending time and energy on the wrong problem. This level of granular clarity enables getting to the root of the problem more efficiently. One method to help get to this level of clarity is to ask “why” five times to get to the core of the problem or issue. This technique helps prevent spending energy on more superficial issues. It requires us to dig deeper so we can address and solve the critical issue. Questions that begin with “What if…” and “How can…” are action-oriented and powerful. They help set up a solution-focused approach rather than a problem-blaming conversational tone. Human performance improvement (HIP) is another method that leads to the clarification of root causes within an organization. This methodology helps identify issues that often go beyond employees’ skills and knowledge. The benefit to conducting a performance root-cause analysis is that it can illuminate gaps and drive human performance (Piskurich, 2002). This process starts with a business analysis to identify and clarify the company vision, mission, goals, targets, and needs. The next step is to create a performance analysis to evaluate the current level of performance versus the desired level of performance. Once the performance analysis is complete, a gap analysis is done which helps create a roadmap to design methods for converting problems into desired behaviors and outcomes. According to Boyd (2002), analyzing performance gaps consists of two steps—the first step is to identify gaps, and the second step is to prioritize them. There are many models and processes to help clarify the problem and challenge at hand. It is important to invest time upfront
to ensure there is clarity regarding the question that is being asked and the problem that is being solved.

The next action item of clarification involves gathering data. This can involve collecting such information as role clarification, resources, relevant facts, opinions, and a check on people’s feelings about the issue. The next part of clarification is to formulate questions that, by design, will generate solutions. These questions can address obstacles, resources, and opportunities. The key is for them to be open-ended and phrased in a way that invites conversation and ideation.

Steps for ideation
The process of ideation is using techniques to generate ideas that will answer the questions that were formulated in the clarification process. We tend to be creatures of habit; therefore, it is not unusual to generate the same questions that were raised in the past. Unfortunately, this leads us to the loop of engaging in habitual thinking patterns, which ultimately prevents generating new solutions. The challenge is to produce new questions that will lead to the creation of new solutions. This takes us to the next step, which is to develop and evaluate our ideas.

Steps for developing ideas and formulating solutions
This is the intersection where focus and evaluation criteria are examined. Ideas, options, and solutions are analyzed to see if they solve the problem by meeting the required needs and criteria for a successful outcome. It is recommended to have specific criteria in place for evaluating the merit of an idea and the plausibility for implementation. For simple ideas, it is suggested to use a non-complicated scale to rank order and highlight the most desirable idea. For more complex ideas, a SWOT (strengths, weaknesses, opportunities, and threats) analysis might be helpful to evaluate the viability and merit of each idea. Ideas can be combined and reexamined for how
they can be improved and reinforced. The outcome of this step is to determine which ones are the best fits and select which idea(s) will be implemented.

**Implementation and change**

The first step to be able to implement the solution is to draw up an action plan. This step requires using the lens of a project manager because it requires resource allocation, stakeholder analysis, and a communications plan. Most often these types of solutions represent a change to the status-quo, which is why having the stakeholders champion the change is so critical for solution implementation. Equally important is a well-thought out communications plan along with a well-designed change-management plan. It is helpful to evaluate the action plan and break it into a series of readily accomplished tasks. Anticipate obstacles and resistance and think of ways to mitigate them. Acknowledge small successes and build on them. Celebrate big milestones. Be willing to reassess, reevaluate, and refine the action plan as needed. This is where creative solutions gain momentum and changes begin to happen. Osborn and Parnes developed a seemingly simple model in the 1950s that works in a linear fashion (as cited in Creative Education Foundation, 2015). However, most people that have gone through significant changes can attest that it is often a messy process.

The CPSP is a step-by-step process that provides a helpful framework in which to work. However, I contend that the creative problem-solving process is more organic in nature and the steps, while interdependent, do not always go in sequential order. Rapid changes in our political, economic, social, and environmental realms can force us to change our priorities and to refocus our energies and resources. Availability of new information and technologies can require us to take a step back, re-evaluate our assumptions, and redefine the problem we are trying to solve.
CPSP is a structured process for solving problems with methods that help us move beyond conventional thinking.

**The connection between creative problem-solving and working with constraints**

Presenting problems themselves are often complex and bound by significant constraints. For this reason, the “can/if” thinking model presented in Morgan and Barden’s (2015) book, *A Beautiful Constraint: How to Transform Your Limitations into Advantages, and Why It’s Everyone’s Business*, stood out. The model is designed to intentionally leverage constraints.

**Working with constraints**

Creative problem-solving, by design, brings together divergent and convergent thinking processes (Baer, 2003; Mumford & Mobley, 1989; Mumford, Feldman, Hein, & Nagao, 2001; Mumford, Hester, & Robledo, 2012; Mumford & Hunter, 2005; Rich & Weisberg, 2004). The intended outcome of creative problem solving is to generate innovative and pliable solutions with specific resources, such as time, money, choices, and labor. Often those same resources are the exact constraints that caused the problem or are part of the problem. Morgan and Barden’s (2015) book, *A Beautiful Constraint: How to Transform Your Limitations into Advantages, and Why It’s Everyone’s Business*, is specifically designed to teach people how to embrace constraints and work with them rather than against them. They are known for working with “Challenger Brands,” which are brands that are able develop a formidable presence in the market place because of their compelling and provocative branding propositions and innovative marketing strategies.

We are often required to do more with less; however, we are often at a loss to figure out how. Usually at the onset of such a requirement, we are not even sure if it can be done. At any given
time, we can find ourselves overwhelmed with the abundance of choices, data, possibilities, attention span (considering the reality of not having enough time), or bandwidth to take advantage of all the choices and opportunities. According to Morgan and Barden (2015), we vacillate between living with a fear-based scarcity mentality and an anxious sense of abundance that presents us with too many choices. Either extreme presents us with constraints.

The theory of constraints (TOC) was first introduced in 1984 by Goldratt, who published a book entitled *The Goal: A Process of Ongoing Improvement* to help organizations reach their goals. Goldratt’s (1997) next book, *Critical Chain: A Business Novel*, took the concept one step further by highlighting the importance of identifying and removing the weakest link or constraint in an organization. Goldratt’s popular books promoted the concept of systemic constraints in a business context. Constraints and bottlenecks became a part of the dialog among mainstream management. Morgan and Barden (2015) looked at constraints in a completely different light. Rather than remove them, they embraced them with a methodology that “can unlock a constraint’s transformative benefits to make it a beautiful source of possibility and opportunity” (p. 6).

In the first part of their book, “A *Beautiful Constraint: How to Transform Your Limitations into Advantages, and Why It’s Everyone’s Business*, Morgan and Barden (2015) focused on the process of making constraints beautiful, and in the second part they focused on the application of the concept and why it matters. The first part of the book outlines five aspects of working with constraints:
• Our relationship with constraints, the behaviors that negate our ability to see opportunities in constraints.
• How to frame constraints to lead to breakthroughs.
• How to find solutions to problems defined by constraints.
• How to garner resources even if they are not readily available.
• How to stoke the fires of passion and fuel our perseverance along the journey.

Examining our relationship with constraints
According to Morgan and Barden (2015), it is important to assess and examine our relationship with constraints because they can either help or hinder us with respect to problem solving. They have identified three personality types with respect to their relationship with constraints. The three types of personalities are described as follows:

1. Victim: Someone who lowers their ambition when faced with a constraint.
2. Neutralizer: Someone who refuses to lower their ambition but finds a different way to deliver the ambition instead.
3. Transformer: Someone who finds a way to use a constraint as an opportunity, possibly even increasing their ambition along the way. (Morgan & Barden, 2015, p. 19)

It is important to understand that it is possible to be any one of these personality types when going through the problem-solving process. Like the process itself, which does not always occur in a linear progression, our feelings and perspectives are fluid and adaptive: they will change throughout the process. Morgan and Barden (2015) highlighted the importance of exploring three important questions having to do with one’s mindset, one’s knowledge and understanding of the method, and one’s motivation:
1. Do I believe it is possible? We will only be open to exploring ways to make a constraint transformative if we believe it’s possible.

2. Do we know how to start to do it? We can be open to the possibility of success, but not know how to get started, because this situation, this kind of challenge, may not yield to the methods we use for more conventional problem-solving.

3. How much do I want to do it? We can believe that it might be possible, and know how to start doing it, but if we aren’t driven to do it, then progress is unlikely. (Morgan & Barden, 2015, pp. 21–22)

One of the most poignant examples working with constraints highlighted by Morgan and Barden (2015) is the story of Yves Behar’s “One Laptop Per Child” initiative. Behar was committed to making laptops affordable to children in developing countries. To accomplish this, he had to find a way to bring the price of a $1000 laptop down to $100, which was no small feat. When asked about the challenges of the project, Behar had this to say:

The reality on a project like this is that you hit a million snags and a million people tell you “it can’t be done like this” or “it doesn’t make sense” or “you shouldn’t try this” or “the cost of this or the engineering of that is something we can’t do”. And every time you are presented with one of these challenges that potentially are crippling for the project, you say no. You go back to the big idea. You go back to the belief. You go back to what got you to work on this in the first place. (p. 27)

Behar was successful in being able to bring the cost of a laptop down to $100. Behar’s story about the types of limitations and constraints he encountered is not uncommon when people are creating transformational changes. There are predictable problem-solving and attitudinal stages that people will encounter when working on transformative initiatives. Fortunately, there are also strategies for how to effectively work with constraints in the various stages.
Stages and strategies for responding to constraints
In addition to developing an awareness about one’s relationship with constraints, Morgan and Barden (2015) highlighted specific stages and strategies for transitioning through them when going after a big, bold, audacious goal (see Table 1). Initially, the idea of working with constraints seemed counter-intuitive (see Figure 4). Morgan and Barden (2015) flipped the switch and, in doing so, lit up the idea of working with constraints. Now, instead of feeling heavy and overburdened by constraints, it felt energizing, exciting, and inspiring. What I found extremely valuable in Morgan and Barden’s (2015) work was their ability to reframe the positive aspects of working with constraints. A person who could work with constraints was a modern-day gladiator. In the first chapter, they say the following of problem-solvers:

Professional problem-solvers have a different relationship with constraints from the rest of us: they see them as inherently beneficial, because they provide clear problem definition and focus the problem-solver’s energies; they set the boundaries to explore and push against. (p. 33)

Once a person adopts the right mindset, knows how to start the problem-solving process, and is clearly motivated, the next step is to identify the behaviors and filters that may be getting in the way of seeing the opportunity in the constraint.

Breaking our dependence on limiting beliefs and behaviors
We like to stay in our comfort zones, which is why it is so tempting to keep relying on the strategies that brought us success in the past. However, Morgan and Barden (2015) suggested that there is a vulnerability in relying too much on our successes of today; it can make it difficult for us to see what could create success in the future. They refer to this phenomenon as “path dependence,” which, according to them, is the act of going down narrow, binding, restricted pathways. These restricted pathways thwart organizational progress.
### Table 1. Responses to Constraints

<table>
<thead>
<tr>
<th>Stages</th>
<th>Foundational Premise</th>
<th>Types of Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim Stage</td>
<td>The constraint will necessarily inhibit our ability to realize our ambition.</td>
<td>Avoidance strategies:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>denial of the constraint</td>
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<tr>
<td></td>
<td></td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduction strategies:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reduce level of ambition to fit perceived impact of constraint.</td>
</tr>
<tr>
<td>Neutralizing Stage</td>
<td>Our ambition is too important to allow this constraint.</td>
<td>Workaround strategies:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>neutralize the effect of the constraint by finding another way around it.</td>
</tr>
<tr>
<td>Responsive Transformer</td>
<td>This constraint that we need to respond to could catalyze arrival at a better</td>
<td>Transformative strategies:</td>
</tr>
<tr>
<td>Stage</td>
<td>solution.</td>
<td>use the constraint to prompt different, potentially breakthrough new approaches and solutions.</td>
</tr>
<tr>
<td>Proactive Transformer</td>
<td>What constraints should we impose on ourselves to stimulate better thinking or new</td>
<td>Transformative strategies:</td>
</tr>
<tr>
<td>Stage</td>
<td>possibilities?</td>
<td>use the constraint to prompt different, potentially breakthrough new approaches and solutions.</td>
</tr>
</tbody>
</table>

They are characterized by rigidity and cognitive inflexibility. These pathways can show up in the form of sacred cows, erroneous assumptions, obsolete success criteria, and outdated organizational biases and priorities that are no longer appropriate.
Morgan and Barden (2015) discussed a few key steps that we can take to break out of path dependence. The first step is our willingness to do a fearless inventory of our preconceived ideas and biases that lock us into a certain way of thinking and doing things. We need to make our covert practices, beliefs, and assumptions overt. In a business context, one exercise Morgan and Barden (2015) recommended is identifying six words that are most important to the organization. It serves as a values clarification exercise which can then be used to determine which paths to keep and which ones to break. Morgan and Barden (2015) suggested that we need to explore questions in five key areas to help us identify our path dependence. The questions require us to examine the following vulnerabilities that create path dependence:

1. Our assumptions about our current approach
2. Our habitual routines and processes
3. Our habitual sources we go to for solutions
4. Our internal and external relationships that we depend and rely on
5. Our current key performance indicators that we use to measure our success. (Morgan & Barden, 2015, pp. 49–51)

There are two parts to breaking path dependence: a) making our biases overt by looking at the language we use and the meaning we ascribe to it, and b) asking probing questions that will force us to see our biases about the beliefs and behaviors that no longer serve us and our organizations well. These questions and their answers are the keys to creating new paths. They are catalysts that propel us into action.

The art of asking propelling questions
When we ask better questions, we get better answers, find new paths, and transform our constraints (Morgan and Barden, 2015). Morgan and Barden (2015) called these “propelling questions,” and their definition of such a question is one “that has both a bold ambition and a significant constraint linked together” (p. 59). They suggested that propelling questions force us to see the beauty in the constraint and, therefore, can “propel us off the path on which we have become dependent” (p. 59).

Morgan and Barden (2015) contended that propelling questions are powerful largely because they create a sense of conflict and discomfort. They require us to be creative, think more complexly, engage in cognitive flexibility, and adapt our perspectives. This is how they spoke about the power that drives propelling questions:
If we want to make constraints beautiful, then it matters how we ask the questions that contain them. All of these questions harness the constraint to the ambition, ensuring that the constraint drives the solution:

- How do we win the race with a car that is no faster than anyone else’s?
- How do we build a well-designed, durable table for five euros?
- How do we establish a stronger relationship with this buyer than the market leader, without a communications budget?
- How do we grow more and better-quality barley using less water? (p. 64)

When looking at propelling questions, Morgan and Barden (2015) highlighted the inherent tension between the constraint and the ambition. Constraints fell into four categories: foundation, resource, time, and method (pp. 66–67). Ambitions were classified into five categories: growth, impact, quality, superiority, and experience (pp. 67–68). Morgan and Barden (2015) argued that propelling questions are crafted—the words that are chosen and the paradoxes that are highlighted matter. They emphasized that what gives propelling questions power is having them framed with as much specificity, authority, and legitimacy as possible. Once the propelling questions have been raised, the next step is to figure out the best way to answer them.

The art of answering propelling questions
The heart and soul of Morgan and Barden’s (2015) model comes down to being able and willing to answer propelling questions in a way that creates a “conversational climate.” They used the “we can if” model, which was developed by Hurson (2007). The model serves as a framework for answering propelling questions and finding the solution(s) among challenging constraints. Morgan and Barden (2015) offered five compelling reasons why Hurson’s (2007) “we can if” model is so powerful:

- It keeps the conversation on the right question. It keeps the conversation about how something could be possible, rather than whether it would be possible.
• It keeps the oxygen of optimism continually in the process. It keeps optimism and inquisitiveness alive at the same time.

• It forces everyone involved in the conversation to take responsibility for finding answers rather than identifying barriers. It doesn’t allow someone to identify obstacles without looking for a solution to that obstacle in the same sentence.

• The story it tells us about ourselves is that we are people who look for solutions, rather than a group of people who find problems and obstacles. It builds and reinforces our thinking about ourselves as a culture of potential transformers rather than impotent victims of insuperable circumstance.

• It is a method that maintains a mindset. The failure to generate an answer with one line of enquiry simply leads to another can-if, another how. (pp. 80–81)

Morgan and Barden (2015) used Hurson’s (2007) “we can if” map and model to help create a “conversational climate”: a conversational environment designed to create momentum and generate wildly innovative and pliable solutions to challenging questions. The “we can if” map contains nine types of “we can if” categories that would be most common in problem-solving situations with propelling questions, as shown in Figure 5.
In addition to leveraging Hurson’s (2007) “we can if” map, Morgan and Barden (2015) provided slightly disciplined and structured approach techniques for how best to use the tool. To use the map most effectively, especially with large groups, Morgan and Barden (2015) highlighted seven actions: priming, providing legitimacy, having a strong propelling question, having a leader at each table, stepping back to get a fresh perspective, forcing the group to explore at least three
options, and conducting a review at key stages (p. 99–100). Priming simply means asking participants to think of an example of when they have been able to work with a constraint and find something positive about it. Legitimacy is to share examples of when people have worked with constraints and found advantages. These examples legitimize the concept. Stepping back allows participants to get a fresh perspective. Stepping back also makes it easier to come up with three options around each “we can if” circle, because participants can use that refresh and reset internal button to come up with alternatives. The review process at key stages allows participants to cross-pollinate their ideas and share their observations and experiences of working with the “we can if” map. Morgan and Barden (2015) suggested that once people start exploring the answers from their propelling questions using the “we can if” map, clusters and themes will start to emerge. It is at this point that participants can shift the focus and concentrate on how to “gain access to other people’s resources to help us overcome our own scarcities and meet our ambitions.” (p. 102)

The art of creating abundance
Morgan and Barden (2015) emphasized that we usually have more resources available than we realize. They suggested taking another fearless inventory to see if we can identify habitual thinking patterns and beliefs that may be limiting our ability to see low hanging fruit opportunities easily within reach. To help guide the resource identification process, Morgan and Barden (2015) created a four-square map that identifies potential sources of resources (p. 113): stakeholders, external partners, resource owners, and competitors (see Figure 6). The map has two axes that cut across the different sources to help us identify those who share our agenda and can be influencers and those who do not yet share our agenda. On the opposite side of the map are two other groups: those who see we have something in abundance to share that is of value
and those who do not yet recognize that they are lacking what we have in abundance. Each quadrant in this map is used to help create a framework and determine what assets are in abundance and can be traded. Morgan and Barden (2015) argued that going through this process leads to embracing a more inventive approach to “how we think about accessing more resources” and how we “redefine how we think about being resourceful” (p. 121). This way of thinking about resources and abundance is empowering and can act as an emotional motivator and energizing fuel for the journey to transformation.

Figure 6. Sources of Resources

Fueling our fire
Propelling questions are characterized by Morgan and Barden (2015) as being big, bold, and audacious. Their answers require focus, discipline, inquisitive optimism, and persistence, and ultimately lead us to innovative and transformative solutions. The process can be exciting,
exhilarating, demanding, challenging, frustrating, exhausting, and rewarding. It requires us to tap into internal resources that motivate us and enable us to be tenacious when going after the goal. Morgan and Barden (2015) suggested that the activation of our emotions is one of the most powerful sources of fuel to help drive our creative tenacity. The deeper and more personal the activating emotions are, the better. Morgan and Barden (2015) created a map of emotions, which was adapted from Plutchik’s (1980) theory of basic emotions (see Figure 7). In the article “Emotion Wheel by Robert Plutchik,” Mulder (2018) explained that Plutchik (1980) wanted to create a visual tool to help explain his theory, which posited that there are eight primary emotional states that can be used to identify our emotions. The eight primary states are polar opposites, and we experience their intensities as we move from one extreme state to the other. The eight primary emotions in opposite pairs are listed below:

- Joy vs. Sadness
- Trust vs. Disgust
- Fear vs. Anger
- Anticipation vs. Surprise

Morgan and Barden (2015) created a modified emotional map that has eight core emotions, which are on the periphery, and there are three levels of intensity for each emotion. The closer one gets to the center of the map, the more intense the emotion (see Figure 8). To use this map, Morgan and Barden (2015) suggested leaning into the full range of emotions and keeping the emotions vivid and alive. They wanted people to experience the inherent tension and pull between opposing emotions. It is in this space, where the emotions contrast, that emotions can be most powerful. Morgan and Barden (2015) stated, “When making constraints beautiful, motivation is the method. Breakthrough happens when a propelling question meets strong

Source: Adapted from Plutchik, 1980

Figure 7. Plutchik’s Wheel of Emotions
Conventional problem solvers are more likely to be path dependent, and the problem solvers who prefer to take the road less traveled are the true trailblazers. Those are the individuals who yearn to find another path by embracing the challenge of finding beauty in a problem’s constraints and turning that into a transformative advantage. The next part of my literature review led me down a path to better understanding the traits and characteristics of those trailblazers who are also known as transformational thinkers.

**Characteristics and traits of transformational thinkers**

In seeking a profile of a transformational thinker, I sought to find similar traits and characteristics. Since I did not find one, I posit that creating one would give us a better understanding of the type of people who are likely to drive transformation.

There is far more research on transformational leadership than on the art and science of transformational thinking. However, my research did shed some light on identifying elements of the transformational thinking process: an innovative mindset, cognitive flexibility, divergent and convergent thinking, creative insight, and a unique approach to problem solving. To understand the characteristics of transformational thinkers, the next logical step was to review my data from the interviews and read about transformational thinkers in hopes that the information would ultimately lead to common denominators shared among transformational thinkers. In doing so, I found that transformational thinkers have five common characteristics: curiosity, appreciation for setting goals, courage or willingness to take risks, grit, and optimism.
Curiosity
Curiosity is fundamental to being human, and it starts long before we can utter the universal question “Why?” Just look at how babies reach out to touch things because they are curious about the texture. Toddlers put things in their mouths because they are curious how things taste. Adults take things apart because they are curious about how something works. Livio (2017), astrophysicist and author of Why: What Makes Us Curious, claimed that there are different types of curiosity, and different degrees or intensities of curiosity, and they depend on the person and the situation.

Source: Adapted from Morgan & Barden, 2015

Figure 8. Morgan and Barden's Range of Emotions
What is curiosity?
Livio (2017) highlighted the difference between “perceptual curiosity,” which can feel relentless, uncomfortable, and will not be satiated until we get the information we are seeking, and “epistemic curiosity,” which creates an anticipatory, pleasurable reward when we arrive at the answer or find the hidden treasure. Livio (2017) stated that epistemic curiosity is largely what drives us to learn new things. When we follow that path, we get rewarded by the neural transmitter dopamine, which acts as a chemical messenger and gives us the ability to experience pleasure. There is also “diversive” curiosity, which is what compels us to do something because “we want to know.” This might explain the constant texting, checking emails, and “Googling” to get an immediate answer. Livio (2017) also noted that MRI results have shown that different types of curiosity activate different parts of our brain. It appears that genetics play a role in our levels of curiosity as well as our environments, which can either enhance or diminish our sense of curiosity.

Why is curiosity important?
In Oppong’s (2016) blog “Why Curiosity Leads to Creative Breakthroughs,” the author began the post with a quotation from Lorraine Twohill, Head of Marketing at Google, who states that “Curiosity and creativity are never far apart. You need to be curious to identify problems worth solving, and then come up with new solutions.” (as cited in Oppong, 2016). Curiosity is important because it helps us determine what problems to solve. It is what drives people to figure out how to connect dots to solve complex problems and engage in vivid imagination to discover and create what could be. Curiosity is the spark of a person’s awareness. It ignites and fuels their passion to create, innovate, and transform.
Oppong (2016) cited the work of Dr. Kashdan (Kashdan et al., 2009), Professor of Psychology and Senior Scientist at the Center for the Advancement of Well-Being at George Mason University, who stated that curiosity is important because “there are few things in our arsenal that are so consistently and highly related to every facet of well-being—to needs for belonging, for meaning, for confidence, for autonomy, for spirituality, for achievement, for creativity.” In the blog post “Creativity: What’s Curiosity Got To Do With It,” Dr. Koutstaal (2017) offered another explanation for why curiosity is so important: our survival as individuals and as a species depends on it. Koutstaal (2017) and Livio (2017) both contended that curiosity has had an integral role in advancements in science, technology, and human development. According to Koutstaal (2017), curiosity is vital to our well-being: “Our ability to shift our thought patterns between specific thoughts and more abstract ideas, depending on the situation, is the hallmark of mental agility….and those with a flexible mindset also tend to be happier and more creative.” A key insight about curiosity is the mind-body symbiotic relationship. Engaged hearts and minds are also characteristics commonly found among transformational thinkers. While there are many articles about how to enhance curiosity, Vozza’s (2015) article “8 Habits of Curious People” clearly outlined typical behaviors and mindsets that are part of the creative problem-solving process:

- They listen without judgment.
- They ask lots of questions.
- They seek surprise.
- They’re fully present.
- They’re willing to be wrong.
- They make time for curiosity.
• They aren’t afraid to say, “I don’t know.”

• They don’t let past hurts affect their future.

The connection between curiosity and creativity
Koutstaal (2017) argued that there are two types of curiosity and that they have different connections to creativity. According to Koutstaal (2017), “general curiosity” promotes seeking more information, which, in turn, leads to higher creativity. “Specific curiosity” is more narrowly-focused, and while it contributes to creativity, general curiosity was shown to have a greater effect on idea generation, quality, and originality with respect to creative problem solving. Koutstaal (2017) pointed out that while it seems intuitive that curiosity and creative problem solving are closely linked together, researchers have only recently been testing their theories about the connection between the curiosity and creative problem solving. Koutstaal (2017) highlighted a study that involved 122 undergraduate students who were tasked with developing a marketing strategy. The marketing plan needed to increase sales among a specific demographic group. Researchers were interested to find out which type of curiosity, general or specific, had the biggest impact on creative problem solving. Their findings revealed that general curiosity had a stronger impact on creative problem solving, in part because it promoted gathering a wider range of information and prompted further exploration of specific information (see Figure 9).
I would like to add two more types of curiosity: passive curiosity and active curiosity. Many of us might have an inkling of curiosity about something that sounds mildly interesting. For example, I might be curious about how to play the card game Bridge, but not so curious that I would be willing to spend time or money to learn how to play. I call that passive curiosity. Active curiosity is strong enough that it becomes a catalyst for action. I surmise that transformational thinkers have a great deal of active curiosity, and that level of curiosity is what drives them to explore certain ideas and interests. In addition to curiosity, another common characteristic of transformational thinkers is their appreciation and use of goal-setting.

Source: Adapted from Koutstaal, 2017

Figure 9. Curiosity and Creative Problem Solving


Appreciation of goal-setting
Simply put, transformational goals can be used to create the roadmap to help a person or a business get from their current state to a desired future state. Well-defined goals outline the intentional and specific steps that are required to make the transformation happen. Given that the intention behind a transformation is to create a profound and radical change, it is understandable that incorporating specific goals into the transformational process would be useful.

In the article “Motivation, Goals, Thinking, and Problem Solving,” authors Gilhooly and Fioratou (2013) argued that solution-focused problem solving is driven by goals, and having goals in place helps to enhance motivation. They discussed a certain problem-solving approach known as the “problem reduction” process. One of its features is that it creates a hierarchy of goals starting with broad ranges goals to ones that are very specific in relation to the problem and its contents. Their point of view is that, while daydreaming may be an important part of creative problem solving, it is the structure of goals that helps reach a solution. There is a reciprocal relationship: the process of working on goals generates the motivation to solve them.

The relationship between goals, motivation, and creativity
Innovation requires creative thinking and problem solving, and working with constraints rather than against them can be conducive to breakthroughs and transformational thinking. Goals, in their own unique way, create structured constraints with inherent parameters related to time and resources. In the article “Setting Goals to Get Innovation,” Shalley and Locke (1996) argued that Locke and Latham’s (1990) goal-setting theory illuminates the criticality of goal setting in relation to innovation and can act as a powerful motivator (as cited in Shalley & Locke, 1996). Their article highlights three outcomes related to goals: the relationship between goal setting and
motivation, the connection between goal setting and creativity, and the application of goal setting (Shalley & Locke, 1996).

**Goal-setting and motivation**

There are several positive correlations between setting goals and motivation as stated here:

- People accomplish more when they’re trying for performance goals which are both difficult (challenging, even impossible) and specific (clear) than when they’re trying for any other type of goal (such as “do your best” or “work hard”).

- Goals are most likely to be attained when people are strongly committed to the goals and are given feedback showing their progress in relation to the goals.

- People are most likely to set high goals and be committed to them when they have high self-efficacy (task-specific self-confidence).

- Goals regulate action directly by affecting what people pay attention to, how hard they work, and how long they work.

- Goals affect action indirectly by motivating people to discover and utilize task strategies which will facilitate goal achievement.

- Incentives must not discourage risk-taking, such as trying for nearly impossible goals.

  (Shalley & Locke, 1996)

**Goal setting and creativity**

It almost seems counterintuitive to put structured goals in place when you want to tap into your creative side. But Shalley and Locke (1996) found that setting creativity goals can be very effective for producing innovative unique outcomes in the same way that productivity goals can be useful in reaching quantitative outcomes and certain metrics. What appears to work best for
setting creativity goals is finding the sweet spot of structure and clarity on the specifics of the
goal and the freedom to accomplish them as each person sees fit.

In the article, “Stepping back to see the big picture: When obstacles elicit global processing”,
authors Marguc, Van Kleef, and Förster (2015) found that interferences and obstacles
encountered when pursing goals enhance creativity. Simply stated, when we encounter barriers
in the form of people, resources, or circumstances that impede our ability to reach the goal, we
must recalibrate and figure out what to do. Other researchers (Friedman, Fishback, Förster, &
Werth, 2003; Förster, Friedman, & Liberman, 2004; Jia, Hirt & Karpen, 2009) also found that
dealing with obstacles increased creativity (as cited in Marguc, et al., 2015). Our cognitive
responses, according to Marguc et al. (2015), seem naturally wired to get creative to figure out
how to effectively navigate obstacles in pursuit of a goal.

Goal setting and application
One of my favorite handrails is, “the answer is no unless you ask.” There are many examples of
businesses, such as 3M Company, Google, and HP, that set goals for their employees to be
innovative and creative. For example, 3M Company is known for requiring 25% of their annual
revenue to come from new products, and Google allows their employees to spend 20% of their
time focused on free-thinking side projects that interest them. In the article titled “Google’s New
Best Innovation: Rules Around 20% Time,” Gersch (2013) wrote the following:

[F]ocused free thinking builds a change engine into the culture. There is room to
explore and power to be generated from those intrinsic interests. Their
imagination and innovation on the company’s strategic goals positions Google to
be on the verge of creating a new internal dynamic.
Shalley and Locke (1996) provided an outline with five characteristics to an effective approach for goal-setting: clarity, challenge, commitment, feedback, and task. Additionally, Locke (1996) also provided a detailed list of the application of goals, which includes timelines, explaining the “why,” specific expectations of the outcomes, clarity on the measurements and rewards, and prioritization.

In Flow: The Psychology of Discovery and Invention, Csikszentmihalyi (1990) affirmed that people are happier when they are completely immersed in an activity or in a state of “flow.” When we have goals that are challenging, motivating, and inspiring, it is easy to fall into that state of flow; we are completely absorbed, lose track of time, and feel a sense of connectedness to what we are doing. In addition to the application of effective goals, there is compelling research that claims social support can enhance the pursuit of goals.

There is evidence that social accountability can be a useful tool and resource to help one meet their goals. In the article “Cultivating Effective Social Support Through Abstraction: Reframing Social Support Promotes Goal Pursuit,” authors Lee and Ybarra (2017) suggested that how people think about fostering social support directly influences their interest and ability to pursue goals:

By definition, social support promotes goal-pursuit by providing people with instrumental and emotional resources (Cohen, Gottlieb, & Underwood, 2000). Indeed, much research has shown that social support is instrumental to successful goal-pursuit and thriving (Brunstein, Dangelmayer, & Schultheiss, 1996; Feeney, 2004; Feeney & Collins, 2015; Rusbult, Finkel, & Kumashiro, 2009). (as cited in Lee & Ybarra, 2017, p. 453)

In the article “Interpersonal Influences on Goals: Current and Future Directions for Goal Contagion Research,” Laurin (2016) claimed that people are inclined to pursue goals when they
see others pursuing goals. The author suggested that goals have a significant social contagion factor. Simply put, people are inspired to adopt ideas and pursue goals by the mere presence and exposure effect of others pursuing goals. Given the usefulness of goals to help provide structure to the problem-solving process and act as a source of motivation, the social contagion of goal pursuit is a beneficial phenomenon worth noting. In the article “Cognitive Behavioral, Solution Focused Life Coaching: Enhancing Goal Striving, Wellbeing, and Hope,” authors Green, Oades, and Grant (2006) found that people who participated in a 10-week study did significantly better in reaching and maintain their goals when supported by coaches and peers. This finding was supported in another article by Grant (2008), who found that having a coach to hold people accountable has a positive correlation with goal attainment. When people invite other people to support them, they can leverage their expertise and develop sure-win strategies for achieving their goals. In the article “Professional and Peer Life Coaching and the Enhancement of Goal Striving and Well-Being: An Exploratory Study,” Spence and Grant (2007) found several advantages to social accountability in relation to goal pursuit. Having an accountability partner can help ensure that progress and success are being measured. In addition to having a thought partner with whom to solve problems and develop strategies for dealing with obstacles, having a coach or an accountability partner helps people stay engaged and focused. To leverage the benefit of social accountability, one must first find the courage to openly commit to the goal.

**Courage**

What is courage? After reviewing over 100 articles and reading several books on courage, I have come to appreciate that there is no one, be-all and end-all definition of courage. There are various definitions of courage; however, most of them share two elements: fear and a worthwhile outcome. What I came to appreciate about the construct of courage is that, even though most of
us do not choose professions that require life and death situations (such as firefighters and police officers), we have opportunities to act with courage in many aspects of our lives on a regular basis in our work, play, and relationships. I believe courage typically involves a situation where we have some fear and trepidation and we find ourselves willing to move forward despite our distress because the value we put on the desired outcome is more meaningful and important than the discomfort we feel. In some ways, courage is like a compass that can guide us through the difficult situations that challenge our values, morals, ethics, and overall well-being (spiritual, psychological, emotional, and physical).

In their article “The Construct of Courage: Categorization and Measurement,” authors Woodard and Pury (2007) suggested that one of the reasons little attention has been given to the topic of courage is because it is difficult to find a clear, concise, and agreed upon definition of courage. (p. 135). I found that to be true as I began my research. I came upon a variety of definitions, and each one focused on different elements of courage: morals, ethics, fear, risk, goal attainment, and contextual factors. Woodard and Pury (2007) defined courage as “the voluntary willingness to act, with or without varying levels of fear, in response to a threat to achieve an important, perhaps moral, outcome or goal” (p. 136).

**Types of courage**

Woodard and Pury (2007) highlighted three types of courage: moral, social, and psychological. Moral courage presented itself when there was an issue that involved a person’s ethics, values, and integrity. Social courage was shown in situations where a person risked social disapproval. Psychological courage dealt with one’s ability to confront and explore their irrational beliefs, fears, and anxieties. As I explored the literature, I noticed elements of Woodard and Pury’s
(2007) definition in most of the articles which led me to believe their work on the topic of
courage is seminal. The three types of courage identified are broad enough that they are likely to
transcend most situations that involve courage.

Woodard and Pury’s (2007) work offers a holistic perspective. In their effort to further understand the various dimensions of courage, they created an assessment tool: Woodard Pury Courage Scale (WPCS-23) (see Appendix A). This assessment tool dug more deeply into the various types of courage and included four additional factors: “general courage, dealing with groups, acting independently, and a combination of physical and moral situations” (p. 138). The types of situations where one would be inclined to demonstrate courage included “work/employment courage, patriotic, religion or belief-based, physical courage, social-moral courage, and independent, or alternatively, family-based courage” (p. 142).

Many of the articles defined courage as a construct that needed to be understood as an entity that existed in relation to fear (Finfgeld, 1999; O’Connell, 1997; Rachman, 1990; Shelp, 1984; Van Eynde, 1998). However, recent findings suggest that fear may not be a necessary condition for individuals to act with courage. Perhaps it is not surprising that there is so little consensus on the topic of courage, given its complexity. One needs to understand what incentivizes someone to be courageous and identify the types of situations and conditions that are conducive for a person to act with courage.

Definitions of courage range from those found in the field of positive psychology, where it is viewed as a personal trait (Seligman, 2005), the field of philosophy, where it is viewed as a
virtue or a person’s morals and ethics (Augustin & Schaff, 1887; Plato, 1961), or the field of physiology, where it is viewed through the lens of reflective judgment and cognitive complexity (Worline, Wrzeniewski, & Rafaeli, 2010). The topic of courage has been discussed and debated for a long time, going as far back as Aristotle (n.d.) who claimed, “Courage is the first of human qualities because it is the quality which guarantees the others.”

**Components of courage**

In addition to Woodward and Pury’s (2007) work, another main figure in the study of courage is Shelp (1984), who studied courage through the lens of the physician-patient relationship. In Shelp’s (1984) seminal work, the author stated the following:

> Courage is the disposition to voluntarily act, perhaps fearfully, in a dangerous circumstance, where the relevant risks are reasonably appraised, in an effort to obtain or preserve some perceived good for oneself or others, recognizing that the desired perceived good may not be realized. (p. 354)

In their article “The Construct of Courage: Categorization and Measurement,” Woodard and Pury (2007) referred to Shelp’s (1984) construction of courage that has four components: (a) free choice to accept or not to accept the consequences of acting, (b) risk or danger, (c) a worthy end, and (d) uncertain of outcome (p. 135). I believe one of the reasons Shelp’s (1984) work on courage is so widely used is that, like Woodard and Pury’s (2007) construct of courage, Shelp’s definition can be applied in a vast number of circumstances. Rachman (1990) also looked at courage as the ability to be resilient and to act despite fear. It seems reasonable that many definitions of courage would involve some aspect of fear, because it is a state that most people have experienced at one time in their life.
Much of the research I encountered had an element of fear associated with the construct of courage (Finfgeld, 1999; O’Connell, 1997; Rachman, 1990; Shelp, 1984; Van Eynde, 1998). In Serrat’s (2011) article “Moral Courage in Organizations,” the author started by defining courage on an individual level. Serrat (2011) referred to Rate, Clarke, Lindsay, and Sternberg (2007) and summarized their thoughts on courage:

Comprehensively, as stated by Rate, et al., it is a willful, intentional act, executed after mindful deliberation, involving objective substantial risk to the bearer, and primarily motivated to bring about a noble good or worthy end, despite, perhaps, the presence of the emotion of fear. (as cited in Serrat, 2011, p.1)

Interestingly, articles from the field of positive psychology offer a different perspective on courage. Positivists such as Peterson and Seligman (2005) looked at courage in the context of having a meaningful life. The authors argued that there are three ways to have a life filled with happiness and contentment, and the paths to get there are through pleasure, engagement, and meaning. They suggested that when we act in ways that are courageous by following our values, doing what we hold in high regard, and acting for the greater good in situations where it is difficult or our choices may be unpopular, we are engaging in experiences that enhance our well-being. The positivists suggest that when we act in ways that are congruent with our values, we are participating in activities that are conducive to creating a life of meaning. The element of fear seems to be eclipsed in importance compared to engaging in activities that enhance our sense of fulfillment.

Ethics and morals
In “Moral Courage in the Workplace: Moving to and from the Desire and Decision to Act,” authors Sekerka and Bagozzi (2007) examined what lies behind people choosing to act in a “morally courageous way” when faced with difficult and challenging ethical decisions. They felt
that there was a gap in the literature and wanted to help explain the personal, emotional, and social factors that impact ethical decision making:

While existing theory sheds light on various aspects of ethical decision making, missing from the literature is an examination of how emotions, automatic responses to situational conditions, along with conscious and deliberative thought, work together to help guide this process. Yet to be explored are the internal factors and the social influences that accompany them, specifically those that contribute to forming the desire and the decision to act with moral courage. (p. 132)

Sekerka and Bagozzi (2007) defined moral courage as “the ability to use inner principles to do what is good for others, regardless of the threat to self, as a matter of practice” (p. 135). They spoke about moral courage as a judgment that leads to “habits of the heart” to do things that are in the best interest of others. Their work touches on the idea of human flourishing, which I believe can lead to organizational flourishing. Moral courage, they stated, “is central to human flourishing because, as individuals struggle with their desires and reasoning, sustained fortitude helps them to overcome their own internal strife” (p. 135). The model they present helps us better understand the roles that self-regulation, self-reflection, and self-evaluation have in influencing our decisions to act or not to act with moral courage. Their model and propositions draw upon “contemporary ideas from philosophy, psychology, and organization research to describe how affect and cognitions work together with individual and social forces to influence moral courage in the workplace” (p. 145).

While the article “Moral Courage in the Workplace: Moving to and from the Desire and Decision to Act” (2007) focuses mainly on individuals acting with moral courage, a subsequent article by Sekerka, Bagozzi, and Charnigo (2009), titled “Facing Ethical Challenges in the Workplace: Conceptualizing and Measuring Professional Moral Courage,” concentrates on how
ethical challenges are effectively managed in organizations. Sekerka et al. (2009) suggested that “professional moral courage (PMC) is a managerial competency” (p. 565). They studied managers in the U.S. military and used a five-dimensional scale (see Appendix B) to measure PMC: moral agency, multiple values, endurance of threats, going beyond compliance, and moral goals.

The intent behind their research was to help “develop a proactive approach to organizational ethics that in turn would foster PMC as a management practice” and, in doing so, would “articulate an expanded organizational ethics framework that moves to integrate compliance and value-based approaches” (Sekerka et al., 2009, p. 566). The authors were influenced by the work of Srivastava and Cooperrider (1988) and argued that courage is a management virtue. They suggested that “each manager must determine how to establish the will to act and maintain that willingness as they traverse their management decision with virtues in action” (Sekerka et al., 2009, p. 566). We learn from Schein’s (2010) work in Organizational Culture and Leadership about the vital role that culture has in organizations. Sekerka et al. (2009) took the same stance and stated that individuals will be more successful engaging in acts of PMC in organizations that have policies, procedures, and norms that support moral and ethical conduct and decision-making.

Roles and influencers
Sekerka and Bagozzi (2007) developed a theory (see Figure 10) that highlights the importance of the roles that personal choice and self-regulation play in moral courage and ethical decision making. Our decisions to act or not to act, the authors suggested, are partly influenced by perceived social expectations and our aspirations of the type of person we wish to be.
The development of a desire to act with moral courage is influenced by personal factors that are, in turn, dependent upon social forces such as organizational directives, social norms, perceived rewards or punishments, social pressure, and other situational and contextual factors. (p. 133)

Sekerka and Bagozzi (2007) identified three interdependent factors that reinforce the desire to act with moral courage: self-efficacy, outcome expectations, and affect towards the means of goal attainment. They presented eight propositions to explain how self-regulation influences the decision to act in ways that are morally courageous (see Table 2). Their propositions consider the following factors that influence acts of moral courage: positive and negative emotions, anticipation of goal attainment or failure, expectations of success, social norms, the desire to act, confidence levels, social, automatic and conscious self-regulation, self-conscious emotions, and social identity. Any one of those factors that influence moral courage is packed with considerations—internal issues and external elements—that could account for someone’s decision-making.

![Diagram](image)

*Source: Adapted from Sekerka & Bagozzi, 2007*

**Figure 10. Factors that Influence Movement to and from the Desire and Decision to Act**
Complexities with courage
The more life experience I have accumulated, the more I have come to appreciate the beautiful messiness of life, people, and relationships. Each one of us is unique, every relationship has its own life-cycle and rhythms, and we all see the world through different filters based on our values and beliefs. After studying so many different definitions of what constitutes courage, it became apparent that part of the challenge with defining courage stems from the complexity of the construct and the intimate relationship courage has with an individual’s schemas, psychology, and environment.

The personal meaning of courage
Brown (2007) wrote a great deal about courage and our willingness to stand up for what we believe, our resilience, and our ability to fail, fall, and get back up again. Brown (2007) pointed out that the definition of courage stems from the Latin word cor which means “heart”:

Courage is a heart word. The root of courage is “cor”—the Latin word for heart. In one of its earliest forms, the word courage meant to speak one’s mind by telling all one’s heart. Over time, this definition has changed, and today, we typically associate courage with heroic and brave deeds. But in my opinion, this definition fails to recognize the inner strength and level of commitment required for us to speak honestly and openly about who we are and about our experiences—good and bad. (p. xxiii)

Brown is a world-renowned researcher on shame and vulnerability, and Brown’s (2010) TED X-Houston talk, which went viral, created a global conversation on courage. Brown argued that vulnerability is our greatest measure of courage. This is because when we allow ourselves to be vulnerable, we reveal our heart, emotions, and feelings, and when we do that, we reveal our authentic selves and open ourselves to uncertainty. Brown (2012) offered a definition of courage in the book Daring Greatly, in which she explained that courage has five elements: asking for what you need, speaking your truth, owning your story, setting boundaries, and reaching out for
support. Brown (2012) suggested that we have “arena” moments, which are moments when we
stand up for our values and put ourselves in a situation where there are no guarantees on what the
outcome will be. Arena moments can be large or small, such as having a difficult conversation
with a friend or asking for a promotion. They call on us to be brave, vulnerable, and courageous.
Brown’s definition resonates with me on a deeply personal level. I see arena moments daily and
am aware that showing up with courage is an intentional choice: Having a difficult conversation,
speaking my truth, asking for support, admitting what I do not know, and being honest about
what I need are all examples of my arena moments. In addition to courage, I have found that grit
and perseverance go a long way to get through those arena moments.

The courage to have grit
The German philosopher Friedrich Nietzsche (1911) famously said, “That which does not kill us,
makes us stronger.” Talk to most people who have survived and thrived through hardships,
setbacks, and disappointments, and they will tell you that their adversities made them stronger,
wiser, and more empathetic. Some will say it gave them a sense of profound gratitude and
appreciation. Inspiring stories abound about people who have faced adversity and triumphed.

Here are a few examples of people that faced significant setbacks and hardships:

- Helen Keller became deaf and blind at nineteen months old. She learned to speak English,
  German, French, and Latin, and graduated Radcliffe College with honors. She advocated for
  people with disabilities and helped found the American Civil Liberty Union.
- Milton Hershey started three unsuccessful candy companies before he brought milk
  chocolate, which was previously an imported luxury item, to the masses.
- Dr. Seuss was rejected by different publishers 27 times before he published his first book,
  And to Think I Saw it on Mulberry Street.
• Thomas Edison was pulled out of school because his teachers called him “stupid.” He was fired from various jobs and, even after he became a successful inventor credited with over 1,000 patents, he was well known for saying that genius is “1% inspiration and 99% perspiration.” Of the light bulb, Edison said, “I have not failed. I’ve just found 10,000 ways that won’t work.”

• Henry Ford failed and filed for bankruptcy twice before he successfully launched the Ford Motor Company.

• Colonel Sanders of the internationally successful company Kentucky Fried Chicken was told by over 1,000 people that he was crazy when he pitched the idea for his chicken recipe and cooking techniques to restaurants.

• It took James Dyson 5,126 failures before getting it right and figuring out the world’s first bagless vacuum cleaner.

• J.K. Rowling, author of the world-famous Harry Potter series, was rejected by twelve different publishers. At the time of her writing, she was living on government subsidies and going through personal difficulties. Her Harry Potter brand is worth close to $15 billion.

• Walt Disney was fired from a newspaper job because he was told he lacked creativity. He went through a lot of financial hardships and many of his movies such as The Three Little Pigs, Pinocchio, Bambi, and Fantasia were met with resistance. Disney was told that Mickey Mouse would fail because women were terrified of mice. It took Disney over sixteen years to convince Pamela Travers, the author of Mary Poppins, to turn her book into a screenplay and a movie. (Wanderlust Worker, n.d.)
What do all of these people have in common? They are all transformational thinkers. They all displayed creative, innovative, and adept problem-solving abilities. They displayed courage by pursuing their dreams, creating things that were previously non-existent, took risks, solved problems with constraints, and continued to maintain a sense of hope and possibility despite being rejected and misunderstood. They all had grit, determination, perseverance, and resilience.

According to Duckworth (2016), grit is having resilience when one is faced with adversity, and it also has an element of a deep and loyal commitment to that which we are passionate about in life. Duckworth’s (2016) research is part of a growing field in psychology that focuses on “non-cognitive skills.” As a teacher, Duckworth (2016) was interested in finding out why some students succeeded, and others did not. Duckworth (2016) realized that having a higher intelligence did not always bring academic success. In fact, Duckworth (2016) observed that the students who tried the hardest, in general, did the best. Students with high intelligence who did not try did not do as well as students who tried harder but were not as smart. Duckworth’s (2016) research suggested that a person’s grit could predict a successful outcome. For Duckworth (2016), grit is a personality trait that enables one to persevere in their pursuit of challenging goals. Grit combines determination, passion, and focus and serves as powerful motivator to keep us going when the going gets tough. Duckworth (2016) created a grit assessment tool designed to measure the extent to which a person approaches life with grit (p. 55). Grit, according to Duckworth (2016), is something we can develop from the inside out through four psychological assets: interest, practice, purpose, and hope. It plays a fundamental role in our ability to achieve goals and goes together with realistic optimism. According to Duckworth (2016), people who have grit do not believe that good luck will get them where they want to go. They understand the
importance of practice, are willing to work hard to achieve clearly-defined goals, and are open to feedback that can be used to refine and improve their performance. Their deep sense of optimism and hopefulness is what enables them to bounce back from setbacks quickly. Duckworth (2016) sums up grit in this way:

We all face limits—not just in talent, but in opportunity. But more often than we think, our limits are self-imposed. We try, and fail, and conclude we’ve bumped our heads again the ceiling of possibility. Or maybe after taking just a few steps we change direction. To be gritty is to keep putting one foot in front of the other. To be gritty is to hold fast to an interesting and purposeful goal. To be gritty is to invest, day after week after year, in challenging practice. To be gritty is to fall down seven times and rise eight. (p. 275)

The good news is that we can develop and strengthen grit through the following: connecting to what interests us, being willing to engage in daily habits that improve our performance, defining our sense of purpose, understanding what brings meaning to others, and adopting a mindset of hope and optimism. Dweck (2016), Professor of Psychology at Stanford University and author of Mindset: The New Psychology of Success, coined the term “growth mindset” and had insights similar to those of Duckworth (2016). According to Dweck (2016), a “growth mindset” is found among individuals who have confidence that their talents can be developed through hard work, incorporate feedback from others, set goals, and have strategies to achieve them. Dweck (2016) argued that people with a growth mindset are more likely to succeed in accomplishing their goals.

In the article “Persistence: It’s a Habit of Mind and Body,” Proctor (2005) argued that persistence is needed for dealing with repeated rejections and obstacles. Proctor (2005) highlighted the importance of vision and desire, and outlined four steps to turn persistence into a habit:
1. Have a clearly defined goal.
2. Have a clear plan.
3. Make an irrevocable decision to reject all negative suggestions that come from well-intended but uninformed individuals.
4. Establish a network of people who can provide useful information, support, and encouragement.

In Brown’s (2013) keynote address to creative professionals at a 99U conference, the professor and author spoke about the relationship between courage, vulnerability, and perseverance. There is a message of embracing failure and being willing to get back up again and again:

If you’re going to show up and be seen, there is only one guarantee, and that is, you will get your ass kicked…that’s the only certainly you have. If you’re going to go in the arena and spend time in there whatsoever, especially if you’ve committed to creating in your life, you will get your ass kicked… Yeah, it’s so scary to show up. It feels dangerous to be seen. It’s terrifying. But it’s not as scary, dangerous or terrifying as getting to the end of our lives and thinking, what if I would’ve shown up? What would’ve been different?

In Brown’s (2015) book Rising Strong, the author wrote about the complex nature of failure and the importance of tenacity, will, and determination to persevere and get back up, even after we have fallen and failed. I attended a Daring Way workshop in July 2015, where Brown was promoting her book Rising Strong, and I heard her say, “If we are brave enough, often enough, we will fall. When we take risks in our lives, we will inevitably fall and experience disappointments, hurts, failures and heartbreak.” For people who are willing to be curious, creative, and innovative problem-solvers, some type of failure is almost certain to be a part of the process. The issue, then, is not whether you are going to fail, but how you will choose to handle
the failure when you do. Of this, Brown (2015) wrote, “Failure can become nourishment if we are willing to get curious, show up vulnerable and human, and put rising strong into practice” (p. 214).

According to Brown (2015), feelings of failure are often accompanied by feelings of powerlessness and despair, and the antidote is found in hope. Hope, according to Snyder (1994), is something that can be learned. Snyder (1994) argued that hope is a cognitive process—a trilogy of goals, pathways, and agency. According to Brown (2015), “Hope happens when we can set goals, have the tenacity and perseverance to pursue those goals; and believe in our own ability to act” (p. 202). Hope and optimism, according to Brown (2015), are integral parts of our struggle with adversity and they are what help us get back up after each fall.

**Optimism**
There is a lot of information regarding the relationship between optimism and innovation and the impact of having an optimistic mindset. There are those who have argued that having an optimistic mindset is essential to transformational thinking and innovation (Achor, 2010; Beazley, 2009; Buchaman & Seligman, 1995; DeGrandpre, 2000; Norem & Canter, 1986; Peterson, 2000; Seligman, 2002, 2005; Sneider, 2001). Having an optimistic outlook provides a sense of hope and possibility that is needed to keep going, especially when one encounters obstacles, barriers, setbacks, and failures, which are inevitable. Radcliffe and Klein (2002) suggested that an optimism bias can possess an adaptive risk when it acts like a filter to mitigate things that are negative and can create a vulnerability. People may not heed important warnings or take appropriate precautions and then put themselves risk. People may develop an unrealistic perspective about what may be required to move an idea forward. The consensus in the literature
is that there is a positive connection between optimism and innovation. Additionally, all of the
individuals interviewed for my research spoke about the importance of having an optimistic
mindset, especially when they experienced setbacks and disappointments.

The research highlighted different types of optimism (Beazley, 2009) and found that some types
of optimism are better suited for specific situations. For example, some situations may call for
cautious optimism due to situational factors and others may be better served by endless,
unbridled optimism. Overall, a healthy sense of optimism serves people well who are striving to
create innovative and transformational outcomes.

The opening quotation to Beazley’s (2009) article is from Helen Keller: “Optimism is the faith
that leads to achievement…no pessimist ever discovered the secret of the stars, or sailed to an
uncharted land, or opened a new doorway for the human spirit.” That quotation speaks to the
relationship between optimism and discovery. There has been an increased interest in positive
psychology and optimism over the last few decades (Achor, 2010; Seligman, 2002, 2005;
Peterson, 2000). Research by Tiger (1979) suggests that optimism has an “adaptive utility” that
is beneficial to our health and well-being. Seligman (2002, 2005), an American psychologist,
professor, and founder of the Master of Applied Positive Psychology (MAPP) program at the
University of Pennsylvania, is largely attributed with introducing the notion of positive
psychology to the scientific community. Seligman (2002, 2005) and Peterson (2000) were the
first two psychologists who flipped the switch on the Diagnostic and Statistical Manual of
Mental Disorders (DMS). Seligman (2002, 2005) and Peterson (2000) pointed out that the DMS
focused on disease and what was wrong with people. They thought it would be beneficial to have
a positive counterpart to the DMS and focus on what can go right for people rather than what can go wrong. This was the beginning of positive psychology. Peterson and Seligman (2004) defined positive psychology as the essence of what makes our lives meaningful. They highlighted the importance of engaging in activities and relationships that help us flourish. Our clarity about our character, strengths, and virtues helps guide us to make decisions that enable us to lead a life of meaning and purpose. The focus on positive psychology is concentrated on growth and development rather than pathology. The authors contended that having a positive psychological mindset and one that focuses on positive emotions, traits, and institutions enhances our sense of wellbeing in the world. Since that time, researchers have identified different types of optimism. Beazley (2009) identified the different types of optimism as the following:

- Dispositional optimism.
- Unrealistic optimism.
- Optimism as attributional style.
- Comparative optimism.
- Situational optimism.
- Realistic optimism.
- Strategic optimism.

According to Scheier and Carver (1985), dispositional optimism refers to how we forecast future events. It represents “big optimism” (Peterson, 2000) because it instills a sense of confidence that our future will have more desirable outcomes than undesirable. Unrealistic optimism (Weinstein, 1989) is what creates a lack of alignment between the dispositional optimism that believes in a bigger, brighter future ahead and the evidence that suggests our expectations are incorrect. There is a gap between the current reality and what we hoped or expected it to be. We find unrealistic
optimism among individuals who are convinced that success will happen automatically with no effort at all. Unrealistic optimism is problematic, as it may prevent us from harnessing the resources, skills, and adaptability that will be required to persevere through setbacks and adversity. Optimism as attributional style (Buchman & Seligman, 1995) refers to what type of attributes people ascribe to a positive situation. In Seligman’s (2002, 2005) work in positive psychology, optimistic people use a constructive explanatory style when they encounter adversity. Their positive lens helps put events into healthy perspective. For example, they see difficult circumstances as temporary rather than permanent, challenging events are viewed as specific incident rather than all-encompassing, and setbacks are a result of misfortune or happenstance rather than a personal defect. Optimistic people associate permanence with good events and believe that they are likely to occur again. They believe that good events have a pervasiveness; goodness will prevail and extend to other events in life. These optimists are less likely to personalize bad events. Instead, they attribute negative events to more universal themes and specific circumstances rather than to personalize them. Comparative optimism (Radcliffe & Klein, 2002) is a cognitive bias that causes a person to believe that they are at a lesser risk of experiencing negative events compared to others. For example, comparative optimists are less likely to believe that their marriage will end in divorce, that they will die at an early age compared to their peers, or that they are financially better off than they really are. This type of optimism can distort reality. This type of optimism allows us to be comfortable in our distorted version of reality. Where situational optimism refers to our belief in a good outcome for a specific situation, realistic optimism (DeGrandpre, 2000; Sneider, 2001) refers to having an optimistic outlook and being realistic about what is required in terms of preparation, resources, focus, and the persistence needed to accomplish a goal. Realistic optimists, in addition to having
a positive outlook, are well-prepared and organized. Lastly, strategic optimism (Norem & Canter, 1986; Ruthig, Chipperfield, Perry, Newall, & Swift, 2007) is when a person sets high expectations and, at the same time, is not too concerned or attached to the outcomes. Thus, a person who engages in strategic optimism is unlikely to experience anxiety in pursuit of a goal.

It turns out that optimism, like curiosity, can also be experienced in varying degrees (Peterson, 2000). Optimism and its counterpart, pessimism, act like filters that color one’s perception and experience of the world around them. Beazley (2009) pointed out the following:

Optimism is associated with specific coping styles, goal framing and positive affect. Optimists exhibit attention to positive information and show active engagement, positive reframing and problem-solving type behaviours (Carr, 2004). Pessimists give more attention to negative information, and show passivity, denial and avoidance.

Most people can find a happy medium and can blend different styles of optimism together depending upon the situation. The complimentary relationship between optimism, goal-setting, and perseverance stands out in the research. According to Zang, Fishbach, and Dhar (2007), optimists are more likely to commit to their goals and persevere to achieve them. Research is showing that different types of optimism have different effects on how we evaluate situations, assess for risk, ascribe meaning, and frame up opportunities. The overall implication of these findings is that optimism can be extremely beneficial in achieving goals, enhancing our outlook on life, and improving our overall sense of well-being. However, optimism can also have a downside.

**The dark side of optimism**

An optimistic bias, which downplays the realities of a difficult situation by not paying attention to details, minimizes and dismisses important information, prevents seeking new and relevant
information, and can lead to poor outcomes and uninformed decisions. An optimistic bias can have a negative impact on discernment, judgment, and decision-making. Studies have been done to illustrate the negative impact of an optimistic bias in planning and managing resources and budgets for projects (Flyvbjerg, 2006), personal finances (Yang, Markoczy, & Qi, 2006), and risk-taking behavior (Prabhakar, Lee, Job, & Roads and Traffic Authority, 1996). Optimism, it turns out, is far more complex than having positive thoughts and hopes for a desirable outcome. The key is to find balance and to leverage the right type of optimism that allows us to go forward and persevere when we are pursuing goals and facing setbacks. In addition to our mindset, research has also shown that certain environments are more conducive to transformational thinking than others.

**Physical environments conducive to transformational ideation**

Corser and Magowan (2010) suggested that work environments need to change to accommodate a multi-generational and diverse workforce with different needs and work styles. Environments influence our moods and thoughts, and, according to Corser and Magowan (2010), should be designed to provide a stimulating and supportive workplace which promotes productivity, innovation, and creative thinking: “It is important to design offices not only as places to work in, but also as somewhere for people to grow, develop, and expand knowledge, combining workspace with public and social spaces” (Corser & Magowan, 2010, p. 1). People want work environments that are adaptive to their needs: quiet places to concentrate, tranquil settings to relax, workout facilities in which to exercise, areas conducive to socializing, and recreational spaces that can get the creative ideas flowing or help let off steam. We also want ergonomically designed work areas and equipment that promote wellness. Rowe (2000) discussed “cognitive ergonomics,” which is described as the “discipline of helping companies maximize their
intellectual assets—their employees' minds—by creating work environments that help people think” (p. 31). Work environments are best designed when the space can help evoke memories and elicit thoughts and new ideas. Along with physical and cognitive ergonomic designs, for many being in a building that is energy efficient and meets Leadership in Energy and Environmental Design (LEED) standards and the Building Research Establishment Environmental Assessment Method (BREEAM) standards for sustainable design makes a difference in how they feel about their working space. This, in turn, can affect their thoughts and moods. All of this suggests that work environments matter because they have an impact on our performance and our experience at work.

Office Snapshots is a website entirely devoted to designing and building office space. In the blog titled “Pixar Headquarters and the Legacy of Steve Jobs” (2012), information is shared from Jobs’ biography about the concept behind the unique design of Pixar’s headquarters. Jobs wanted to create a space that was open and required people to interact and have spontaneous, interactive collaborations. Jobs envisioned a lively campus-type atmosphere that brought people from different disciplines together—such as computer scientists, animators, and production designers. Jobs wanted to create a space where people could interact easily. The campus features a huge atrium which acts as a central hub for people’s paths to cross (see Figure 11). The article refers to Jobs’ biography to get a better understanding of the thought process behind Pixar’s Headquarters and its design. According to the article, Steve Jobs believed the building needed to be designed to foster natural, spontaneous collaboration:

If a building doesn’t encourage [collaboration], you’ll lose a lot of innovation and the magic that’s sparked by serendipity. So, we designed the building to make people get out of their offices and mingle in the central atrium with people they might not otherwise see.
Just as much thought went into planning the exterior, which has a campus that includes a 600-seat outdoor amphitheater, a soccer field, an organic vegetable garden (used by Pixar’s chefs), flower cutting gardens, a wildflower meadow, an Olympic-size swimming pool, a volleyball court, a jogging trail, and a basketball court. The rationale behind these amenities was, according to Jobs, that they were meant “to keep his young animation staff happy—and animated.” (“Pixar headquarters and the legacy of Steve Jobs,” 2012).

While not every company has Pixar’s budget, the article (2012) offers some the following design strategies for people to consider when they want to create a work environment that fosters collaboration and creativity (see Figure 12):
- Design spaces that foster crossing pathways and impromptu and spontaneous opportunities to collaborate.

- Have artifacts in the office that connect people to why they work for the company.

- Make the office experience fun and enjoyable so it is a place where they want to work.

- Allow people to express their individuality and personality at work.

Source: Adapted from Pratt, 2012

Figure 12. Pixar's Campus

This type of intentional office space planning is not just happening for creative companies in the entertainment industry. Lilly, a global pharmaceutical company, reconfigured 470,000 square feet of office space and went from traditional cubicles to a more open layout with shared work spaces suited to different work needs. Their employee surveys showed that the employees were happier with the new design and felt that the open layout stimulated more creativity in their work. This change within companies also reflects the growing interest in co-op work spaces.
Harrington (2013) wrote about the growing interest in people finding office environments where they can connect and collaborate with others but do not have to have a long-term contract with high overhead. A co-op office sharing space encourages the development of mixed-use space and, according to Harrington (2013), “creates a support network of business professionals without the overhead and worries of maintaining an individual office space while promoting collaboration, community, and creativity.”

Secretan (2004) argued that we need to pay attention to and honor the space that people work in. According to Secretan (2004), spaces with hard edges and sharp angles are not conducive to creative work. Secretan (2004) even put forth a challenge to prove the point:

*By dramatically changing the lines of your working environment and the artifacts that fill the space, you can dramatically change the performance of your employees. Want to prove it? Give two teams of equal talent similar tasks but put one in their Dilbert cubicles and the other in a cathedral, forest, park, or gorgeous building and watch the difference in output.*

The point Secretan (2004) made in the article is that traditional work environments with hard right angles do little to please our sense of aesthetics, capture our imaginations, or inspire us. Secretan (2004) believed that we need to create work environments which lift our hearts and engage our spirits:

*When we create “efficient” but ugly working environments, we challenge our natural will and affront the soul. Humans cannot work or play at their best in linear and therefore ugly places. We cannot expect people to produce amazing, creative work in uninspiring environments.*

Entire books, dissertations, and articles are devoted to the topic of physical environments conducive to creative problem solving and innovative thinking. It seemed important to include
this topic as part of the research on transformational thinking because of the impact our physical environment has on our thoughts, emotions, productivity, and creativity. There is one more aspect of transformational thinking that I felt was important to explore, which is the way in which transformational ideas are shared and published.

**Social contagion of transformational ideas**
If a person has a transformational idea and no one hears it, is it still transformational? This question brings up an important aspect of transformational thinkers and their ideas. Are there ways to for innovative, unique, and novel ideas to spread and stick? Several researchers and authors (Ashton, 2015; Dominiak, 2007; Gladwell, 2000; Heath & Heath, 2007; Valente, 1996; Wurm, 2014) would emphatically say “Yes!” I included this section as part of my literature review because I believe it would be helpful to understand how transformational ideas are publicized. The purpose of this paper is not to dive deep into the science of how transformational ideas are made known. Rather, it is to understand the surface level, and the potential roles that social contagion and “stickiness” can have in promoting and publicizing transformational ideas.

In today’s world, innovation has created a digital transformation in the way we send and receive information. With the emergence of social media, time and distance are no longer barriers to receiving information. The influence of social contagion combined with the power of technology can surely accelerate the speed of having an idea spread. But the rapid acceleration of an idea is not enough in today’s world where there are so many distractions. The competition to break through the clutter and bombardment of information we receive daily is fierce. Ideas need to have a stickiness factor to be memorable. Heath and Heath (2009) researched hundreds of stories to find out what made certain stories “stick.” What emerged from the data were six principles that were evident in each story that had a stickiness to it:
• Simplicity: stripping ideas to their core so they’re easy to remember.
• Unexpectedness: avoiding predictability in your statements.
• Concreteness: using specific details to help people understand ideas and remember ideas.
• Credibility: endorsement by experts or celebrities.
• Emotion: ensuring that others care about your ideas by making them feel something.
• Stories: getting people to relate to and act on your ideas. (Heath & Heath, 2007, p. 3)

Dominiak (2007) took some of the insights from Gladwell’s bestselling book The Tipping Point: How Little Things Can Make a Bit Difference (2000) and applied them to help business professionals understand how ideas stick and spread. Gladwell (2000) likened the spreading of ideas to epidemics and makes the argument that big changes can occur from the accumulative effect of much smaller events. According to Dominiak (2007), Gladwell (2000) identified three changes that “might prompt little tweaks that set big changes in motions” (as cited in Dominiak, 2007, p. 2). The three changes are “Law of the Few,” the “Stickiness Factor,” and the “Power of Context.” “Law of the Few” refers to dynamic people who are conduits and pass along important information. These people are trusted resources and their credibility makes their recommendations and endorsements compelling. They are in positions to help start and spread messages that act like epidemics and can ultimately influence people’s decisions. The “Stickiness Factor” requires looking at plans and tactics from a new perspective to discover new benefits from those that no longer work, are predictable, feel mundane, or are no longer relevant. The “Power of Context” is understanding that human beings are sensitive to their environment and even small changes in our environment can amount to big differences. Gladwell (2000) spoke about New York’s crime situation and what happened when there was a movement to
clean up the graffiti and crack down on subway gate jumpers. These were small changes that had a big impact on lowering the overall crime rate.

Gladwell (2000) shared another story about a failing school district and the remarkable transformation with increased academic performance that occurred when broken windows were fixed and replaced with larger windows to let more light in, walls were painted with bright colors, and artwork was placed on the walls. The “Power of Context” is understanding the impact our environment has on our behavior. Small changes can have a big ripple effect. There may also be some nuggets of information that could serve transformational thinkers well when it comes to publicizing their ideas. Transformation, by its very nature, implies change, which is often met with resistance. Transformational thinkers could deliberately and proactively leverage Gladwell’s concepts and manage their own “epidemics” to help spread their ideas.

Thompson (2008) argued that Gladwell’s (2000) notion about what makes something popular is nothing new and has been around for more than 50 years. Thompson (2008) wrote that, in the mid-1950s, two pioneering sociologists, Katz and Lazarsleid (1955) wrote *Personal Influence*, which highlighted the importance of opinion leaders. Thompson (2008) posited that Gladwell’s (2000) “Tipping Point” theory, which suggests that “rare, highly connected people shape the world,” may not be as compelling as many people think. Thompson (2008) cited research by Watts, a Colombia University Professor and network theory scientist, who set up a series of email experiments to challenge the Influential Theory and Gladwell’s “Law of the Few.” According to Thompson (2008), Watts’ research, which analyzed email patterns, found that “highly connected people are not, in fact, crucial social hubs.” Furthermore, Thompson (2008)
added that Watts’ work is not “mere academic whimsy” because he “developed a new technique for propagating ads virally, which can double or even quadruple the reach of an ordinary online campaign by harnessing the pass-around of everyday people—and ignoring ‘Influentials’ altogether.” Watts offered an alternative explanation for why ideas spread and suggested that the susceptibility of a person or group at large is more important than how persuasive or influential a person is (as cited in Thompson, 2008). In this case, timing and readiness play a role in an idea’s acceptance. As Victor Hugo once famously said, “All the forces in the world are not so powerful as an idea whose time has come” (as cited in Wurm, 2014).

In the article “The Other Factor that Makes an Idea Spread,” Wurm (2014) suggested that, for any given idea to spread, it is likely that multiple factors are involved. Wurm (2014) argued that the importance of the “idea carrier” has a large influence on the spreading of ideas. Wurm (2014) stated that “much of the desire to share an idea with others was linked to that idea’s carrier. It’s the carrier who gets the audience to open up, trust, and ultimately spread the idea.” When people like an idea carrier and the carrier shows them how to see themselves in the idea, people are more likely to share that idea with others. Wurm, 92014) cited many examples illustrating that the carrier does not necessarily have to be the one who researched or discovered the idea. What made the difference in social contagion had more to do with how a story was told, the way the idea was packaged, and a person’s readiness. As Wurm (2014) noted, “They may be impeccable storytellers, thinkers or writers. They make fresh connections and present cogent arguments. They are critical in getting ideas to take hold.” Ashton (2015) made a similar point in the book How to Fly a Horse: The Secret History of Creation, Invention, and Discovery, noting that most ideas have been built on previous discoveries. As Isaac Newton famously said in 1675, “If I have
seen further it is by standing on the shoulders of Giants.” While it often seems that certain ideas go viral overnight, many of them have been percolating and building steam for a long time.

Valente (1996) spoke about the importance of social networks in the context of the innovation curve of adoption (see Figure 13). The idea is that certain types of people are more comfortable, eager, and willing to adopt and embrace innovative ideas. Valente (1996) argued that, while understanding the innovation adoption curve is helpful in predicting the pattern of adoption and diffusion, a person of influence and an opinion leader may have more to do with getting people to adopt a new idea or behavior.
Figure 13. Roger’s Curve of Adoption

Moussaïd, Kämmer, Analytis, and Neth (2013) researched what types of mechanisms and situations of social influence impacted the formation of opinions. Moussaïd et al. (2013) defined social influence as the following:

The process by which individuals adapt their opinion, revise their beliefs, or change their behavior as a result of social interactions with other people. In our strongly connected society, social influence plays a prominent role in many self-organized phenomena such as herding in cultural markets, the spread of ideas and innovations, and the amplification of fears during epidemics. (p. 1)

Their research led them to conclude that opinions among a group will either converge or split over repeated interactions with two types of “attractors of opinion” that have an influential effect on the group: the expert effect and the majority effect. Moussaïd et al. (2013) claimed that the
expert effect happens when we are “induced by the presence of a highly confident individual in
the group” and the majority effect is “caused by the presence of a critical mass of laypeople
sharing similar opinions” (p. 1). Moussaïd et al. (2013) claimed that either of these two effects
can cause a tipping point and influence the formation and direction of public opinion. Their
findings suggest that at least 15% of a group needs to be viewed as experts to have influence
over a collective opinion and that, without that penetration of expertise, a group of low-
confidence individuals who share the same opinion will have more influence over the collective
social opinion. They bring in another aspect of understanding to the influence that social
networks and social contagion have in forming collective opinions and embracing ideas.

I do not claim to know the best way for a transformational idea to stick or spread like an
epidemic. I appreciate that the idea needs to be interesting, relatable in some fashion, and
memorable. I suspect some methods for leveraging social opinions and getting them to spread
are better than others. For a person with a transformational idea, it seems that experimenting with
different methods to discover what works best for spreading their idea is warranted. Clearly,
social networks, opinion leaders, early adopters, and timing all play a role in the adoption and
acceptance of transformational ideas.

The common denominator among transformational thought leaders is that every one of their
ideas has a story behind it. Their stories are colored by their values, creative solutions, acts of
courage, and extraordinary perseverance. When the time came to decide on a research
methodology, I knew I wanted to conduct research that would find value in the stories of
transformational thought leaders. I wanted to discover something meaningful in their stories and trusted they would lead me to a deeper understanding of the transformational thinking process.
Chapter 3: Methodology

Let Me Tell You a Story

When I first started reading Brown’s work (2002, 2012, 2015), I was amazed to discover a research methodology called “grounded theory,” which primarily involved learning through listening to people’s stories. There were four reasons why I wanted to use grounded theory as my research methodology. First, there was not a lot of research on the process of transformational thinking, so listening to the experiences of transformational thought leaders was a good way to build a foundational understanding of the process. Second, the spirit of grounded theory was aligned with the topic. Part of transformational thinking is having an idea you want to pursue and being completely open to the process of how you get there. I knew I wanted to arrive at an understanding of the characteristics of transformational thinkers and the process of transformational thinking, and I wanted the journey to be less prescriptive. Grounded theory allowed me to pursue my interest in the topic with a spirit of adventure and curiosity. Third, the stories provide a rich context which makes facts come alive and become more meaningful. They make the information more animated, suspenseful, and interesting. Stories used in grounded theory research are analogous to a visual treasure map. They provided vivid illustrations and detailed descriptions, and I knew they would lead to an incredible discovery. But perhaps the most important reason why I selected grounded theory was I did not have a theory or hypothesis about the process of transformational thinking. I came up with a broad-based research question and believed that the grounded theory research methodology best fit the nature of my research questions: What are the characteristics of transformational thinkers and what is the process that transformational thinkers follow to create and realize transformation? Based on the questions, the diverse bodies of thought in related fields, and the fact that so little has been written on the
process of transformational thinking, grounded theory research was the best fit. I believed using
the grounded theory research methodology would lead to an exciting treasure hunt. I was
sure the experience would be worthwhile because the research would allow me to share the
inspiring stories of transformational thought leaders. Everything else that came out of the
research made the treasure even more valuable.

The Fundamentals of Grounded Theory
Stories are subjective in nature and provide rich qualitative data. Grounded theory posits that
theory can be directly constructed by the data. The core of grounded theory is that it
provides a systematic approach to inquiry and the data that is collected can then be used to
generate a new theory. This is accomplished by creating codes from words, memos, notes, and
observations. Those codes are then used to create conceptual categories that can be retested in
future studies.

The website Grounded Theory (n.d.) stated that Glaser and Strauss (1967) highlighted the
underlying aims of the theory in their book, *The Discovery of Grounded Theory*:

1. To discover new ways of understanding the social world.
2. To generate a new theory to understand the investigated phenomena.
3. The emergent theory should be “grounded” from the collected data and not be imposed
   from the researcher (as cited in Grounded theory: Methodology, n.d.).

I chose grounded theory because I believe it would allow me the freedom and flexibility to make
connections between the data I collected and my analysis, and that I could then develop an
emerging iterative process. Even though the process is flexible, the process requires discipline
and rigor as the approach requires constant checking, revising, and elaboration of the codes. It is
an iterative process and the researcher must ask analytic questions of the data and the emerging patterns and themes. According to the Introduction page of the Grounded Theory (n.d.) website, grounded theory “is a systematic inductive approach to inquiry that emphasizes that the tentative categories are rigorously tested and retested.”

Grounded theory involves a series of steps (see Figure 14) that starts with comparing data to develop codes and using those codes to develop more significant codes to develop potential categories. Continually revising and reanalyzing the codes leads to the emerging categories, and those become concepts. The concepts are analyzed so that the researcher can offer a theory that was grounded in the research.

Source: Adapted from Grounded Theory: Methodology, n.d.

Figure 14. Grounded Theory Flow Chart
Another reason I chose grounded theory was because it allowed me to be close to the data by interviewing the participants, reading and rereading their transcripts, and recalling sensory memories from the conversations. I believed that being close to the data strengthened my insights. Those insights led to a profile of the characteristics of transformational thinkers and a conceptual framework for the processes that transformational thinkers use for creating and realizing transformational outcomes. Another reason why I chose grounded theory was because I felt it made the voices and stories of the research subjects heard and validated.

This approach helps grounded theory researchers to make their work visible and voices collected from the data heard. Given how little research there was on the process of transformational thinking, I was attracted to use a methodology that was designed to start with a broad question, offering the benefit of approaching the topic without a preconceived idea of what I would find in relation to social phenomena that I was studying. The Benefits and Challenges (n.d.) page of the Grounded Theory website highlighted the benefits of grounded theory that appealed to me:

> Grounded theory avoids preconceived assumptions, offering a more neutral view of understanding human action in a social context (Simmons, 2006). In addition, it offers the researcher a proven methodology to develop their own theory that is not preformed or pre-theoretical from existing theories and paradigms (Engward, 2013).

While grounded theory may appear to be simple and straightforward, it is not without its challenges. In particular, the researcher must approach the information with an open mind and let the themes emerge naturally. It is hard to resist the temptation to impose certain beliefs and assumptions when studying a social phenomenon.
Challenges with grounded theory

Grounded theory can be “challenging for the researcher as it requires an open mind to allow themes to emerge naturally rather than being imposed upon by the researcher when approaching social phenomenon” (Grounded theory: Benefits and challenges, n.d.). It can be difficult to create a new roadmap with little guidance other than one’s development and interpretation of the codes. It can be equally difficult to decide which bucket words belong in, especially when there are similarities in the word structure but the storytellers ascribed different meaning to them. It is hard not to be influenced by the literature review that is conducted prior to beginning the research. Our life’s experiences and values create filters through which we receive and interpret information, which makes it a challenge to remain neutral. However, despite these challenges, grounded theory was the ideal methodology for this study.

The ideal methodology

Grounded theory research was the ideal methodology for this study for several reasons. The span of my questions was broad in nature and started with a “What,” which suggests that the answers could be deep and wide in scope. There was limited research available on the topic, which created an invitation to create a framework. I was not trying to prove or disprove a personal predetermined or existing theory. The lack of a preconceived hypothesis about the characteristics of transformational thinkers and the framework they used to create and realize transformational outcomes seemed aligned with the core principles of grounded theory. Grounded theory is also an exciting and interesting way to develop a theory from unfolding data that is grounded in stories, which in this case is the data. I felt the iterative coding process would foster new insights, enable me to offer a conceptual framework that would prove to be useful, and make a meaningful contribution to the field of knowledge with respect to transformational thinkers and the processes they follow to create and realize transformational outcomes.
First steps of grounded theory research
The first step, like developing any story, is to ponder how to go about writing it. In that sense, it is very much like planning a trip and having a good road map to guide the way. I think of this methodology chapter as a detailed road map, so that anyone making a similar journey has a detailed itinerary with recommended travel tips for a successful trip to their desire destination. Any person following these steps can take short cuts or extended side trips; however, at the very least, they will have a basic road map with simple directions for conducting grounded theory research. I explored other research methodologies, such as a qualitative study, a deep dive into a single case study, and a comparison of case studies.

An invitation to conduct grounded theory research
I love the qualitative aspect of grounded theory research because, by asking open-ended questions, patterns can begin to emerge, theories can be constructed, and insights can be gained. I like the definition of grounded theory that Charmaz (2014) applied in *Constructing Grounded Theory*:

> Grounded theory methods consist of systematic, yet flexible guidelines for collecting and analyzing data to construct theories from the data themselves...Grounded theory begins with inductive data, invokes iterative strategies of going back and forth between data and analysis, uses comparative methods, and keeps you interacting and involved with your data and emerging analysis. (p. 1)

My Myers-Briggs profile shows me as an “INFJ/P” (introverted, intuitive, feeling, and on the cusp of judging and perceiving). My “Insights Discovery” assessment positions me in the empathetic role and shows me as someone who truly values connection and relationships. The words used to describe my personality traits are supportive, compassionate, and empathic. I was so excited at the prospect of conducting grounded theory research and immersing myself in a
process that begins loosely and ultimately becomes more data-driven during the coding process. I simply could not resist the invitation after I read Charmaz’s (2014) description of the experience: “Grounded theory gives you focus and flexibility. This method offers the tools for conducting successful research. Grounded theory strategies will help you get started, stay involved, and finish your project” (p. 3). We have been told for the past two years to “trust the process,” and I felt that grounded theory was a sure way to help create and sustain the trust that would be needed to finish this dissertation.

The work by Glaser and Strauss (1967) was hugely influential in Brown’s research on vulnerability, resiliency, and courage. They made a compelling statement that, in its day, was considered quite revolutionary. They challenged the notion that true research could only be conducted through scientific, quantifiable methods. Glaser and Strauss (1967) argued that a systematic approach to collecting qualitative research had its own logic and could be used to construct theories. They contended that research, which was gathered through interviews, observations, interactions, and the review of documents and relevant material, was completely legitimate and could be used, as Charmaz stated in Constructing Grounded Theory (2014), “to move qualitative inquiry beyond descriptive studies into the realm of explanatory theoretical frameworks, thereby providing abstract, conceptual understandings of the structured phenomena” (p. 8) being studied. Of the Glaser and Strauss’ (1967) basic principles of grounded theory, Charmaz (2014) stated the following:

Glaser imbued the method with dispassionate empiricism, rigorous codified methods, emphasis on emergent discoveries, and its somewhat ambiguous, specialized language that echoes quantitative methods. Strauss brought notions of human agency, emergent processes, social and subjective meaning, problem-solving practice, and the open-ended study of action to grounded theory. (p. 9)
The methodological GPS
The process for conducting grounded theory research appears seemingly simple: ask people open-ended questions, capture their stories, and look for the emerging patterns. Like so much about this dissertation process, very few things are that straightforward. As one can see from the flowchart depicted in Figure 15, there were several interdependent steps involved in this process. Some happened simultaneously while other steps were conducted independently. Like any good GPS, at times, steps needed to be “re-routed” depending on the turn that I took. This flowchart and the following descriptive sections provide a detailed summary of where my methodological GPS took me over the course of my dissertation.
Figure 15. Methodology Flow Chart
Identify the question
Most trips begin with the big question, “Where do you want to go?” and once you answer it, the fun of planning can begin. Identifying the question was a lot like going to Barnes & Noble and browsing through the travel section. One can go through a lot of books before they land on one that really beckons them to come and explore. Finding my research question was like that process. There were a lot of questions that intrigued me; yet, I found myself coming back to some version of wanting to understand how people think in ways that transform the course of human events. I wanted to know about the art and science of transformative thinking. I also wanted to understand how certain people and their ideas can go from relative obscurity to “rock star” status and become a common reference point. My hope is that by asking the research questions—“What are the characteristics of transformational thinkers?” and “What is the framework transformational thinkers follow to create and realize transformational outcomes?”—this study will deepen our understanding of psychological, emotional, and intellectual profile of transformational thinkers. Secondly, my hope is that an outcome of this study will be to contribute a conceptual framework for the process of transformational thinking. By having a profile of the characteristics of transformational thinkers and an understanding of the framework they use to engage in transformational thinking, this study can help business leaders create organizational cultures that foster creativity, innovation, and transformation.

Develop a dream list of interviewees
One of the best pieces of advice I ever received was, “The answer is always ‘no’ unless you ask!” That piece of sage advice has liberated me to ask for things I never would have dreamed of prior to hearing it. I have also learned that, just because I ask, it does not mean that I will get the
answer I want, and I must always manage my expectations. That is the only outcome I have control over. I used this advice when I started to compile the list of people I wanted to interview.

I decided to go big. Really big. If they had a version of the Oscars for transformational thinkers, my list looked like the celebrity guest list (see Appendix A). In order to be on the list, people had to meet the criteria for transformational thinkers that I derived from the literature as well as my own thoughts. They had to be creative, imaginative, and they must have developed and shared ideas that resonated with people around the world. I believed their work sparked global conversations and transformed the way we think and act. Every individual on my initial interview list had imagined a unique solution to a challenging problem and engaged in creative problem solving to transform the world as we know it. For example, Larry Page, Sergey Brin, and Mark Zuckerberg are all examples of transformational thought leaders whose creative and imaginative ideas changed the way we gather and share information and stay connected to one another. Elon Musk transformed our ideas on how we think of transportation with the design and production of electric cars and commerce with PayPal. Both of those inventions required working with constraints and engaging in creative problem solving. Jeff Bezos used his imagination, creativity, and intellect to transform the retail experience worldwide. Tony Robbins found a novel way, using creativity and intellect, to create a platform to help people transform their lives. Bill and Melinda Gates established a non-profit organization guided by the belief that, every life has equal value. As such, their foundation is dedicated to helping those in need. Their
transformational work has helped define what it means to be a global citizen and to adopt a perspective that transcends differences and focuses on our shared humanity.

I was not able to secure interviews with any of the world-renowned transformational thinkers, so I had to rethink who to interview for my study. I decided that I wanted a list of interviewees that would be diverse for two reasons. First, I thought it would be more far more interesting to talk with people who are transformational thought leaders that are easily accessible. It supports the idea that we can interact with transformational thinkers on a regular basis because they are our co-workers, neighbors, customers, or fellow travelers. Second, I thought it would fascinating to see what I could learn about the pattern of transformational thinking knowing that the research subjects were in different professions who worked in various private and non-profit industries, including academia, marketing, manufacturing, healthcare, and community service. In my mind, that would suggest that the process is independent from the individual that came up with the idea. Additionally, it might suggest that a person’s individuality and their life experiences have a profound influence on transformational thinking. It would be even more intriguing if what was revealed was a core set of values of transformational thinkers that transcended their differences. Like many things, there are different approaches one can take to solve a problem. For me, I was far more interested in taking the approach that included a diverse group of transformational thinkers.
I wanted my list of invitees to be multi-cultural, from different walks of life and professions, and whose transformational ideas were in different domains. Sadly, my initial list of invitees was predominately made up of white American men, so I included people from various professions: writers, software engineers, performing artists, philanthropists, social scientists, physicians, and scholars. I wanted to hear the stories from the people who had been credited with publishing an idea that forever changed the way the general population looks at things and engages in the world. Business examples that came to mind included Fed-Ex’s transformation of package delivery, Uber’s transformation of our ideas of transportation, Airbnb’s transformation of global hospitality, Percy Spencer’s transformation of the food industry (the invention of the microwave), and Cirque du Soleil’s transformation of the circus experience. I wanted to know what it was about them and their process that allowed for a transformational idea to emerge, be cultivated, and be nurtured. My list felt unbalanced. It gnawed at me. Part of it was the glaringly disproportionate number of women on the list. But it was more than that. I felt that I was somehow missing something in my definition and list of transformational thinkers.

And then, as life would have it, a serendipitous event occurred which changed my orientation towards transformational thinkers. The event, which took place in Jackson Hole, Wyoming, was part of the North Face Speaker Series, “Never Stop Exploring.”
Exploring new perspectives on transformational thinkers
I spent a week in Yellowstone National Park in late August of 2017, and I timed the trip to coincide with the total solar eclipse. One of the peak viewing spots was just outside of Jackson Hole. After spending time in the park, my family and I wrapped up our vacation with a few days in Jackson Hole. We planned an early morning hike to Jenny Lake and wanted to get everything organized the night before. On the list of essential items was “bear spray,” and there was one store in town where you could rent the canister at a fraction of the cost compared to buying it. My son, Jackson, stayed back at the hotel while my friend and I went to the store to get the bear spray. Unfortunately, the store was closed by the time we arrived there. We decided to take a different route back to the hotel and, as we passed by an outdoor adventure store, I noticed a poster on the window. I was captivated by the image of a green dome tent, set in white snow, with a glorious skyline of Northern Lights. The poster was promoting North Face’s “Never Stop Exploring” speaker series and, as luck would have it, the event was taking place that evening. I had no idea what to expect, but I knew that if it had to do with outdoor adventures and was sponsored by North Face, I was all in. My friend and I got to the theater, bought our tickets, and sat in the front row. What transpired that evening completely changed my perspective on transformational thinking. We saw two documentaries that featured two amazing female explorers who completely pushed the boundaries of extreme skiing and snowboarding by doing something that had never been done before. Their stories were captivating. They showed that it took grit, determination, resolve, and resiliency to pursue their dreams. Their stories were personal and poignant, and in my mind I knew I was in the presence of transformational thinkers. I had never heard of Kit DeLauries or Hadley Hammer, but after hearing their stories and
appreciating their ability to persevere, their fierce commitment to honor their authentic selves and pursue their dreams, I knew I would never forget them. Kit DeLauries is a world class athlete and the first woman to summit and ski the highest peaks on all seven continents. Hadley Hammer is also a world class athlete and she was the first woman to ski the spine of Mount Tsirku in Alaska (see Figure 16). I was in such awe of their accomplishments, I felt compelled to share their stories with others.

After the event, I spoke to my son, Jackson, about their adventures. I pulled up video footage on YouTube because my descriptions of their accomplishments would not do them justice, and I wanted Jackson to get a glimpse of the terrain these women skied. That led to a conversation on global warming, the importance of being good stewards of our planet, and the role that nature plays in our lives.
My son and I spent a week in Yellowstone and Jackson Hole. We explored nature’s wonderland, watched the magnificent solar eclipse, and were blown away by the steep drop of Corbet’s Couloir. Each experience was an invitation to engage in rich, far-ranging discussions. When I returned to Colorado, I reflected on our vacation and our conversations. Then it hit me—there was a connecting core element in all those experiences, and that element was related to what I had been wrestling with in the realm of transformational thinking.

The creation of our national parks, hiking and skiing the highest summits on all seven continents, and skiing the spine of Mount Tsirku were accomplished by transformational thinkers. Behind
each of those triumphs was a transformational thinker whose story is characterized by elements of curiosity, courage, challenging pursuits, inspiring goals, and an indomitable spirit. According to the National Park Service (2018), Yellowstone National Park, believed to be the first national park in the world, was established by the U.S. Congress and signed into law by President Ulysses S. Grant on March 1, 1872. At a time when land was abundant, George Catlin, an American painter and author who traveled to the Great Plains, was concerned about the destruction of the environment. There were debates as to whether the land should be used for private enterprise or be protected for future generations. It took courage to propose such a novel idea. In a similar way, Kit DeLauries and Hadley Hammer were curious to see if they had what it took to accomplish such demanding physical feats. Their stories reflected their indomitable spirit and grit for pursuing challenging goals. They were inspired by other world-class athletes and wanted to accomplish something that would hopefully inspire others to be curious and push for breaking barriers. These characteristics are evidenced in the successful outcomes these individuals achieved.

Those stories of wonderment and accomplishments are catalysts to conversations that deepen our understanding of the world around us, our relationships, and our core values. As such, I believe that the “storytellers” are examples of leading transformational thinkers. They call on us to find the courage to question, examine our assumptions, challenge our limiting beliefs, and explore new possibilities. The ability to tap into that mindset is fundamental to transformational thinking.
Their stories had a profound impact on my thoughts about the art and science of transformational thinking. It led me to a broader definition, a much fuller spectrum of what constitutes transformational ideation. It gave me a perspective on the grassroots impact of transformational thinking and cultivated the idea that transformational thinking grows and flourishes one conversation at a time. That perspective gave way to a new list of people to reach out to for my research.

**The invitation list of transformational thinkers**

The definition of transformational thinkers that I discovered on matrix7.co.uk’s website (Transformational Thinkers, 2011) resonated with me so much that I revised my list of transformational thinkers to include world class athletes, creators of non-profit organizations, teachers, and business people. That definition is as follows:

> [A]n approach to life, work, and play, which is based on personal accountability and vision. Its basic tenets are simple, seemingly universal, truths which enable individuals and teams to create generative change, build sustainable success, and perform at their optimum, in any circumstances. (Transformational Thinkers, 2011)

All the people I added had, in some way, embodied this definition and had been involved in transformational work on a grassroots level within their chosen professions. After my experience at the North Face Speaker Series event, I realized that these transformational thinkers were positively influencing the way people think and make choices.
In truth, I had a hard time with this part of my research. I was fearful of being rejected and had visions of my request for an interview going completely unnoticed. In some cases, I needed the skills of Sherlock Holmes to find the correct address. I compiled my list of addresses and personalized each typed letter with a paragraph explaining why I considered them a transformational thinker and was interested in interviewing them (see Appendix C). I included the basic information about the interview process and provided my contact information. I invited them to reach out to me if they had any questions and said that I would follow up with a phone call or an email within a week.

I wanted my letter to stand out so, in addition to the typed letter, I wrote a personal thank-you card and thanked them for taking the time to read my letter and consider my request for an interview. I enclosed the typed letter and the thank-you card in a white 6x9 inch envelope. I addressed all the letters by hand and used special stamps commemorating the complete solar eclipse.

I received a courteous and polite, “thank you for the invitation but unfortunately I do not have the time now” from many of the well-known “celebrity-status” names that were on the list. Others went into the void and I never heard a word in response to my letter or email. Thank goodness, however, there were some that graciously said “yes” to my request for an interview.
The final list of interviewees
My goal was to have a minimum of eight transformational thinkers for my research. In the end, I interviewed nine individuals. The group consisted of three women and six men with professions in academia, business, and non-profit management. There were four academic scholars, three business owners, and two founders of non-profit organizations (see Table 2.). Additionally, all the interviewees were well established in their careers and highly educated with advanced degrees.

The questions
I developed a questionnaire using an appreciative inquiry approach, which was intended to elicit generative answers by drawing on positive experiences. The questions (see Appendix 3) were open-ended by design so that the interviewees could share what was most meaningful to them. I also wanted to include questions that would help me understand how transformational thought leaders handled adversity, the type of support they received, and the lessons they learned along the way. The interviews lasted 45-60 minutes, and their answers to the questions yielded rich data with specific examples, the sharing of ideas, and the emotional impact of their transformational work.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Mark Barden</td>
<td>International keynote speaker, partner at eatbigfish, and coauthor of <em>A Beautiful Constraint: How to Transform Your Limitations into Advantages and Why It’s Everyone’s Business</em>.</td>
</tr>
<tr>
<td>Dr. Richard Boyatzis</td>
<td>Distinguished University Professor of Organizational Behavior, Psychology, and Cognitive Science at Case Western Reserve University and author.</td>
</tr>
<tr>
<td>Dr. Kim Cameron</td>
<td>William Russell Kelly Chair of Management and Organizations, Professor of Higher Education, Co-founder of the Center for Positive Organizations, and author.</td>
</tr>
<tr>
<td>Dr. Lyell Clarke</td>
<td>President and CEO of Clarke, an environmental company of pioneers of green chemistries and leaders of eco-responsible business practices “transforming the mosquito control industry.”</td>
</tr>
<tr>
<td>Ms. Allison Dake, PhD Candidate</td>
<td>Founder of Connexiones, a nonprofit organization providing educational resources to the Los Cabos, Mexico, community through training and support services in order to create cohesiveness as well as sustainable “wellbeing” in the community.</td>
</tr>
<tr>
<td>Dr. Mary Gentile</td>
<td>Director of the Giving Voice to Values curriculum, Professor of Practice at University of Virginia-Darden School of Business, and author.</td>
</tr>
<tr>
<td>Dr. James Ludema</td>
<td>Co-founder and Director of the Center for Values-Driven Leadership and a Professor of Global Leadership at Benedictine University and author.</td>
</tr>
<tr>
<td>Mr. Adam Morgan</td>
<td>Founder of eatbigfish, an international marketing and consulting firm known for its challenger brands and author of <em>Eating the Big Fish, The Pirate Inside: Building a Challenger Brand Culture Within Yourself</em> and <em>Your Organization and co-author of A Beautiful Constraint: How to Transform Your Limitations into Advantages and Why It’s Everyone’s Business</em>.</td>
</tr>
</tbody>
</table>
Validity & reliability, ethical considerations, researcher bias, and anonymity

Before I could conduct research, I was required to submit a dissertation proposal to the Internal Review Board (IRB) to gain approval to conduct research since I was working with human subjects. The IRB is comprised of committee members whose belong to an institution whose responsibilities include reviewing proposals, approving initiatives, and periodic review of research involving human subjects. Their primary purpose is to protect the rights and welfare of the human subjects. The IRB committee approved my dissertation proposal, which implied that the way I intended to conduct the study, recruit participants, secure the data, and protect their anonymity met their ethical standards. Additionally, the nature of the study and the methods for collecting and analyzing data using the grounded theory methodology met their validity and reliability standards.

The Methodological Process of Coding

This research involved three phases of coding: broad-based coding, refined coding, and granular coding. I used the MAXQDA12 program for broad-based coding. This program was immensely useful in highlighting key words and phrases. The methodical process of coding involved three
main steps: reviewing the transcripts, highlighting sentences, phrases, and words related to my research question, and developing a systematic method for coding the data.

The overview of the methodological process of coding
I developed a process for coding the data that involved creating three levels of codes: open codes, central codes, and theoretical codes. I used a matryoshka doll, also known as a Russian nesting doll, as a visual metaphor to help guide my process. The largest doll was comparable to the open codes. I needed a big holding container for paragraphs, phrases, and lengthy sentences. The middle doll, or second container, could hold a slightly smaller amount of information. I had to select fewer words to represent the central themes and patterns that emerged from the interviews. The last, and smallest, doll contained the essence of data or the theoretical codes that would be used to develop a conceptual framework for the process of transformational thinking. The theoretical codes were minimal in number, but each word carried significant weight.

There are different methods for coding, and researchers use various names for each level of coding. I purchased a qualitative research software program called MAXQDA 12. It came with a lot of robust features; however, I ended up only using only two of them. I did a lexical search and organized my codes by color. The lexical search showed how often a word was used and made it easy to review the context. The color-coded visual layout made it easy to keep the process organized. I did most of the coding the old-fashioned way: I printed out the transcripts, put them in a three-ring binder, and used different colored highlighters. I put pens to paper and
used yellow highlighters for open codes, blue highlighters for central codes, and pink highlighters for theoretical codes.

The coding process
I read each transcript five times. The first two readings were simply to absorb the information. Active coding involved reading and highlighting a section of the interview and writing notes in the margins. I highlighted words and phrases that spoke to the process of transformational thinking and the characteristics of transformational thinkers. Next, I reviewed my notes, lists of words and phrases, and looked for emerging patterns. That was the first level of coding, and those patterns became my open codes. Once I had my open codes, I read the transcripts again. This time, I could focus on the words and phrases that exemplified my open codes. This level of coding required me to be more discriminate. I had to select words that were more defined and could be representative of an entire category. Once I had my list of second codes, I started grouping words together with similar meanings and putting them into my metaphorical containers. When each container was full of related words with shared meanings, I gave each container a label. Those container labels became the central codes. The last step, theoretical coding, entailed working at a granular level and required even more scrutiny.

The process of distilling and refining codes through three levels required discernment and discipline. Ultimately, I had to select words that represented the essence of my research effectively, efficiently, and in a manner that was meaningful. Using the grounded theory methodology, I developed three levels of coding: open codes, central codes, and theoretical
codes. Open codes were broad, expansive sentences, phrases, and paragraphs that touched on the process of transformational thinking (POTT) and the characteristics of transformational thinkers (COTT). Central codes were narrower in scope. The sentences and phrases were more tightly constructed and exemplified a deeper level of meaning. Lastly, developing theoretical codes required even more discernment because I had to select words that illuminated the essence of the concept, process, and characteristics of transformational thinking. The theoretical codes represented the integration of open and central codes. These codes became the conceptual framework of the POTT. I used a software program called MAXQDA12 to assist with this part of my data analysis.

**Data analysis**

MAXQDA12 is a software program designed for computer-assisted qualitative and mixed methods data, text, and multimedia analysis. Their website describes that the program is designed to do the following:

> [F]acilitate and support qualitative, quantitative and mixed methods research projects. It allows you to import, organize, analyze, visualize and publish all forms of data that can be collected electronically, including interviews, surveys, (PDF) documents, tables (Excel / SPSS), bibliographic data, pictures, videos, web pages and even tweets. (MAXQDA12, n.d.)

I used this software program to go through all the interview transcripts and perform a lexical search. This was the first step in identifying the emergence of the open codes.

**Open codes**

The process of creating open codes felt a bit like opening a jigsaw puzzle and pouring all the pieces out onto a table in one big pile. I needed to come up with method for organizing and
sorting the pieces. I started with a simplistic first step, which was to spread out all the words and sort them by duplication and similarity. MAXQDA12’s lexical analysis allowed me to do a word-sorting based on frequency.

Central codes
Creating the central codes required a better understanding of how the words were used. For example, I went back and looked at the context for how the following words were used: support, help, need, and encouragement. The word “need” was used in different contexts. In one situation, a person saw a need or problem they wanted to have addressed. In another circumstance, the need represented the desire to get support—be it in resources, time, or an endorsement to move a project forward. In another situation, a person felt that they needed to pay attention to their intuition or passion about an opportunity or challenge. Going through the transcripts and looking at a word’s context required using judgment and experience to assess the ascribed meaning.

To create the list of central codes for the POTT and the COTT, I reflected on the interview, the quality of the conversation, the person’s nonverbal communications, and the level of intensity they used to group together different words that had similar meanings.

Central codes: Characteristics of transformational thinkers
I was interested to see if certain traits and characteristics were common among transformational thinkers. To improve the probability of finding core characteristics, I set out to interview a group of people who were demographically diverse in terms of gender, age, religion, location, education, and profession. Even though there were differences among them, they all shared one
common denominator: the desire to create something innovative that has the potential to improve the lives of future generations. After reviewing the interview transcripts several times, I realized that transformational thinkers shared six characteristics: inquisitive minds, optimistic outlooks, clarity on their values, insightfulness, determination, and an appreciation for relationships (see Figure 17).

The discovery of an emerging theory
The coding process helped me to develop an emerging theory of transformational thinking. It also provided insight into the characteristics of transformational thinkers. The process was like putting together a Wasgij puzzle—one where you have no idea what the puzzle will be in the end. You start with a blank canvas, follow your intuition, and start building a vision piece-by-piece. Eventually, a detailed picture emerges.

Grounded theory research required thinking about the meaning of each word. I had to pay attention to the context and reflect on how the word was being used to describe situations, feelings, and insights. Certain words carried more weight because of their frequency or because they had more intensity in their meaning. Eventually, I gained the clarity I needed to construct an integrated theory on the process of transformational thinking.
Chapter 4: Research Outcomes

The Research Story
The research revealed an interesting overview about the characteristics of transformational thought leaders and the methods they went through to create transformational change. Even though the transformational thought leaders I interviewed worked on different initiatives, the data told an illuminating story of specific traits and processes that are required to generate transformational outcomes. Every story was like an individual mosaic piece and, when brought together, an amazing picture emerges full of rich detail and depth.

Research Findings
I found that the biggest challenge with grounded theory research was keeping an objective and unbiased filter (Charmaz, 2017; Glaser & Strauss, 1967). As I examined the data, it was tempting to highlight the words and phrases that supported what I intuitively hoped to find. I knew doing so would compromise the integrity of the data. Once I positioned myself as a social scientist, it became easier to examine the data with rigor and discipline and put my biases aside. It was essential to put aside any preconceived assumptions and biases because I was the only person coding the data.

The coding process provided multiple levels of information that helped me better understand the process of transformational thinking. The words created a range from broad based categories to granular levels of detail. The broad categories created the conceptual and integrated framework of the characteristics of transformational thought leaders and the process of transformational thinking. The subcategories provided a deeper level of meaning that illustrated the nuances and
complexities of this study. It was encouraging to see the discoveries from my study were congruent with the findings in my literature review.

**Data collection and analysis**

Table 3 shows the breakout of specific words and their frequencies from the interviews. This step was immensely helpful because it created a framework that started to lay out the POTT and the COTT. The next step of creating central codes required more introspection because I needed to think about the contextual meaning of the words.

**Table 3. Open Codes**

<table>
<thead>
<tr>
<th>Abilities—40</th>
<th>Determined—1</th>
<th>Humor—1</th>
<th>Opportunity—29</th>
<th>Realist—3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers—26</td>
<td>Difficult—9</td>
<td>Idea—95</td>
<td>Passion—37</td>
<td>Resistance—27</td>
</tr>
<tr>
<td>Awareness—10</td>
<td>Energy—23</td>
<td>Important—60</td>
<td>Perspective—21</td>
<td>Risk—32</td>
</tr>
<tr>
<td>Calling—7</td>
<td>Focus—43</td>
<td>Insightful—1</td>
<td>Positive—63</td>
<td>Skills—20</td>
</tr>
<tr>
<td>Challenge—66</td>
<td>Future—12</td>
<td>Interest—158</td>
<td>Possible—19</td>
<td>Support—50</td>
</tr>
<tr>
<td>Community—51</td>
<td>Goal—33</td>
<td>Need—213</td>
<td>Purpose—29</td>
<td>Talk—240</td>
</tr>
<tr>
<td>Confident—3</td>
<td>Grit—9</td>
<td>Networks—18</td>
<td>Questions—82</td>
<td>Values—44</td>
</tr>
<tr>
<td>Courage—45</td>
<td>Hard—89</td>
<td>Obstacle—29</td>
<td>Reflect—19</td>
<td>Vision—37</td>
</tr>
<tr>
<td>Curious—22</td>
<td>Hopeful—32</td>
<td>Open—35</td>
<td>Relationship—46</td>
<td>Vulnerable—14</td>
</tr>
</tbody>
</table>

**Characteristics of transformational thinkers in the literature**

I discovered six broad categories that profiled the characteristics of transformational thought leaders. Transformational thought leaders were inquisitive, optimistic, values-driven, insightful, determined, and relational (see Figure 17). There were differences in how people expressed these traits in their stories. The subcategories are words that I derived based on how I interpreted their
stories and where I saw connections emerge. For example, risk-taking is paired with inquisitive because if a person is curious about an outcome associated with something they have never done before, such as starting a new non-profit organization, it requires them to be vulnerable and to take a risk to do the experiment. The pairings of words within the subcategories reflects the subjective nature of storytelling and the discretion of the researcher to interpret the meaning of those stories. The six characteristics described above were evident in every transformational thought leader I interviewed. I contend that these characteristics were largely responsible for enabling them to publish new ideas, solve complex problems, and transform their businesses or non-profit organizations, as well as the experiences the students had in their classrooms.

Figure 17. Central Codes: Characteristics of Transformational Thinkers

For example, Lyell Clarke, CEO of Clarke, a well-known leader among international environmental companies, is a great example of a transformational thought leader who embodies
the six central characteristics of transformational thinkers: inquisitive, optimistic, values-driven, insightful, determined, and relationship oriented. Lyell’s company is committed to eradicating mosquito borne illnesses. His company went through a complete transformation, and in the process, he demonstrated the characteristic traits of transformational thinkers. He asked propelling questions because he was inquisitive and wanted to find a better way to eradicate mosquito borne illnesses. He was open-minded to how that could be accomplished and took a risk by using appreciative inquiry (Cooperrider & Whitney, 1999) to help transform his company. He was optimistic that there was a better way and was driven by values to make a positive difference for future generations. He was insightful in that he was comfortable with his knowledge and skills and knew that he did not have all the answers. He valued the relationships that he had with his employees and was willing to ask them to support the vision and mission that he had for his company. He was determined to find an elegant solution that would allow his company to eradicate mosquito borne illnesses without having a negative impact on the environment. He was on a mission with a purpose to transform his company from being known as a toxic pesticide company to a leader in the healthcare industry. His vision of, “making communities around the world more livable, safe and comfortable” (Clarke, 2013a) was accomplished by three guiding values: innovation, community, and sustainability. Their current orientation is completely different from how they operated before. Prior to the transformation, Clarke was a pesticide company that used toxic chemicals to the environment to kill bugs and rodents. Lyell embodies the characteristics of a transformational thought leader.
The Clarke company is now known for “pioneering, developing, and delivering environmentally responsible mosquito control and aquatic services to help prevent disease, control nuisances and create healthy waterways” (Clarke, 2013). Lyell Clarke is clear about the mission of his company. The company’s sustainable business initiatives are a testament to their purpose. They are committed to the following:

- Carbon Footprint Tracking & Reporting.
- Transformational Energy—Fleet.
- Transformational Energy—Facilities.
- Green Power.
- Sustainable Packaging.
- Responsible Purchasing Policies & Vendor Programs.
- Zero Waste. (Clarke, 2013b)

The transformation of Lyell Clarke’s company started with a propelling question and an inquisitive mind. In his interview, Lyell shared that he kept asking himself if there was a way to eliminate disease-carrying insects that could be good for the environment on multiple levels. That inquisitiveness changed the trajectory of his entire company and set it moving in a new direction.
Inquisitive

Curiosity is essential; it drive perseverance, stubbornness, commitment and is the seed crystal for great work

~Mark Barden, coauthor of Beautiful Constraints and interviewee

When I interviewed Lyell Clarke, he shared that his curiosity and inquisitiveness were significant drivers in the transformation of his company. He wanted to know if there was a better, safer way to eradicate mosquitos. When I researched the difference between curiosity and inquisitiveness, I found this explanation:

Inquisitive and curious are synonymous. They are the desires to explore, investigate and draw inferences from the information. However, inquisitive is generally associated with an intelligent curiosity or prying. Therefore, curiosity can be defined as the eagerness to explore and investigate the unknown, whereas inquisitive can be particularly related with the intellectual curiosity or the curiosity marked by various enquiries. (Difference between inquisitive and curious, 2018)

This definition was supported in Livio (2017), who stated there are different types of curiosity (perceptual, epistemic, and diversive) and their level of intensity varies depending on what information the person is seeking. Vozza (2015) highlighted the behaviors associated with curiosity, such as asking a lot of questions, being willing to admit what they do not know, willing to be wrong, making time for self-reflection, and not letting past disappointments get in the way of moving forward. These behaviors were apparent in all the stories I heard during the interviews. Oppong (2016) recognized how curiosity contributes to our need for achievement and creativity. Lowenstein (1994) argued that curiosity has played an integral role in our survival as a species. Loewenstein (1994) contended that we are intrinsically motivated to seek out
knowledge and minimize information gaps. Our curiosity acts like our other instincts such as to drink when we are thirsty, eat when we are hungry, and sleep when we are tired. All of these intrinsic drives are necessary for our survival. Inquisitiveness and curiosity are two elements that go hand in hand, similarly to hope and optimism.

All those interviewed highlighted the importance of being inquisitive, which was also highlighted in the literature. They said it was central to who they were and how they experienced the world around them. All their stories demonstrated an underlying sense of intrigue with people, situations, and problems. Their inquisitiveness was accompanied by three behaviors: risk-taking, vulnerability, and open-mindedness.

Risk-taking

Risk-taking requires one to be self-confident enough and to be willing enough to work without a net.

~Maureen Shul, Executive Director “Wings of Hope” and interviewee

Each person spoke of a situation that involved taking some type of risk. For Allison Dake, it was developing a new model in Mexico that focused on business-to-business funding rather than individual donations to break the cycle of poverty. Her model went directly to businesses in the hospitality industry that needed English-speaking employees. Allison’s organization charged a fee to the businesses for teaching their employees to speak English. She then used those funds to develop and support a non-profit organization dedicated to educating and providing for women and children in need. Lyell Clarke, President and CEO of a third-generation insect repellent
business, took an enormous risk when he decided he no longer wanted to operate a toxic pesticide company. Dr. Mary Gentile took a risk when she presented her program, “Voice to Values,” to Yale University and said that working with them was contingent on a non-negotiable condition: the materials needed to be available to anyone who wanted them, free of charge. Each person’s story was accompanied by emotional exposure and risk—a phenomenon also known vulnerability.

Vulnerability

Takes a lot of courage to be vulnerable and you have to be vulnerable in order to be willing to take risks and put something new out there.

~Richard Boyatzis, Distinguished University Professor of Organizational Behavior, Psychology, and Cognitive Science at Case Western Reserve University and interviewee

When we open ourselves up to taking a risk with no guarantee of the outcome, we make ourselves vulnerable (Brown, 2013b, 2015). We do not know if we will succeed or fail, whether people will embrace or reject our ideas, or whether our idea is even correct. All we know is that when we present our ideas to others, we are allowing ourselves to be judged, scrutinized, and critiqued. Dr. Richard Boyatzis talked about being “crucified” and “ripped to shreds” when he first presented his ideas on emotional intelligence to members of the scientific community at an academic conference. His articles were rejected because the scientific community did not believe there was enough quantifiable objective data to support his claim that emotional intelligence could be used as a predictor of success in work and relationships. Dr. Jim Ludema had no idea if his idea to create the Center for Values-Driven Leadership would be endorsed. At the time he
proposed the idea, along with an executive doctorate program to be taught by visiting scholars and leading thinkers, there was no other program like it in the country. For Dr. Mary Gentile, a self-proclaimed intense introvert, every time she spoke to an audience she took a risk and felt emotionally exposed. Each person’s story had some element of vulnerability. At the same time, they had a mindset that was open to the possibility of having a positive outcome. That open-mindedness gave them the strength and courage they needed to take risks and be vulnerable.

Open-minded

To do this work, it’s important to be curious, have an open mind, and ask open ended questions.

~ Dr. Mary Gentile, Creator/Director of Giving Voice to Values and interviewee

Every person I interviewed talked about the importance of having an open mindset. This type of mindset was characterized as one that accepts the possibility there are a variety of approaches that can lead to a desired outcome (Dweck, 2014). Most of them believed it was beneficial to have a mindset receptive to multiple good answers over a single “right” answer. In some cases, having an open mindset led to gathering more data. When Lyell Clarke became interested in transforming his pesticide company that used toxic chemicals to be an eco-friendly operation, he became a voracious reader on sustainability and organic, non-toxic pesticides and pursued his doctorate degree. When Adam Morgan and Mark Barden (2015) started co-authoring their book, they deliberately opened their minds to viewing constraints as the key to breaking path dependence, which is inherent in traditional problem-solving methodologies.
Each person’s story of transformational thinking involved being open to a new possibility. They adopted a novel perspective, developed an innovative model, or provided a different operating framework to create a new outcome. In addition to having an open mindset, they used propelling questions to help move the process of transformational thinking forward.

Asking propelling questions

You need to learn the art of framing problems and asking powerful questions.

~Dr. Mary Gentile, Creator/Director of Giving Voice to Values and interviewee

Inquisitive and open mindsets are well-served by engaging in conversations that are driven by propelling questions. Propelling questions were described by Morgan and Barden (2015) as questions that help us break free from our old ways of thinking. In general, they are, “action-oriented, provocative questions that pair a bold ambition with a constraint and cause us to flip the switch regarding problem-solving” (p. 58). Propelling questions act as a catalyst that jump start the creative problem-solving process because they force us to look at the problem from an entirely different perspective. They also require us to embrace and work with our constraints rather than against them. Many of the people I interviewed talked about the reality of resource constraints. For example, a propelling question related to a budget constraint is, “How can we generate awareness in the media without an advertising budget?” Such a framework leads down a different path than asking the more traditional question, “How do we get money for advertising?” What I love about propelling questions is the embodiment of optimism in the question and the answers. When there is a focus is on what is possible, there tends to be an
implicit belief in a positive outcome. Having an optimistic outlook is essential for being a transformational thought leader.

Optimistic

I am a relentless optimist...you have to be to do this work because it requires maintaining an optimistic and hopeful outlook.

~Allison Dake, Founder of Connexiones, a nonprofit organization providing educational resources to the Los Cabos, Mexico community and interviewee

Having an optimistic outlook was evidenced in all the stories of the people I interviewed. It was clear in their narratives that having a positive outcome served them well. Achor (2010) made a compelling business argument for the benefits of optimism and happiness. His evidence-based research shows that having an optimistic outlook, which enhances our sense of wellbeing and experiences of joy and happiness, lead to more creative problem solving, less absenteeism, enhanced efficiencies, and more profitability. Brown (2015) explained that optimism is an integral part of our ability to be resilient when encountering adversity. Duckworth (2016) suggested that optimism plays an important role in our ability to pursue goals. Beazley (2009) pointed out that optimism has different nuances and suggested that certain types of optimism are more advantageous in specific situations. Radcliffe and Klein (2002) found that optimism can become a vulnerability when it minimizes negative factors that we need to pay attention to. When optimism distorts reality, it can become a risk that prevents us from making good decisions. Transformational thinking requires a type of optimism that balances an expectancy set of positive outcomes and a sense of reality.
In the world of psychology, optimism is commonly described as a state of mind that reflects an expectancy set of positive outcomes in life, events, and circumstances (Peterson, 2000, 2003; Seligman, 2005). Having an optimistic outlook can be advantageous when playing in arenas characterized by negativity, rejection, and other setbacks. I have come to appreciate that transformational thinking is not for the faint-hearted. It requires having a tough skin and a willingness not to be deterred by the nay-sayers and critics. Many of my interviewees were told their ideas would not work, that it was not the right time, or that there were not enough resources to support their endeavors. Despite setbacks and disappointments, the transformational thought leaders I interviewed all shared the following characteristics: hopeful, humorous, future-oriented, the ability to see possibilities, and the aptitude to turn problems into opportunities.

Hopeful

Hope and optimism are fundamental to bringing about transformational change.

~Maureen Shul, Executive Director, Wings of Hope for Pancreatic Cancer and interviewee

Those I interviewed expected that things would eventually turn out favorably, and they engaged in their endeavors with a resounding sense of hopefulness. Many had an operational sense of optimism that mirrored Snyder’s (1994) definition of hope, which contains three elements: goals, pathways, and agency. Rather than looking at setbacks as obstacles, transformational thought leaders saw them as opportunities. They knew that overcoming the obstacles would move them closer to accomplishing their goals. They believed they could find different and, in some cases,
non-conventional ways to reach their goals. Lastly, they believed they had the ability and skill sets required to reach those goals. They experienced hope as more concrete than just “feeling good about the situation.” For instance, when Maureen Shul wanted to create a foundation that would fund research on pancreatic cancer and distribute grants in non-traditional ways, she developed a detailed plan with specific goals. This is consistent with research related to goal setting theory (Locke & Latham, 1990), which suggests that effective goal setting helps us attain a positive state of positive flow (Csikszentmihalyi, 1988, 1996). Additionally, when we are optimistic, we can allow ourselves to have a stronger sense of hopefulness that we will be able to achieve our goal and our self-efficacy, the belief in our ability to accomplish certain tasks goes up (Bandura, 1977). Allison Dake, Dr. Mary Gentile, and Dr. Kim Cameron all described themselves as “relentless optimists” who also had strategic plans in place with clear milestones and measurements of success. Just before heading off for a three-day off-site retreat, Lyell Clarke’s employees received an email instructing them to bring a bathing suit to the retreat with no further explanation. Halfway through the retreat, he asked the employees to change into their swim clothes and meet him at the pool. He made himself vulnerable by saying that he did not have all the answers to how they were going to transform their company, but he was hopeful and confident that his employees did. He asked them to take a symbolic “leap of faith” alongside him. He believed that they had what it would take to transform their company. He then handed each person a pair of swim goggles and asked them to jump in the pool as a testament to taking a leap of faith, and together they were willing to jump into the process of transforming the company. Lyell Clarke desperately wanted to do something that would create a positive imprint
on the planet. He knew he needed the backing of his employees to make it happen. He was hopeful and optimistic that he could transform his dream into a reality and create a meaningful legacy for his company. He wanted to create a company that would have a positive impact for the environment now and for future generations. All of the stories I heard carried an element of hope and optimism for a better future. Lyell’s company retreat was a “roll-up your shirt sleeves and let’s get it done” event. However, Lyell recalls how even when faced with an enormous challenge, his employees were relentless in their hope and optimistic outlook for being able to transform the company, and they were able to laugh at themselves and with their teams in the process.

Humorous

Celebrations and maintaining a sense of humor were important because they provided motivation and kept us going!

~Allison Dake, Founder of Connexiones, a nonprofit organization providing educational resources to the Los Cabos, Mexico community and interviewee

For some, optimism showed up in their sense of humor and ability not to take themselves too seriously. Several of those I interviewed shared how important it was to balance the seriousness of their endeavors with a light-hearted spirit. For them, finding humor in a situation was the quickest remedy to alleviate stress, frustration, and tension. Levity enabled them to bring down their levels of stress and frustration, get energized, and focus on the work at hand. Others shared that having a sense of humor about their work helped them deal with the criticism and rejection that was an inevitable part of the process. Laughter and not taking themselves too seriously
created a healthy separation between who they were as people versus what they did to earn a living. Their work was meaningful and important, but it was not so all encompassing that they could not find ways to engage in some humor, find levity in situations, and make fun of themselves. According to Wolin and Wolin (1977), humor can make us better observers:

When we notice the humor in a situation, we are in an observant role. It takes a little bit of psychological distance in order to see the humor in ourselves and our circumstances. We are standing beside our painful situation when we can laugh at it.

The ability to see the humor in ourselves makes it harder to wallow and perseverate on negative emotions. Dr. Sultanoff (n.d.) emphasized how humor benefits our overall resiliency because it enhances our biochemical makeup, cognitive abilities, behaviors, and emotional state. The benefits from humor are magnified when working in stressful situations. When we are in a better emotional state, it is easier to look ahead with a positive attitude.

Future-oriented

The work is meaningful because it impacts the well-being of future generations.
~Lyell Clark, CEO and President of Clarke, an internationally acclaimed environmental company and interviewee

Each person’s story spoke of a deep desire to make the future better. They wanted to create something that would have a positive impact as their legacy to future generations. For Allison Dake, it was about breaking the cycle of poverty through literacy for multiple generations. Learning English in a town that thrived from English-speaking tourists meant employment, and employment gave people a means to a better standard of living. Her foundation was dedicated to
helping those in need now and ensuring a future with more opportunities for the local inhabitants. Maureen Shul’s Wings of Hope for Pancreatic Cancer Foundation provides better types of treatment for patients currently suffering from this disease. The goal of the foundation is to fund research that will cure pancreatic cancer in the future. Adam Morgan and Mark Barden’s (2015) problem-solving methodology was designed to foster an innovative strategy for solving audacious problems. They both dedicated their books to their children in the hopes of giving them a brighter future. Lyell Clarke’s company is committed to lowering its carbon footprint on the planet and providing life-saving remedies: “We recognize that every action we take, big or small can directly impact the environment and significantly affect future generations” (Clarke, 2013b). The home page of their website highlights their commitment to creating a better and brighter future:

Sustainability is our passion. We take pride in our work and the difference we make in the world. We're passionate about doing the right thing, even when it's hard.

We're an environmental company. We hold ourselves accountable for making responsible decisions and finding ways to lessen our impact on earth. We put people and the planet first, in everything we do. Pioneers of green chemistries and leaders of eco-responsible business practices, we are transforming the mosquito control industry. (Clarke, 2013a)

These transformational thought leaders devoted themselves creating a better future. They always kept that vision in the forefront because they believed it was entirely possible.
Seeing possibilities

It’s critical to see possibilities and take action.

~James Ludema, Co-founder and Director of the Center for Values-Driven Leadership and a Professor of Global Leadership at Benedictine University and interviewee

It is not uncommon to hear people say, “I will believe it when I see it.” The transformational thinkers I spoke with turned that phrase upside down. They simply believed it and trusted that the supporting evidence would be there. Their unflinching beliefs and convictions enable them to see possibilities without the burden of proof. Unlike their skeptical counterparts, they intuitively trust the process and, when they do, the world has an amazing way of providing them with evidence and resources ensuring that they are on the right track. Dr. Jim Ludema trusted that there was a place in the business world and in academia for a unique executive doctorate program, even though there was neither funding available nor a comparable educational model at the time. Lyell Clarke believed it was possible to become a green, sustainable company. No other pesticide company, to my knowledge, has made the transformation from a pesticide company to an environmental company that is also focused on healthcare and eradicating insect-transmitted diseases. He believed it was possible and started putting initiatives in place to transform the company. In addition to sustainable practices, they created the Clarke Eco-Tier Index, which ranks products, equipment and services based on their impact on the environment. This helps their customers make choices that best support their own sustainability goals. When Lyell Clarke talks about the evolution of his company, the starting point was characterized by a lot of complex and expensive problems that needed to be solved. When Allison Dake went to Mexico to rebuild
homes after the devastation of Hurricane Odile, there were seemingly insurmountable political, financial, and environmental obstacles. In every situation, each person had a story that highlighted their ability to use the challenging circumstances to their advantage. They turned problems into opportunities, which is a characteristic of transformational thinkers (Duckworth, 2016; Peterson & Seligman, 2004).

Turns problems into opportunities

Problems are invitations and opportunities to create innovative solutions and develop tools.

~Mark Barden, International keynote speaker, partner of eatbigfish, author, and interviewee

The ability to turn a problem into an opportunity was evident in every transformational idea, product, service, or outcome mentioned in the interviews. It seems that the ability to do this is intricately linked to similar character traits among those interviewed: an optimistic outlook, positive disposition, sense of hopefulness, and ability to see a future with brighter possibilities.

Morgan and Barden’s (2015) “Can-If” problem-solving model was built on turning constraints into opportunities as a way to break our path dependencies for relying on comfortable and familiar ways to solve problems. By embracing constraints rather than fighting them, according to Morgan and Barden (2015), we force ourselves to go on a different trajectory because those limitations and constraints force us to look at innovative ways to solve problems. Dr. Mary Gentile saw a gap in people’s values and their desire to make ethical choices. She created a model called “Giving Voice to Values,” which provided a framework to help people take actions aligned with their values. She found a way to close the gap between ethical decisions and ethical
actions. Dr. Jim Ludema saw a problem with the growing trend of news stories highlighting unethical behaviors among leaders and corrupt business practices. He also saw the opportunity to create a values-driven center so that leaders could come together and develop strategies and solutions to develop leaders that would improve businesses, the lives of their employees, and give back to the communities that supported them. Dr. Kim Cameron and Dr. Richard Boyatzis saw organizations struggling with low levels of employee engagement, high turnover, and compromised morale among teams. Amidst the dissention and distrust, they saw that focusing on positive organizational behavior would help emancipate people’s energy and cultivate the creativity needed to make improvements in the work environment. In addition to being able to turn problems into opportunities, each person had clear values and experienced profound life events that shaped who they were and gave them a defining sense of purpose.

Values-driven

It is helpful to have a compass of values, beliefs, and/or faith to keep one going when it gets tough.

~Richard Boyatzis, Distinguished University Professor of Organizational Behavior, Psychology, and Cognitive Science at Case Western Reserve University and interviewee

The characteristic trait of being values-driven did not emerge as a specific topic in the literature. However, what did emerge through the stories were three elements related to values-driven work: having a mission, a purpose, and a vision. In the case of those I interviewed, their transformational work created positive influences and outcomes, and most of them were in academia and leaders of non-profit organizations. Three of the interviewees were business men who believed their work had the ability to make a positive contribution to their clients and make
the world a better place. All of the people I interviewed have some altruistic aspect to their work; however, values-driven work and capitalistic goals are not mutually exclusive. I believe that it is completely possible to have capitalistic values, a capitalistic mission, and think in ways that are transformational. Business examples that come to mind are Dyson, Fed-Ex, 3M, and Apple.

What I found in the literature that supported the importance of value-driven work was a connection between values and the pursuit of a meaningful life (Peterson & Seligman, 2004; Seligman, 2005; Snyder & Lopez, 2009) and the pursuit of meaningful goals (Shalley & Locke, 1996). I contend that goal setting is one way of operationalizing our values. Shalley and Locke (1996) argued that goals act as a powerful motivator because they are driven by our sense of purpose. Serrat (2011) defined courage on an individual level and suggested that our values and morals act like a compass to help us make decisions that are aligned with our values. Brown (2007) spoke about the importance of finding the courage to take a stand for what we believe.

Those I interviewed shared three aspects of how they operationalized their values. First, they had tremendous clarity on their values. Second, they were willing to make courageous decisions that were aligned with their values. Third, they pursued meaningful goals that reflected their values and believed the work they were doing was meaningful.

Each person’s clarity of values was influenced by life circumstances, religious beliefs, mentors, and their family of origin. Their values were fundamental to how they defined themselves and engaged with others. Their values provided a platform that made it easy for them to articulate
their sense of purpose. One value they all shared was the importance of making a positive contribution to enhance the lives and wellbeing of others. Every person I interviewed was involved in an endeavor designed to improve the environment, social wellbeing, health, and economic stability of others. Lyell Clarke’s value to create a healthier environment led him to embrace a zero-waste initiative. Allison Dake’s value of empowerment led her to create an institute to educate and empower people so they could earn a living and provide for themselves. Dr. Gentile’s value of making ethical decisions in business led to the birth of a movement and an educational platform devoted to “giving voice to values.” Her program empowers people to make ethical decisions and act on them. Their values gave clarity to their visions.

Vision

Clarity, vision, and purpose are part of the process. You have to have a vision and idea of where you aspire to go.

~Adam Morgan, Founder of eatbigfish, an international marketing and consulting firm known for its challenger brands, international keynote speaker, author and interviewee

Each person’s values represented the colors on their paint palette and they used those colors to paint a vivid vision of where they wanted to go. Allison Dake’s vision was housed in an organization that provided services to the local community and enabled people to prosper for multiple generations. Adam Morgan and Mark Barden (2015) shared a vision that was contained in the pages of a book they co-wrote. Their vision was to embrace constraints in problem-solving rather than fight them. For Dr. Jim Ludema, the vision was to build a better future by teaching people the art and science of values-driven leadership. Lyell Clarke’s vision was to enhance
health and safety in communities. Maureen Shul had a vision of a world that was free of pancreatic cancer. Dr. Gentile’s vision was one that gave people clarity and courage to make ethical decisions. Dr. Boyatzis and Dr. Cameron shared a vision of organizations creating positive work environments that enabled people to flourish. Each person’s vision was inspirational and bold. Not one of these visions came with ready-to-build instructions. It was only through hard work, grit, and passion that these visions became realized and these characteristics are common among transformational thinkers (Duckworth, 2016). If their visions painted the picture of where they wanted to go, then their missions provided the structure of how to get there.

Mission

Transformational work requires the constant articulation of a vision, mission and impact.

~James Ludema, Co-founder and Director of the Center for Values-Driven Leadership and a Professor of Global Leadership at Benedictine University and interviewee

Each person’s values and vision became the cornerstones for creating their mission. They had a clear, concise idea of what they wanted to accomplish and could articulate their fundamental purpose. They could readily answer the questions of why their work was important and how it contributed to the betterment of society. Maureen Shul’s mission was to fund different teams doing pancreatic research in hopes that having multiple research teams would increase the odds of finding a cure sooner. Dr. Boyatzis and Dr. Cameron’s mission was to provide organizations with a framework for positive organizational behavior and leadership. Adam Morgan’s and Mark
Barden’s (2015) mission was to provide people with a better model for problem solving and decision making which involved working with constraints rather than pushing against them. Each person could, without hesitation, talk about their mission and the purpose behind it.

Purpose

This work was a call to action, a personal mission and something bigger than myself. Transformational work is fueled by something that feels personal and meaningful.

~Lyell Clark, CEO and President of Clarke, an internationally acclaimed environmental company and interviewee

Each person had clarity with respect to their values, a bold vision, and an ambitious mission. They had a sense of purpose which was intricately linked to their work and ambitions (Dungy & Whitaker, 2009). They intuitively knew this was their life’s work. They were deeply passionate about their endeavors. In some cases, they felt it was a privilege and an honor to do such meaningful and important work. I heard Allison Dake say multiple times in her interview, “I simply could not leave this alone; I felt compelled to do this work because it was my life’s calling.” The people I interviewed had invested a significant number of years in their professional fields. Some talked about the sacrifices they made to pursue their mission and engage in purposeful work. Their work helped others experience the world around them in more positive ways: supplies for safe drinking water, education to earn a better living, a framework for making values-driven decisions, and a sense of hopefulness from new pancreatic cancer research.
People spoke of their work with passion and conviction. It became clear during the interviews that people could immerse themselves in their work because it was so deeply aligned with their values and life purpose. They spoke about this with certainty and clarity. When asked about how they had such clarity, they shared that they spent time in self-reflection, meditation, and mindfulness. All these practices gave them time to look deep inside themselves and think about what gave their work meaning and purpose.

Life’s calling
When I asked the interviewees about why they pursued their line of work, people spoke about the choice of their vocations with passion, enthusiasm, and reverence. Many described it as their life’s work or life’s calling. They simply could not imagine doing anything else. Their work was the culmination of their interests and values and perfectly aligned with their personal vision and mission. It was as if their occupational choice was embedded in their DNA, and they had no other choice but to pursue an endeavor that lined up with their talents and desires to make a transformative contribution through their work.

Insightfulness

We need to be insightful; it’s what helps us to be flexible when needed and willing to execute and take action when there is an opportunity to seize.

~Lyell Clarke, CEO and President of Clarke, an internationally acclaimed environmental company and interviewee

Morgan and Barden (2015) argued that insights gained from perspective taking enable us to identify opportunities. They suggested the biggest shift we can make to engage in transformational thinking is to flip the switch, change our perspectives, and look at constraints as
positive resources. They also highlighted the importance of the insights we can gain when we pay attention to our emotions and response biases. Peterson (2003) made the case for honoring our intuition because it represents our internal knowing and offers another layer of insight. It is important to trust what we are feeling and sensing in addition to what we are thinking. Many of the transformational thought leaders that I interviewed spoke of the relationship between their intuition and insight. By paying attention to their intuition, they were able to gain different insights into the problem they were trying to solve. According to Officer (2005), our intuition can lead to insights that allow us to consider alternative solutions.

All of the stories illustrated each person’s ability to be insightful. The circumstances and process for gaining insight differed but the result was the same: a deeper understanding of their motivation, a willingness to see opportunities, and an inventory of their skills. Several people shared stories where their lives were in personal turmoil or professional transition and, as a result, it created an ideal opportunity for self-reflection.

Self-reflection

Self-reflection and internal shifts can lead to new insights; you have to be willing to do a fearless inventory and know your strengths and weaknesses.

~ Lyell Clark, CEO and President of Clarke, an internationally acclaimed environmental company and interviewee

The psychological definition of self-reflection refers to an ability to look inward and examine our thoughts, assumptions, and actions. It can be a moment where we pause and take inventory of our interests and goals. It can also be a time where we evaluate our strengths and vulnerabilities.
Certain situations, such as endings or new beginnings, can be conducive to reflect on behaviors and attitudes that have helped or hindered us. More than half of the people I interviewed spoke of poignant circumstances and life events that had given them time to self-reflect and evaluate their choices and priorities. They shared how vital those times of self-reflection were because they provided clarity for what they wanted and needed to do in order to go forward in their life. Their self-reflections were deeply personal, and, in some cases, it was painful to acknowledge what bubbled up. In addition to self-reflection, I also heard a desire to be personally accountable for their decisions, behaviors, and outcomes.

Personal accountability

Personal accountability is paramount; one has to be willing to fail and own their mistakes.

~Maureen Shul, Executive Director, Wings of Hope for Pancreatic Cancer and interviewee

Every person’s story of transformational thinking involved them taking on a leadership role of some kind, such as publishing an idea, asking for resources, setting ethical boundaries, or challenging conventions and social norms. In each story, I heard examples of people holding themselves personally accountable for the outcomes. They were willing to see how they contributed to the success or failure of their transformational ideas. They held themselves accountable for keeping promises and commitments. They felt it was their responsibility to find new and innovative ways to solve the problem, secure resources, and promote an idea. I believe their level of integrity and consistent reliability inspired others and, in this way, they embody the characteristics of authentic leaders. Authentic leadership (George, 2003; Luthans & Avolio,
2003) is an approach to leadership that is built on an ethical foundation. Leaders cultivate relationships with honesty and value input from their followers. Their inclusive approach builds trust and support. Authentic leaders are characterized as leaders who are self-aware and genuine, mission driven, focus on long-term results, and use their head and their heart to lead. Authentic leaders appreciate the value of transparent, direct communication that is supported by empathy and compassion. They modeled personal accountability and, in doing so, gave others the courage to be personally accountable as well. In a world often characterized by people diffusing responsibility and blaming others, I believe this type of ownership in leadership is powerful. It inspires others. Being insightful, taking time for self-reflection, and holding themselves accountable were important character traits. They helped people be effective in pushing forward transformational ideas that had the potential to create change and, in some cases, disruption. Another skill set that proved useful was the ability to consider other points of view.

**Perspective-taking**

Perspective-taking helps you flip the switch to find innovative solutions.

~Kim Cameron, William Russell Kelly Chair of Management and Organizations; Professor of Higher Education. Co-founder, Center for Positive Organizations, author, and interviewee

Perspective-taking requires an individual to be willing to consider other points of view and entertain the possibility that their perspective may be limited or flawed. It can create an opportunity to figuratively put ourselves in another person’s shoes and become more sensitive and empathic to their experience. When we allow ourselves to imagine how another person feels or experiences the world, we have the opportunity to bring in another perspective and host of
considerations to our problem-solving efforts. Perspective taking can further strengthen their perspective and provide additional validity that they are moving in the right direction or the wrong one. Just as we might change our physical location to see something from a different angle or see it in a different light, perspective-taking is our ability to intentionally seek out other points of view on a situation. It extends the invitation to understand a concept from an alternative standpoint. Adam Morgan and Mark Barden (2015) were passionate about the importance of perspective-taking. The main premise of their book, *A Beautiful Constraint: How to Turn Limitations into Advantages and Why It’s Everyone’s Business*, is based on perspective-taking to break out path dependencies on how we traditionally solve problems. Allison’s Dake’s model for ending poverty was created by looking at ways to break the cycle of poverty from the perspective of addressing the root cause of poverty rather than to alleviate the symptoms. Dr. Kim Cameron and Dr. Richard Boyatzis took a strengths-based point of view to look at enhancing organizations rather than the traditional perspective, which primarily focused on problems and failures. All of these examples illustrate a willingness to look at a situation from another point of view.

Transformational thinkers, in addition to being vulnerable and taking risks, acknowledge the immense value in looking at situations from multiple perspectives. Perspective-taking requires a certain degree of confidence. The outcome might require one to have the confidence to admit that their perspective was flawed without becoming deflated by that admission. It also takes confidence to promote one’s perspective and encourage others to try looking at situations from different points of view.
Self-confidence

You need to have self-confidence and be willing to take risks and test ourselves.
~Adam Morgan, Founder of eatbigfish, an international marketing and consulting firm known for its challenger brands, international keynote speaker, author and interviewee

Every person spoke unapologetically and with complete confidence about their skills and natural talents. In the interviews, I asked them not to be humble with their answers when I asked what it was about them that brought forth transformational outcomes. People were thoughtful with their answers. Their choice of words and tones of conviction highlighted that they were comfortable articulating how their skill sets contributed to successful outcomes. Adam Morgan and Mark Barden (2015) were so confident in the value of embracing constraints that they challenged themselves to apply it to their personal lives. Allison Dake admitted to having moments of doubt that things would fall into place, but those doubts were based on circumstances, not on her skills and talents. She never doubted her own abilities to “move mountains and get it done.” Dr. Mary Gentile was initially “mortified” at the prospect of speaking in public. She developed a personal mantra, “I am here to teach and to learn,” to give her courage in front of a crowd. She may have started out being nervous and uncomfortable speaking in public, but she was always confident in the quality of her work and in the importance of her message. Now, she speaks worldwide and her self-confidence with public speaking has grown with each engagement. Dr. Kim Cameron, Dr. Jim Ludema, and Dr. Richard Boyatzis all referenced the self-confidence they had in their ideas. They believed with complete conviction that they were onto something of significance.
Embedded in every story of self-confidence was a sense of determination. Each person knew they had the gumption and tenacity to do whatever it would take to push their ideas to fruition.

**Determined**

You need to have grit, perseverance, determination, and stamina to do transformational work.

~Richard Boyatzis, Distinguished University Professor of Organizational Behavior, Psychology, and Cognitive Science at Case Western Reserve University and interviewee

When I asked people what it was about them that contributed to their success, every person talked about their perseverance. They used a variety of words to describe the characteristic trait of determination, such as stubbornness, focused, persistence, driven, relentlessness, and tenacity. They all had grit, which, according to Duckworth (2016), is the combination of determination, passion, and focus. Duckworth makes that case that grit serves as a powerful motivator to keep us going when the going gets tough. Proctor (2005) argued that persistence is needed for dealing with repeated rejections and obstacles. Determination is fueled by many things and it was an important characteristic trait of transformational thinkers.

Every person mentioned that the work they did was difficult. It took longer than expected and they ran into more obstacles than they had anticipated. There were more setbacks and disappointments than they had imagined. At times, the process of getting their ideas supported felt arduous. Fortunately, their perseverance and determination kept them going through all the trials and tribulations they encountered. They knew being tenacious, stubborn, and persistent was
part of their makeup. I heard the following statements: “I simply would not take no for an answer;” “I was determined to see this through;” “I insisted this could be done and I knew it needed to be done;” and, “I would not and did not give up.” Their determination was fortified by their drive and focus. They were driven to see their ideas and dreams manifested into realities.

Here are the highlights of what they created:

- A platform for giving a voice to values.
- A community center to enhance literacy and eradicate poverty.
- A book with a methodology to embrace constraints and leverage them to solve problems.
- A non-profit foundation with innovative distribution of grants to cure pancreatic cancer.
- A center for positive organizational behavior.
- A zero-waste, organic health care company from a formerly toxic pesticide company.
- An innovative, executive doctoral program housed in a center for values-driven leadership.
- The concept of emotional intelligence and understanding its impact on the ability to be an effective leader.

All of these endeavors required persistence. In addition, each person shared that they did not go down this road alone. They highlighted specific individuals who were instrumental in their journey. The ability to develop healthy, supportive, and trusting relationships was essential to their accomplishments.
Relational

Relationships built the bridges we needed and created a community and supportive network. We couldn’t have done the work without the relationships.

~Allison Dake, Founder of Connexiones, a nonprofit organization providing educational resources to the Los Cabos, Mexico community and interviewee

Every person I interviewed spoke of importance of having supportive relationships. For some, their relationships with family, friends and their faith gave them the fortitude they needed to keep moving forward (Blanchard & Broadwell, 2018). Others spoke with great affection and admiration for their colleagues and talked about the joyful experience of working together. Several called attention to special mentors and sponsors that guided them, challenged them, and helped publish their work. I did find research that supported the importance of social connections in spreading ideas. Wurm (2014) highlighted the influential role that an “idea carrier” has for spreading ideas. Valente (1996) highlighted the importance of social networks and their role in encouraging people to adopt innovative ideas. Authors Lee and Ybarra (2017) contended that social support influences one’s interest and ability to pursue goals. Laurin (2016) explained that there is a social contagion aspect to pursuing goals. Laurin (2016) suggested that we are inspired and inclined to pursue our goals when we see others pursuing their goals. Additionally, research by Cross (2013, 2016) on organizational network analysis (ONA) helps us better understand the patterns of information flow and collaboration within organizations. ONA can help identify the inner workings and informal leaders or hubs who help transmit vital information throughout an organization. This type of analysis sheds light on covert communications among strategically important groups. Social networks diagrams help illustrate an organization’s communication
DNA in that it highlights the relationships between people, their sphere of influence, trusted resources, and who controls the flow of information.

Each transformational thinker I interviewed spoke with enthusiasm about the people they worked with and those who helped transform their ideas into realities. They used terms of endearment to describe people in their personal lives who supported and encouraged them to pursue their dreams. Everyone discussed the essential role other people played in their transformational work and the importance of cultivating nurturing relationships. Adam Morgan described certain people as “intellectual soul mates.” Dr. Jim Ludema talked about colleagues who helped move things forward in way that he never could have on his own. Allison Dake talked about the immeasurable value of being able to partner with local community members who opened doors. She shared that her friendships with the people who lived in Mexico demonstrated that she was credible, invested, and was trustworthy. Lyell Clarke talked about how inspired he was by his son’s courage to jump in the deep end of the pool when he was just learning to swim. He asked himself if he could exhibit the same courage to change his business. Dr. Richard Boyatzis spoke with great affection for his mentor and stated that “no one who has ever created anything of greatness did it alone.” The need to cultivate and invest time and energy into relationships was something each person addressed. Given how much time people spend at work, it makes sense to explore the significance of workplace relationships. Dutton and Ragins (2006) offered this consideration:

Like other relationships, work relationships reflect the full spectrum of quality. At their best, they can be a generative source of enrichment, vitality, and learning.
that helps individuals, groups, and organizations grow, thrive, and flourish. At their worst, they can be a toxic and corrosive source of pain, depletion, and dysfunction. (p. 3)

The authors (2006) suggested that we have opportunities to better “understand the dynamics, mechanisms, and processes that generate, nourish, and sustain positive relationships at work. (p. 3). It did not surprise me that everyone spoke of the significance their relationships had in all faucets of their lives.

In addition, many spoke about role of language in their relationships and the importance to use language that resonated with others.

Provide support

I have a genuine desire to help people by sharing my gifts and talents.
~Mary Gentile, Director of the Giving Voice to Values curriculum and Professor of Practice at University of Virginia-Darden School of Business, author and interviewee

Each person I spoke with shared that they were drawn to situations where they believed they had something of value to contribute. They provided support because they were asked or because they saw a need they could fulfill. Allison Dake spoke of an encounter that occurred when she was in a restaurant in Mexico. A woman approached her and asked if she could help her child with his homework. That one interaction led to an awareness about the type of educational support that was needed in the local community. Kim Cameron was very interested in positive organizational behavioral psychology and believed he could provide support to business leaders
by helping them see the value in applying the principles of positive psychology within a business context.

Ask for support

Asking and getting support from other people plays a critical role.

~Richard Boyatzis, Distinguished University Professor of Organizational Behavior, Psychology, and Cognitive Science at Case Western Reserve University and interviewee

Every person interviewed highlighted the importance of having support from others to accomplish their transformational outcomes. Lyell Clarke shared that he knew he could not transform his company by himself. He knew he did not have all the answers and was counting on his team, whom he deeply respected for their knowledge and skills, to move the company forward. All one needs to do is look at the dedications in the books authored by Kim Cameron, Richard Boyatzis, Mark Barden, and Adam Morgan and it is clear to see their profound gratitude to those that supported them along the way. Support has a variety of forms. It can present itself through the challenging of ideas, listening without judgment, sharing insights, providing constructive feedback, and offering words of encouragement (Morsch & Nelson, 2006). Richard Boyatzis, Kim Cameron, Allison Dake, Maureen Shul, and Lyell Clarke were emphatic about the importance of asking for and receiving support. In their own words they all said it would have been impossible to accomplish what they did without the support of others.
Invest relational energy

Emotions and investing relational energy are a big part of the process.

~Kim Cameron, William Russell Kelly Chair of Management and Organizations; Professor of Higher Education. Co-founder, Center for Positive Organizations, author, and interviewee

People shared that much of their success was due to their willingness to invest relational energy. Owens, Baker, Sumpter, and Cameron (2016) suggested that “energy can be useful and an interpersonal level toward achieving workplace goals” (p. 35). Furthermore, the authors contended that “energy is an organizational resource that increases employees’ capacity for action and motivation, enabling them to do their work and attain their goals (p. 35).

Unfortunately, according to Loehr and Schwartz (2003) and Pfeffer (2010), this critical organizational resource may not always be efficiently managed and may even be in decline (as cited in Owens et al., 2016).

Owens et al. (2016) suggested that our energy, defined by feelings of vitality, liveliness, and enthusiasm, is comprised of six different streams. According to Collins (1993, 2004), five of the streams have to do with energy at the individual level in psychological and physical realms; the sixth stream has to do human energy in social interactions (as cited in Owens et al., 2016). The literature with respect to relational energy looks at three related constructs: interaction ritual theory (Casciaro & Lobo, 2008, as cited in Owens et al., 2016), social contagion theory, and the conservation of resources theory (Hobfoll, 1989, as cited in Owens et al., 2016). Interaction ritual theory focuses on the impact that face-to-face interactions have on our emotional energy,
which is heightened when share experiences and interact with others (Collins, 1993, 2004, as cited in Owens et al., 2016). Good examples of this phenomenon can be observed at rock concerts or sports games where there the level of excitement and cheering is increased due to the influence of the crowd and the shared experience. Owens et al. (2016) contended that, “It is this shared experience that influences both the intensity of an individual’s emotions and also how that individual continues to interact with interaction partners.” (p. 35). Social contagion theories focus on the way that emotions can spread through a phenomenon known as emotional contagion (Hatfield, Cacioppo, & Rapson, 1994, as cited in Owens et al., 2016). The spreading of emotions can have a big impact on our energy levels and they can enhance or detract our energy. In addition to the spread of emotions, social contagion theories also explore the transference of ideas and thoughts (Hirshleifer & Teoh, 2009, as cited in Owens et al., 2016), attitudes (Paxton, Schutz, Wertheim, & Muir, 1999, as cited in Owens et al., 2016), motivation (Radel, Sarrazin, Legrain, & Wild, 2010, as cited in Owens et al., 2016), and behaviors (Crandall, 1988, as cited in Owens et al., 2016). Social contagion theories help us understand the role that social interactions can have in elevating or diminishing our levels of energy. The conservation of resources theory refers to our natural inclination to care for and build our resources including our energy levels (Hobfoll, 1989, as cited in Owens et al., 2016). We establish and maintain relationships with people who replenish and distance ourselves from people and situations that deplete our energy. Positive social interactions are known to enhance and increase our energy levels (Fritz, Lam, & Spreitzer, 2011, as cited in Owens et al., 2016).
Develop relationships

It’s important to know what appeals to people, develop relationships and create a connection.

~Mary Gentile, Director of the Giving Voice to Values curriculum and Professor of Practice at University of Virginia-Darden School of Business, author and interviewee”

The development of relationships is a natural outcome of investing relational energy (Cameron, 2012; Schein & Schein, 2018). Everyone mentioned the importance of relationships and spoke of how they contributed to their resiliency, overall levels of enjoyment associated with their work, and their overall sense of wellbeing. Kim Cameron, Jim Ludema, Mark Barden, Lyell Clarke, and Adam Morgan spoke with great affection and appreciation for their colleagues. They felt incredibly lucky to work with people they liked, respected, and valued. Allison Dake and Maureen Shul talked about the importance of cultivating relationships within the local community to garner trust, credibility and support for their non-profit organizations. Mary Gentile spoke of the importance of developing relationships within the professional community and the value of social networking to help open doors. Many of the stories were sprinkled with seemingly serendipitous events; however, these events were an outcome of having developed relationships along the way. An essential part of developing relationships is the ability to find a common language and speak in a way is relatable and resonates with people.
Speaking a common language

You need to communicate in a way that connects and invites people in to collaborate, co-create, and co-own.

~Mary Gentile, Director of the Giving Voice to Values curriculum and Professor of Practice at University of Virginia-Darden School of Business, author and interviewee

The words we use create a framework for how we see and experience the world around us (Chapman & White, 2012). Many of the transformational thought leaders I interviewed talked about the importance of using words that resonated with people, evoked positive emotions, piqued their interest, and pulled them in. They took it upon themselves to find a way to effectively communicate their idea, vision, and mission. They carefully crafted their message to create inclusion and facilitate a desire to support their ambition. For example, Lyell Clarke talked about the importance of being an environmental company dedicated to responsible business practices and committed to making “communities around the world more livable, safe, and comfortable.” He continued in the interview by saying, “We do that by pioneering, developing, and delivering environmentally responsible mosquito control and aquatic services to help prevent disease, control nuisances, and create healthy waterways.” Dr. Kim Cameron and Dr. Richard Boyatzis highlighted the importance of using quantifiable data when talking with people in academia and the scientific community. They found that objective, measurable data created credibility and made it easier for their ideas to be accepted. Dr. Jim Ludema realized that he needed to use financial numbers and figures to demonstrate the viability of his idea. He knew that his audience would be interested in the bottom line. Allison Dake worked on her Spanish-speaking skills so that she could be more easily understood when she traveled to Mexico. The
residents in Mexico appreciated the effort she made to speak in their native language. Dr. Mary Gentile, who travels around the world teaching about giving voice to values, talked about the importance of learning the cultural nuances of each country. Understanding and being respectful of cultural norms allows her to build bridges so that her message can be embraced. Each person talked about the importance of effective communication and, in every story, there was some mention of the need to speak in a way that created a sense of inclusion and relatedness.

As I started to go through the grounded theory coding process, I realized that I could have done a dissertation just on the traits of transformational thought leaders. My original intent was to focus on the process of transformational thinking, but what I came to appreciate through my research was that the characteristics of the transformational thought leaders are intimately related to the process.

**Central codes: Conceptual framework for the process of transformational thinking**
The characteristics of transformational thinkers were complementary to the framework processes they followed that created and realized transformational outcomes. In fact, the data that emerged from my research showed a strong correlation between the two sets of central codes and, in some cases, they were variations or counterparts of the same theme. The six central codes (see Figure 18) that represent the conceptual framework for transformational thinking include mindset, challenge, purpose, process, resilience, and connection.
The promise of a solution and mitigating gaps is compelling and that is the type of mindset one needs to have.

~Mary Gentile, Director of the Giving Voice to Values curriculum and Professor of Practice at University of Virginia-Darden School of Business, author, and interviewee.

In the context of transformational thinking, mindset emerged in the literature in different ways. Dweck (2016) talked about the importance of having a growth mindset in the book, *Mindset: The New Psychology of Success*. Dweck (2016) contended that people with a growth mindset are more likely to set goals, have strategies for achieving them, are willing to work hard, and are
more likely to succeed in accomplishing them. Authors Chiesa and Serretti (2010) addressed the connection between mindfulness and creativity. They found that having a calm mind promoted creative thinking and provided physiological benefits. Congleton, Hölzel, and Lazar (2015) came to similar conclusions and found that mindfulness increased the density of our brain’s gray matter and contributes to creative problem solving. Having an optimistic, curious, and open mindset was also cited in the literature as being advantageous to transformational thinking.

People’s transformational outcomes would have been impossible to accomplish without a mindset characterized by curiosity, optimism, and an orientation to the future. When Allison Dake went to Mexico to explore how she could transform the community through education and language, she had to be open-minded so she could learn and discover how things were done in Mexico compared to the United States. She needed to appreciate the cultural nuances. Adam Morgan and Mark Barden (2015) were curious if there was a better way to engage in problem-solving that worked with constraints rather than against them. Dr. Kim Cameron was optimistic that positive organizational behaviors would create work environments that would allow people and businesses to prosper.

All of the people I interviewed had a vision for a better future, which fueled their momentum and desire to keep pushing forward. Everyone acknowledged that they had an intuitive sense that they were onto something significant. They knew they were solving a problem or embracing a challenge that had the potential to create monumental changes. Dr. Mary Gentile intuitively
believed that people wanted to do the right thing and engage in ethical practices. She found that they needed a decision-making framework to create alignment between their actions and their values. Hence, her work called “Giving Voice to Values” was created. Each person shared a moment of self-awareness when they decided that it was time to listen to their intuition and act.

Lyell Clarke spoke candidly that he was aware of how unhappy he was in life and knew he needed to do something different. That was when he started considering making changes to the way he ran his business. He was not comfortable in his own skin and was bothered by the impact the company’s chemicals were having on the environment. He also said it “just was not fun anymore and I was not enjoying the experience of being at work.” Everyone knew they faced big challenges ahead, but rather than paralyze them with fear, they allowed those challenges to motivate and energize them.

**Challenge**

Challenges are interesting and compelling. They are what pull you in and make the work exciting.

> ~Adam Morgan, Founder of eatbigfish, an international marketing and consulting firm known for its challenger brands, international keynote speaker, author, and interviewee

Morgan and Barden (2015) made a compelling case for embracing constraints and challenges. When we embrace the challenges, we are more likely to find innovative and transformational solutions because we arrive at an outcome that pairs bold ambitions with constraints. Blane (2017a) argued that “what if” questions set the stage for transformational work. Those types of questions, stated Blane (2017a), create challenges because they force us to think of possibilities
in unchartered territory. Working with uncertainty and ambiguity creates a unique set of challenges. Marguc, Förster, and Van Kleef (2011) found that encountering challenges enhanced creativity. Other aspects of challenges had to do with goal attainment and the relationship between challenges and resiliency. Gilhooly and Fioratou (2013) argued that our ability to find solutions is embedded in the challenges we face. They suggested that goals act as strong motivators and help us step up to the challenges presented to us. Challenges are inherent in the process of transformational thinking. Every story shared involved embracing and overcoming significant challenges.

Every act of transformational thinking included an aspect of risk-taking and embracing a challenge. It was more than engaging in problem solving, although that was a part of it. The challenges were compelling and, in some cases, absolutely mind-boggling. The challenges they faced touched on their personal values and, therefore, the concerns that arose were powerful and too large to ignore.

Their endeavors involved taking risks, facing rejection, and, in some cases, being ridiculed. Dr. Jim Ludema took a risk when he presented a proposal to the Regents at Benedictine University to suggest creating a program that was unlike any doctoral program in the country at the time. Dr. Mary Gentile took a risk, and stood her ground, when she approached Yale University with her program “Giving Voice to Values” and insisted that the materials be made available for free to anyone who wanted them. The challenge to transform a toxic chemical pesticide company to a
green company seemed almost insurmountable at first. Now, Lyell Clarke’s company receives prestigious industry awards for its sustainability practices. It is a recognized for its contributions towards making communities around the world healthier. When an epidemic outbreak of a transmittable disease occurs, Lyell’s company is on the Center for Infectious Disease’s speed dial. They are viewed as a trusted resource with unparalleled expertise in eco-friendly practices.

None of these feats were accomplished without some act of courage and vulnerability because they required innovation and presenting an idea without any guarantee it would be accepted. In Dr. Richard Boyatzis’s case, it meant presenting at respected academic conferences and being ridiculed and told he was wrong. In the business world, where there is a tendency to focus on what is wrong, it took courage and vulnerability for Dr. Kim Cameron to suggest that there is more to be gained by focusing on the positive. For Allison Dake, being a tall, attractive blonde American woman created its own set of barriers in Mexico. People saw her like many other Americans who came to Mexico on a holiday and donated some money to feel good for the moment. Allison Dake had to earn their trust and prove that she had no intention of going away until she accomplished her mission. In a training I attended, Dr. Brené Brown was the facilitator, and she said, “vulnerability is the birthplace of creativity and innovation.” In other words, there is nothing more vulnerable than creating something that has never been created or published before.
Everyone I interviewed had a story to share that proved Dr. Brown’s point. They all took risks and, in doing so, made themselves vulnerable. They did this willingly because the work was essential to their beliefs, values, and life’s work.

Purpose

This work is like a calling; a purpose driven life. The work needs to be significant and add positive value.

~James Ludema, Co-founder and Director of the Center for Values-Driven Leadership and a Professor of Global Leadership at Benedictine University, author, and interviewee

Duckworth (2016) made the point that we need to have grit to reach important goals. Duckworth (2016) contended that having a sense of purpose and passion are significant drivers to accomplishing meaningful pursuits. In addition, Duckworth (2016) contended that one way to enhance a person’s grit is to define their sense of purpose. Research in the field of positive psychology (Peterson & Seligman, 2004) explicitly states that our wellbeing is enhanced when we engage in a life that has meaning and purpose. This seems so obvious; however, arriving to a point of clarity and defining how best to operationalize one’s life purpose does not always come readily or easily for some. Another aspect of living and working with a sense of purpose is highlighted by Sekerka and Bagozzi (2007). The authors suggested that when we have clarity about our values and morals, we are better equipped to make difficult decisions. Additionally, they contended that when we make decisions from the heart in the best interests of others, our sense of purpose is elevated. Having a defined sense of purpose helps us to flourish. It connects us to what is interesting, engages us in habits that improve our performance, helps us understand
what brings meanings to others, and enables us to adopt an optimistic and hopeful outlook on life.

As mentioned above under the Characteristics of Transformational Thinkers, people had clarity on their sense of purpose. Their purpose was deeply embedded in their core values. Their values acted like a lantern to guide them in their work. This was especially important when times were tough and difficult decisions needed to be made. They spoke with resounding clarity and vividness about their visions for a better world. They offered detailed descriptions about their mission and how they planned to accomplish it. They were intrinsically motivated to do the hard work because it was meaningful. They had a purpose and I could hear the passion behind their purpose when they spoke about it. Having passion with a purpose is wonderful, but it is not enough by itself to create a transformation. People need to have a process in place to leverage their passion and create outcomes.

Process

You have to trust the process; solutions may come from unsuspecting and unknown places.

~Adam Morgan, Founder of eatbigfish, an international marketing and consulting firm known for its challenger brands, international keynote speaker, author, and interviewee

The processes associated with transformational thinking range from biological processes that enhance our creativity to problem-solving processes that provide structure and a methodology for developing transformational solutions to challenging problems. Mumford, et al. (2012) made the
case that creativity is found in our ability to generate well-defined, original, high-quality solutions to complex problems. Baas et al. (2015) contended that there are three processes that foster creative thinking: defocused and task focused attention, cognitive flexibility, and persistence as it relates to investing cognitive resources. Morgan and Barden (2015) suggested that there are several processes to help arrive at creative solutions, and they shared processes for breaking path dependencies. They offered a process to help us engage in “Can-If” thinking that allows us to see new opportunities and possibilities. The methodology of asking and answering a series of propelling questions generates action. In the 1950s, Osborn and Parnes developed their process for creative problem-solving that included a four-step process: clarify, ideate, develop, and implement (Osborn, 1953).

People will engage in transformational thinking with different speeds and work through various elements of the conceptual framework at different times. Each person I interviewed talked about various elements of the transformational thinking conceptual framework. Their experiences varied as they fluctuated between different components at different times. Variances in cadence and components were influenced by new information and constraints as well as social, political, and economic changes in their environment.

The right mindset coupled with a compelling challenge and a sense of purpose is the beginning of a potent recipe for creating something astounding. However, that alone will not necessarily create something extraordinary without a process in place to convert a transformational idea into
a transformational outcome. Everyone I interviewed discussed a process that they had that helped propel their transformational idea forward. Some aspects of their processes varied, but they all shared four elements: goals, frameworks for decision-making, an iterative problem-solving process, and the use of propelling questions.

Based on the interviews, innovative thinkers having goals aligned with the literature (Locke & Latham, 1991; Shalley & Locke, 1996), which suggests that goals can enhance our wellbeing, provide meaning and purpose, instill motivation, and create social connections. People shared stories of how their goals fostered transformational thinking. In general, they said the following about having goals:

- Gave them focus.
- Propelled them forward.
- Provided benchmarks and measurements.
- Broke things down into manageable pieces.
- Held them accountable for their successes and failures.

Clearly articulated goals with timelines and measurable outcomes became a roadmap for success. The measurements of success varied depending on the goal, but each person shared a few examples of their milestone moments and what it took to get there. For Allison Dake, it was watching a mother being able to help her children with their English homework or seeing a new home built after the hurricane. The first cohort of the Values-Driven Leadership doctorate program was a significant milestone for Dr. Jim Ludema. Dr. Kim Cameron, Dr. Richard
Boyatzis, and Dr. Mary Gentile all experienced successful milestones when their articles and books were published. Those milestones did not happen without a myriad of difficult and complex decisions and negotiations that had to be made as part of the process.

I cannot fathom the number of conversations and decision-making opportunities that people were presented along the way. I came to appreciate the necessity of having frameworks for making decisions and solving problems to move their ideas forward. There was not a one-size decision-making model that every person used. However, they all used some method with criteria that went back to their core values, vision, mission, and purpose. Some decisions were based on resources, urgency, changes in circumstances, or new information. In all cases, they were evaluated against their alignment with the person’s core values.

Unlike the framework for decision making, which always came down to their core values, the problem-solving methods showed more variance. Some people had a step-by-step process in place and they subscribed to a defined problem-solving methodology. Others had more latitude and engaged in collective brainstorming to solve their problems. Regardless of what problem-solving model each person used, they all shared two common denominators. First, each problem and its solution went through an iterative and evolutionary process. No problem was solved the first time out of the gate. It took multiple attempts and rounds of refinements to get to a solution. Second, they all used propelling, action-based questions to move the problem-solving process forward. Propelling questions, as defined by Morgan and Barden (2015), are “powerful questions
that bind a bold ambition with a significant constraint” (p. 11). They created a paradox that prompts “and” thinking as opposed to “either-or” thinking. Problem solving becomes more complex when working in space defined by uncertainty and ambiguity. However, working through the inherent tension of a solution that embraces ambition and constraints often resulted in transformational outcomes. As Dr. Boyatzis said in his interview, “it takes a lot of determination and grit with passion” to preserve and solve audacious problems.

Resilience

You need to have resilience because you will encounter resistance, which comes in different forms, is part of the process.

~Mark Barden, International keynote speaker, partner of eatbigfish, author, and interviewee

According to Duckworth (2016), grit is having resilience when one is faced with adversity. It is our ability to bounce back and get up after we have experienced a setback. Brown (2015) encouraged us to embrace failure and set up the expectations that we will fall, fail again, rise, and repeat the process. That is a predictable outcome if we are willing to take risks and be vulnerable. Sultanoff (1997) emphasized how humor benefits our overall resiliency because it enhances our biochemical makeup, cognitive abilities, behaviors, and emotional state. The benefits from humor are magnified when working in stressful situations. Transformational thought leaders demonstrate resiliency in different ways; however, they all display resiliency as one of their signature characteristics.
What I learned from the data was that it takes resilience to transform a bold idea into reality.

Each person talked about the necessity of fortitude and determination in relation to their work. In addition to resiliency defined as our ability to bounce back from adversity, it also means that we do not let adversity define us (Brown, 2010a, 2010b, 2012, 2013, 2015; Duckworth, 2016; Seligman, 2005). Resilient people effectively deal with hardships, believe in themselves, and see situations as temporary rather than permanent.

Resiliency and optimism go hand in hand, and resilient people are inclined to find a silver lining or opportunity embedded in the problems they encounter. They manage to maintain a sense of humor, keep good company, enlist the support of others, and cultivate self-awareness. They engage in good self-care, find strength and solace in their beliefs and values, and stay connected to their passion.

The data were colored with stories and examples of resiliency. I believe that people gained strength and resilience by inviting others to share in both their joys and disappointments. There was no right way to strengthen one’s resiliency. For some, it was through connecting with a higher power. For others, they connected with family members and friends. Some sought out new allies, and others strengthened their resiliency in solitude and self-reflection. Through the data, it became clear that being able to connect with someone or through a meaningful activity was an essential part of resiliency and the process of transformational thinking.
Connection

Supportive and encouraging people are fundamental to moving forward. We have a desire to connect, create, and be in a community.

~Kim Cameron, William Russell Kelly Chair of Management and Organizations; Professor of Higher Education. Co-founder, Center for Positive Organizations, author, and interviewee

The importance of connection emerged in the data in many domains: community, creativity, passion, values, and the pursuit of meaningful goals. This research gave me a much deeper and broader understanding for the role that connection has in transformational thinking. Silvia (2015) contended that there is a deep connection between intelligence and creativity. Koutstaal, (2017) made a case for the connection between curiosity and creativity. Guilford (1979) claimed there is a connecting relationship between mental incubation and creative problem solving. Lee and Therriault (2013) suggested that there is a reciprocal relationship between higher-order cognitive thinking abilities and creativity. Parke et al. (2015) stated that emotional intelligence is connected to our creative abilities. Initially, when I thought about the role of connection to the process of transformational thinking, I thought about it in relation to people who provided support to transformational thought leaders. My idea of “connection” was primarily between people. However, as I read more, it became clear that the process of transformational thinking is enhanced through different types of connections.

Prior to conducting this research, I visualized transformational thinkers as being perfectly content in their own company. I suspected they might view engaging with others as distractions, annoying encounters, and irritating events because it meant wasting time that could be better
spent elsewhere. I could not have been more incorrect in my assumptions. What I found was that being part of a supportive community and working with others added dimensions of support and affirmation and enhanced the quality of their work. Even the critics, while unpleasant, gave them reason to pause, reexamine their own assumptions, and work harder. Colleagues with different viewpoints and experiences helped them see their problems through a different lens. Colleagues who shared divergent opinions and observations challenged them to generate transformational ideas. In some cases, the interviewees talked about how their colleagues’ different perspectives piqued their curiosity and inspired them to dig a little deeper. They potentiated each other, and that synergy led to better ideas, methods, and solutions. While all but two of my interviews were conducted over the phone, I could hear the emotional lift and the increased level of energy in their voices when they talked about the people who supported them on their journey. There was a qualitative difference in their tone, and I suspect that just talking about the people with whom they worked closely with created an immediate sense of connection, affection, and appreciation. They used words such as “joy,” “love,” and “laughter” in their descriptions of working together. Some described their colleagues as “family” and spoke of them with reverence. They expressed great respect and appreciation for their ability to engage in passionate debates or robust conversations, and they valued being able to share their achievements together. Every person I interviewed said that their accomplishments would not have been possible if not for the support and encouragement they received along the way.
These sentiments reflect the importance of connection. In that spirit, there were two additional elements that were integral to creating a sense of community and connection: finding a common language and investing in relationships (Cameron, 2012; Chapman & White, 2012; Jansen Kramer, 2011; Morsch & Nelson, 2006). Our words shape the world around us (Schein & Schein, 2018). In the context of the process of transformational thinking, finding a common language meant knowing one’s audience. People realized that they needed to use words that were relatable, inspiring, and credible. It appeared that one of the biggest challenges Dr. Kim Cameron and Dr. Richard Boyatzis initially faced was providing scientific, quantifiable, and objective evidence to support their claims. That was the language that their audience needed to hear to be convinced that their theories had merit. Finding a common language could mean using financial figures, culturally appropriate colloquialisms, or (literally) another language altogether, depending upon the location. Finally, people acknowledged that a key to their success was taking the time and energy to invest in building and sustaining relationships. Those relationships provided comfort and encouragement during difficult times. They created social networks, which were immeasurably helpful in promoting their ideas and, in some cases, securing resources. The relationships gave them generative energy that helped keep them going during the long hours, day after day, week after week, and year after year. They were a life force that made the journey worthwhile.

The insights I gained from doing grounded theory research led to the discovery of an incredible treasure. After completing three levels of coding and discovering patterns, I saw something
magical appear before my eyes. The process reminded me of the magic rock gardens that come with a special growing solution. You put the crystals into a container and watch them instantly grow into a brilliant colored crystal garden. I put the coded words into containers with categories and suddenly I had my version of a beautiful, conceptual framework and model. I had a bountiful treasure: an understanding of the characteristics of transformational thought leaders and the process of transformational thinking.

The findings that emerged from conducting grounded theory research lead to two important observations: (a) transformational thinkers share common characteristics, and (b) there is a conceptual framework that creates a process that transformational thinkers follow to create and realize transformational outcomes. Furthermore, in this study it turned out that the characteristics of transformational thinkers were interdependent with the conceptual transformational thinking framework. After I completed analyzing the data and seeing the patterns emerge, I wanted to go back and revisit the literature to see if there were studies that supported or offered alternative perspectives.
Chapter 5: Research Insights

Research Insights
Grounded theory is designed to generate new perspectives and insights because one conducts the research with an open, curious mind, and a blank slate (Charmaz, 2014, 2017; Glaser, 2014, 2016; Glaser & Strauss, 1967). I believe the challenge to conducting grounded theory research is to ensure that the researcher puts aside any preconceived notions and biases that would act as a filter and influence the findings. That is why it is so critical to have an objective, unbiased mindset when conducting the research. On needs to take a fearless inventory and ascertain whether they are carrying biases and preconceived ideas into the research process. If the answer is “yes,” then they need to find a way to leave those at the door. Asking open-ended questions can help because they are designed to create patterns that allow pictures to emerge and discoveries to be made. My research, along with the literature review, led to insights about the characteristics of transformational thinkers, the process for creating transformations, and their unique interdependence.

Going back to the literature
After completing the coding process, I returned to the literature review to search for support, dissent, or alternate perspectives of my findings. I found that my data was congruent with the research in the following areas: creative problem-solving (Baas et al., 2015; Johnson, 2011; Mumford et al., 2012; Nijstad et al., 2010; Puccio et al., 2011; Ramsland, 2012), resilience (Buchman & Seligman, 1995; Brown, 2013, 2015; Duckworth, 2016; Dweck, 2016; Seligman, 2005; Snyder, 1994, 2000), mindset (Csikszentmihalyi, 1996; Morgan & Barden, 2015; Seligman, 2005; Snyder, 1994, 2000), curiosity (Kashden et al., 2009; Livio, 2017; Morgan &
Barden, 2015), and passion (Duckworth, 2016). I noticed different perspectives with respect to the process of creative problem solving, the innate nature of creativity and imagination, the types of optimism best suited to creative problem solving, and the ideal ways to enhance creative thinking. The only areas that emerged from my data that I did not see in the literature review were pliability and application. I suspect those two concepts emerged in the interviews because I asked people to talk about specific transformational projects. They discussed their goals, strategies to accomplish them, their actions, and the measurable outcomes of their achievements. I presume that if my literature review included more research on measurable outcomes of transformational thinking, I would have had more alignment with my data outcomes and the literature in this domain.

Overall, the research that emerged from the grounded theory methodology of this study was substantiated in the literature. The data provided a foundation for building a theoretical framework for transformational thinking.

**Insights regarding characteristics of transformational thinkers and the processes transformational thinkers follow**

I found an overlay between the characteristics of transformational thinkers (COTT) and the processes associated with transformational thinking (POTT) through an inherent relation. I believe many of the characteristics of transformational thinkers are aligned with, if not required for, certain activities associated with creating transformational outcomes. For example, resiliency was a common characteristic trait found among the transformational thinkers I interviewed. Perseverance was integral to the POTT (Duckworth, 2016), and one needs to have resilience to
persevere when faced with defeat and setbacks (Brown, 2013, 2015; Duckworth, 2016; Dweck, 2016). An inquisitive mindset, which was a characteristic of transformational thinkers (COTT), is fundamental to being curious (Dweck, 2016; Kashdan et al., 2009; Livio, 2017; Morgan & Barden, 2015). Curiosity is intrinsic to the POTT because it leads to asking propelling questions and entertaining “what if” scenarios. Insightfulness, another characteristic trait of transformational thinkers, allows people to make meaningful connections and see possibilities that might elude others (Carson & Langer, 2006; Feldman, Hayes, Kumar, & Laurenceau, 2007). This type of insightfulness complements the awareness component of transformational thinking. People who are insightful often have a deeper level of awareness that enables them to see the relationship between problems and opportunities in a different light (Hedblom, 2013; Hedblom et al., 2015). The awareness of their values fuels their passions, vision, and mission. Being values-driven, a characteristic trait of transformational thinkers, is vital to the transformational process, and it is what leads to having passion with a purpose (Kraemer, 2011). When one has passion with a purpose, then one is more inclined to engage in creative ideation and actions. People’s values, passions, and sense of purpose are all catalysts for creating transformational change (Duckworth, 2016, Dweck, 2016; Kraemer, 2011).

Transformational thinking demands creative and innovative thinking and the core principles of CPSP. They build the framework for sustainable creative idea management and ideation, which is fundamental to creating a transformation. Creative problem-solving models are designed to
generate innovative solutions to challenges (Baas et al., 2015; Johnson, 2011; Mumford et al., 2012; Nijstad et al., 2010; Puccio et al., 2011; Ramsland, 2012).

The same is true for the COTT and the POTT. Perhaps there are more noticeable differences in the situations that prompted the need and desire for transformational change. Yet even though different circumstances may be the spark that ignites transformational thinking, all the people I interviewed shared two important common denominators: the desire to make a positive contribution and the need to have a process in place to bring their ideas to fruition.

**Integrated and inductive theory and framework**

Based on this insight, the patterns that emerged from my grounded theory research and the literature review led me to create an inductive theory and framework for the process of transformational thinking that integrates the characteristics of transformational thought leaders. The conceptual framework includes six interdependent aspects: awareness, curiosity, passion with a purpose, ideation, perseverance, and pliability. These six steps, which do not need to be taken in sequential order, support the process of generating and implementing transformational ideas.

**Awareness**

Each person was clearly attuned to their values. They were aware about their motivators and drives. They knew the aspects of their beliefs and the life experiences that shaped them. They paid attention to people and situations that did not sit right with them. They did not ignore these feelings and they believed, intuitively and cognitively, there was a better solution. They were
aware of their strengths and motivators and knew their vulnerabilities. Awareness of one’s values, sense of purpose, and strengths were integral to helping transformational thinkers create transformational outcomes (Brown, 2013, 2015; Duckworth, 2016; Kraemer, 2011, Seligman, 2002, 2005; Snyder, 1994, 2000).

Curiosity
Transformational thinkers have a relentless sense of curiosity and inquisitiveness (Ashton, 2015; Livio, 2017; Vozza, 2015). They want to understand the “why” behind a problem and, from there, they want to figure out how to solve the challenge. Their curiosity drives a longing to know why certain situations and problems exist. That curiosity is compelling, and it motivates them to want to solve the problem or explore the opportunity embedded in the problem to see where it may lead.

Passion with a purpose
Every person I interviewed spoke about their transformational endeavors with a keen sense of passion and purpose. Some referred to it as their “life’s work” or a “calling.” It was as if they had no alternative but to immerse themselves to solve the problem and embrace the challenge. When I asked them why they felt so strongly about the need to create a transformational solution, their explanations always included a story about their values. Their values, passion, and purpose were intricately woven together. The infusion of passion with purpose fueled their ideas, enhanced their creativity, and stimulated an innovative mindset (Duckworth, 2016, Dweck, 2016; Kraemer, 2011; Seligman, 2002, 2005; Snyder, 1994, 2000).
Ideation
Every example of creating a transformation involved a process of thinking, reflecting, and creating (Baas et al., 2015; Johnson, 2011; Morgan & Barden, 2015; Mumford et al., 2012; Nijstad et al., 2010; Puccio et al., 2011; Ramsland, 2012). People had different methods for creative ideation. Some people preferred to cultivate ideas on their own before sharing them with a group at large. Others preferred to start with a group-brainstorming process. Many talked about ideas going through an iterative process which required multiple layers of ideation and constant refinements. A few talked about the ideation process as slow, steady, and evolutionary. Some talked about ideation as a spark, saying that once the first idea was created, a slew of other ideas appeared in a blaze of rapid succession. The process of ideation varied, but every transformational outcome involved multiple rounds of getting ideas out there on a piece of paper, a napkin, or a white board.

Perseverance
Perseverance was exemplified by the refusal to accept the status quo and the willingness to embrace arduous tasks, and it was viewed as a necessity to create transformational outcomes (Brown, 2013, 2015; Duckworth, 2016; Dweck, 2016; Frederickson, 1998). It meant applying grit and steely-eyed determination to see something through and being able to show resilience by bouncing back from set-backs, failures, and disappointments.

Pliability
One of the most surprising discoveries of my research was the importance of pliability. I believe this part of the process is the culmination of awareness, curiosity, passion with a purpose, ideation, and perseverance. It was not enough for the transformational thinkers that I interviewed
to have a transformational idea that sat on a shelf and was not put to the test. The idea had to be pliable. In addition to the idea needing to be useful, it had to be examined and tested (Jackson, 2017).

The outcomes of the first few applications required a willingness to be flexible so that modifications could be made where needed. Not one person said that they got it the idea right the first time. All the transformational ideas from the people I interviewed went through multiple revisions. In fact, some are still going through revisions in response to social, economic, and political changes in the environment. Other transformational ideas are going through revisions because new data has been acquired or they received feedback that they wanted to implement.

Research integration and alignment with the literature
Given how little literature was available specific to the POTT, I had to create my own framework for how to research the topic. I created a list of categories that intuitively made sense because I believed that they were related to the either the POTT or the COTT. The initial outline of my literature review was broad in nature and contained several categories and subcategories, as shown in Figure 19.
The data that emerged from my grounded theory research was aligned with my literature review in every category. The only caveat was that I did not have enough time during the interviews to go into depth on certain categories, such as environments conducive to transformational thinking, the use of social media, tipping points, and the curve of adoption. Those topics were not discussed in detail and, therefore, did not emerge in the data frequently enough to create a recognizable pattern.

My research mirrored what I found in the literature review. The central codes for the COTT and the central codes for the POTT were cited in the literature. The literature highlighted the importance of having a curious mindset (Kashden et al., 2009; Koutstall, 2017; Livio, 2017;
Vozza, 2015) and an optimistic mindset (Achor, 2010; Beazly, 2009; Buchman & Seligman, 1995; DeGrandpre, 2000; Peterson, 2000; Ruthig et al., 2007; Seligman, 2002, 2005; Sneider, 2001). Transformational thinkers exhibited courage (Brown, 2012, 2015; Duckworth, 2016; O’Connell, 1997; Rachman, 1984, 1990; Rate et al., 2007; Woodward & Pury, 2007; Worline et al., 2002), vulnerability (Brown, 2012, 2015), passion (Duckworth, 2016; Gardner, 1993; Robinson, 2011) and resilience (Brown, 2012, 2015; Duckworth, 2016; Dweck, 2007; Metzl & Morrell, 2008; Morgan & Barden, 2015). They engaged in mindfulness practices (Ball, 1980; Colzato et al., 2012; Davis, 2009; De Dreu et al., 2008; Kabat-Zinn, 2005; Langer, 2014; Lebuda et al., 2016) and made time for self-reflection. This allowed them to be clear about their strengths and skills and contributed to their self-confidence (Duckworth, 2016; Peterson & Seligman, 2004; Seligman, 2002, 2005).

It was affirming to know that my reasoning about the characteristics of transformational thinkers was supported by the literature. I had the same experience when going back to look at the literature and seeing how it aligned with the POTT.

The literature related to the POTT touched on every central code that emerged from my data. People spoke about the importance of creative thinking (Acar et al., 2017; Johnson, 2011; Ramsland, 2012), creative problem-solving methodologies (Morgan and Barden, 2015; Mumford, 1989; Mumford et al., 2001, 2010; Mumford, Hester, et al., 2012; Mumford, Medeiros, et al., 2012 ;Rich & Weisberg, 2004), and the need for establishing goals (Duckworth, 2016; Dweck, 2006; Gilhooly & Fioratou, 2013; Shalley & Locke, 1996). Having a curious
mindset (Kashden et al., 2009; Koutstall, 2017; Livio, 2017; Morgan & Barden, 2015; Vozza, 2015), having a supportive network (Achor, 2010; Brown, 2012, 2015; Grant, Curtayne, & Burton, 2009; Green et al., 2006), and asking propelling questions (Hurson, 2007; Morgan & Barden, 2015) that elicited complex divergent and convergent thinking (Puccio et al., 2011) were critical to the process of transformative thinking. Everyone I interviewed spoke about the significant constraints that they had to work with and demonstrated how they could leverage those strengths and turn them into advantages (Hurson, 2007; Morgan & Barden, 2015; Seligman, 2002, 2005). Those questions were instrumental in their ability to formulate ideas and concepts (Morgan & Barden, 2015; Puccio et al., 2011). They addressed the importance of taking risks and being vulnerable (Brown, 2012, 2015; Duckworth, 2016; Dweck, 2007) as part of the process. Some shared stories about serendipitous events and informal influencers who helped spread the word about their ideas and their work (Ashton, 2015; Dominiak, 2007; Gladwell, 2000; Heath & Heath, 2007). All of this was reflected in the literature and emerged in the coding process.

**Transformational thinking: An integrated model and framework**
To truly understand the process of transformational thinking, I believed it would be valuable to learn about the characteristics of transformational thinkers. This was, in part, because I was curious and wanted to know if there were similarities and differences between the profile of the person and the process. What I discovered was the characteristics of transformational thinker and the process are completely interdependent. Therefore, the logical conclusion was to create a
conceptual framework that integrated the characteristics of transformational thinkers and the process of transformational thinking.

**Overview of a conceptual transformational thinking framework**
The process of transformational thinking is iterative and does not occur in sequential order. However, each part of the framework is essential, and, like many things, the sum is greater than the whole of its parts. Therefore, I wanted to design a framework that allowed for the interdependence between the various parts of the process and showed how they work synergistically. The visual framework is reminiscent of a spider web with a center point. The web is impacted by everything that touches it, and everything moves and evolves from the core. Additionally, there are connecting parts that extend out, and a single tug on any one string reverberates through the entire web. The orb, or center, is the strongest part of a spider web. For this design, I felt the center of the model had to be the force from which everything emanated. Therefore, I selected values as the center point (see Figure 20).
Values
People’s values drove their processes and touched on every aspect of the transformational thinking process. They were intricately connected to their vision and mission and acted as the glue that held everything together. I heard different values throughout the interviews; yet, there were some common core values that everyone touched on. A few that stood out included compassion, honesty, integrity, connection, and contribution. Dr. Brené Brown (2015, 2017) suggested that our values act as guiding lights to help show us the way. Like a lighthouse, they emanate a beacon of hope and guidance to bring us safely to shore when the fog is thick and the sky is dark. I chose a heart to symbolize the center of my model because I believe our values are the life force that drives our decisions, actions, and attitudes. Even the person at the lighthouse must turn on a switch for the light to shine. Our version of turning on the switch starts with self-
awareness. Self-awareness helps us establish our values, articulate our purpose, and define our passion because it requires that we evaluate and assess what is important to us. Self-awareness also shines a light on the questions we have about who we are, who we aspire to be, and the ways of the world. Self-awareness leads to curiosity. It makes us wrestle with why certain situations are excruciatingly uncomfortable or even intolerable. In addition to having self-awareness, being introspective and reflective can also help us have better mindfulness and cognizance about the world around us. It enables us to pay attention to other people and circumstances and how we engage with one another. Therefore, after we assess our values, we are able to identify opportunities that are aligned with our values. In the stories I heard, people’s values presented the core from which everything else evolved. Their values, like a lantern, illuminated light out onto the path ahead of them. That light allowed them to become aware of places and opportunities to invest their energies (see Figure 21).
Awareness

It would be impossible to create a model on the process of transformational thinking without including awareness. People engage in transformational thinking because they are aware of an opportunity, have identified a compelling problem to solve, or have a burden they want lifted off their shoulders. Each person I interviewed was aware of how their values influenced them to do something that would transform their lives and the lives of others.

The intersection between transformational characteristics and the transformational thinking process is shown in the Venn diagram (see Figure 22). It highlights the integration of awareness in the following: values, challenges, opportunities, resources, skills, and direction.
The transformational thinkers I interviewed described themselves as perpetually curious about the world around them. Their awareness of their personal values combined with their cognizance of important concerns and challenges to address fueled their curiosity.

**Curiosity**
Transformational thinkers have a relentless sense of curiosity and inquisitiveness. They want to understand the “why” behind a problem and, from there, figure out how to solve it. It is almost as if their curiosity is an actual need that motivates them to solve the problem. Curiosity is important to the process of transformational thinking because it engages our minds to be active instead of passive. Mental curiosity is like a muscle and it gets stronger the more it gets activated. Being present is an important tenet in the practice of mindfulness, along with the premise that where your mind goes, the energy goes. In relation to curiosity, this means that being curious makes our minds more observant of new ideas. Once we are curious about...
something and put that intention out in the proverbial universe, we start noticing new ideas. It is as if we expect to find clues that will lead us to a hidden treasure or, in this case, a transformational idea that will lead to a positive disruption or breakthrough. When we anticipate finding something, our mind pays attention to people, ideas, and situations that we may have formerly overlooked. A curious mindset opens the world to new possibilities and allows us to see them more clearly. We are more invested in looking deeper below the surface to see where those possibilities will lead us. It is healthy to have a curious mindset because it creates an active and connecting lifestyle. Our curiosity creates bridges and connects us to others with inquisitive mindsets and supports the process of transformational thinking (see Figure 23). Transformational thinkers’ curiosity runs deep because it is so intricately connected to their values and, hence, it becomes interwoven with their passions.

![Figure 23. Curiosity Integration and Transformational Thinking](image-url)
Passion with a purpose

Every person I interviewed spoke about their transformational endeavors with an intense sense of passion and purpose. Some referred to it as their “life’s work” or a “calling.” They felt they had no alternative but to immerse themselves in their field of work and the challenge. When I asked them why they felt so strongly about the need to create a transformational solution, their explanations always included stories that reflected their values. Values, passion, and purpose were intricately woven together. The infusion of passion with purpose fueled their ideas, enhanced their creativity, and powered their drive, especially when the going got tough.

The passions that emerged in the data were not the types of passions that people describe when talking about a hobby or a recreational activity. They were deep-seated passions that embodied principles and gave their work a sense of meaning. Knowing one’s life purpose is essential to leading a life that is filled with significance. Living with purpose is known to positively influence physical, emotional, and psychological health (Achor, 2010; Seligman, 2005). It promotes resilience and helps build better relationships and resiliency (Achor, 2010; Seligman, 2005). A meaningful life that is aligned with our values helps guide us when making important and difficult decisions. It can connect us to something larger than ourselves and helps us make positive contributions. Passion is what allows us to focus our energies on the causes that resonate deep within us. Passion fuels our dreams and commitments and enables us to be more creative and innovative. For these reasons, the integrated model has a component of passion with a purpose (see Figure 24).
Passion with purpose is a strong motivator to solve complex problems and it is essential to the transformational process. However, it is not enough to bring about a transformation. To engage in transformational thinking, one must spend time cultivating innovative ideas and experiment with them. This aspect of transformational thinking is referred to as ideation.

**Ideation**

Albert Einstein (n.d.) said, “Imagination is more important than knowledge.” I love this quotation because it emphasizes the importance of creative idea generation. Each person’s interview contained an example of a transformation that came to fruition after relentless rounds of ideation. An initial set of ideas produced another set, and that process kept regenerating until they solved their problem or created something entirely new. The process of ideation varied but
every transformational outcome involved multiple rounds of getting ideas out there, be it on a piece of paper, a napkin, or a white board.

The process was generative; however, people used different methodologies for getting their creative ideas out on the table. Some people preferred to cultivate ideas on their own before sharing them with a group at large. Others preferred to start with a group-brainstorming session. Everyone said their ideas went through an iterative process, which required multiple layers and refinements. Some talked about the ideation process as slow, steady, and evolutionary, whereas others said their ideation process was more like a spark—once the first idea was created, a slew of other ideas appeared in a blaze of rapid succession. The process of ideation integrated each person’s insights and incorporated those insights into a specific creative problem-solving process (see Figure 25).

Figure 25. Ideation Integration and Transformational Thinking
Since ideation is an evolutionary process, which can be time intensive, one must have the stamina to persevere to be successful.

**Perseverance**
In Merriam-Webster’s online dictionary, *perseverance* (n.d.) is defined as the “continued effort to do or achieve something despite difficulties, failure, or opposition.” The perseverance in people’s stories was exemplified by their refusal to accept the status quo, their willingness to embrace arduous tasks, and their ability to keep pushing through, especially when the push felt like going uphill on a steep mountain. It meant applying grit and steely-eyed determination to push something forward and bounce back from set-backs. Many of the people I interviewed are still persevering because their goals have not reached completion. They have had to focus and refocus to keep moving in a forward direction despite being blown off the trial or falling backwards. They have had to revise and improvise with changes in funding, resources, and regulations. When we persevere through difficult circumstances, it gives us a sense of hope, optimism, and the self-confidence that we have what it takes to tackle the next obstacle. Our accomplishments bring us a sense of satisfaction and empowerment. The web article on EHE’s Newsletter (2016), titled “What Is the Importance of Perseverance?” addressed the relationship between perseverance and our sense of well-being:

According to Barbara Frederickson, Ph.D., in “The Role of Positive Emotions in Positive Psychology”, positive emotions help counteract negative emotions, promote creativity, broaden the mind, and open individuals up to new possibilities and ideas. They may also have long lasting consequences by helping us to build enduring physical, social, intellectual, and psychological resources to draw from. When we make perseverance a habit, we feel empowered to take ownership of our
lives and our future knowing that we can take advantage of opportunities for even greater success. This is a boon for our mental health and enhances our personal well-being, family and interpersonal relationships, and our ability to contribute to our community and society.

Perseverance, like curiosity, is a skill set that can be learned and strengthened. It requires us to see setbacks as temporary and obstacles as learning opportunities. The skill sets that are characteristic of people who are driven, focused, and determined are needed for resiliency, and resiliency is an integrated requirement of perseverance. (see Figure 26).

Figure 26. Perseverance Integration and Transformational Thinking

Perseverance is what enables us to keep trying new things. However, there is another component of the integrated model that is related to perseverance—pliability. Passion with purpose gives us a focus and moves us to act. Ideation is the part of the process that enables us to generate ideas to
help us solve the challenge, seize an opportunity, or create something new. Perseverance fortifies us to keep going and not be deterred or diminished by the inevitable setbacks that we will encounter. Pliability is the part of the process that allows us to test our ideas and is what ensures consistent and continuous improvement of our ideas.

**Pliability**

One of the most surprising discoveries of my research was the importance of pliability, which is defined by Jackson (2017) as “the final ingredient that ensures consistent and continual improvement” (p. 32). I believe this part of the process is the culmination of awareness, curiosity, passion with a purpose, ideation, and perseverance. It was not enough for the transformational thinkers that I interviewed to be content with having a transformational idea that sat on a shelf and was not put to the test. The idea had to be pliable. In addition to the idea needing to be useful, it had to be examined and tested. People often use the term pliability in relation to muscles, referring to the muscle’s ability to adjust and be more resilient. Muscle pliability is useful because it focuses on flexibility and strength to increase performance and prevent injury. The concept can be applied to any worthwhile endeavor that one wishes to pursue. We want to do all that we can to ensure a successful outcome. We need to be strong and flexible in our thinking, relationships, communications, and problem-solving approaches. It is for this reason that the last step of the integrated framework is pliability (see Figure 27). Pliability refers to a person’s ability to adjust in their thinking in relation to solving a problem and in the willingness to make recalibrations with the application of their idea. Pliability in this sense goes hand in hand with thinking, implementing, revising, and redeployment. It is a part of the process
that will be revisited with every stage of ideation. In the stories I heard, there was a need to be flexible and open-minded. I listened to the importance of relationships and being connected to a larger community that offered support and encouragement. Pliability was the lever that was pulled to find a way to present ideas and solutions in a language that fostered credibility and interest. Pliability was the entity that gave people courage to be adaptive and to make modifications where needed. Pliability allowed people to be flexible when they acquired new data, received feedback, or needed to respond to social, economic, and political changes in the environment. Relationships and connections give rise to pliability because they can be a source of new information, an infusion of creativity, and provide a discerning eye for details that might have been overlooked.

Figure 27. Pliability Integration and Transformational Thinking
Summary
My dissertation started out with a two-part question: How do people come up with transformational ideas, and what is about them that gives them the ability to come up with those ideas? I had no idea where my research would take me, which is part of the reason I was interested in doing grounded theory research. I wanted to speak to people who were, in my opinion, transformational thinkers and learn about their processes. I suspected that in the process of hearing their stories, a profile of their characteristics would emerge. That is exactly what happened. Like the model itself, I have come full circle. Dr. Terence Jackson (2017) made an astute observation about the purpose of transformational thinking in the book *Transformational Thinking: The First Step Toward Achieving Personal and Organizational Greatness*:

“Transformational thinking is designed to expand the parameters of our own perception as we learn the value of including others’ perceptions in the planning, problem-solving, and decision-making processes” (p. 10). I went through my own journey of transformational thinking in the process of writing this dissertation. The first big step required learning from others and exploring the literature. This integrated conceptual framework (see Figure 27) is the compilation of what emerged from the stories, my own thoughts, and the work of others that I discovered in the literature. I also included another visual framework that depicts the metaphor that the framework and process is like a spider web where everything is connected and movement in one place will reverberate throughout the web (see Figure 28).
The process of transformational thinking is fluid. The framework for the process is broader because it provides us with an orientation or a philosophy which we can apply to any facet of our lives. Dr. Terence Jackson (2017) summed it up nicely:

Transformational Thinking isn’t intended to be a stand-alone-philosophy. It isn’t Communism, Capitalism, Buddhism, Catholicism, Corporatism, or any other “ism” out there. It is a framework into which any other belief can fit. What is does promise to be is a reality improvement tool…Transformational Thinking is a philosophy that teaches one to challenge all assumptions. Thought is the precursor to what was, what is, and what will be. When we transform our thoughts, we transform the kind of decisions we make, the kind of actions we take, and ultimately, we transform the results we produce. That is why we must transform our thinking. We must produce better results than we have in the past. (p. 3)
My research revealed a conceptual model that integrated the characteristics of transformational thought leaders and the process of transformational thinking. This study furthered my optimism and hopefulness for a bright future ahead. The study provided answers to my questions about the roles of curiosity, innovation, creative problem solving, and perseverance in relation to transformational thinking. The literature gave clarity on my propelling questions. I learned that we all can be creative and that certain processes enhance our abilities to engage in innovative problem solving. Creating transformational outcomes requires more than having creative people participate in a well-designed process. It requires specific characteristics within the people doing the transformational work. Understanding the dynamic, symbiotic relationship between the
process and the characteristics of transformational thought leaders has tremendous implications for the future (see Figure 29).
Chapter 6: Future Implications

The Road Ahead

I have had a lot of time to think about the future implications of this research from three different perspectives: on an academic, professional, and personal level. Each perspective has the potential to move this research in a different direction and create various types of impact. These perspectives are not mutually exclusive, and I see value in all of them. For the academic perspective, the focus will be on future opportunities for research. The professional perspective will include applications for leaders, teams, and the work environments. The most poignant implication will be how I intend to use what I have discovered through the research to enhance the quality and well-being of my life and the lives of those I love. As with most worthwhile pursuits, in addition to acknowledging what was gained, it is equally important to address the limitations. Embracing those “constraints” is exactly what will lead to more fruitful work in the future.

Limitations and constraints

When I started coding the research, I had an intuitive sense of the patterns that would emerge. One of the limitations I faced with my research was the fact that I did not have the time nor the means to hire an independent set of researchers to code the data. It would have been interesting to see what patterns would have emerged if the data had been coded by someone who did not conduct the interviews and had no sensory memory related to the transcripts. Perhaps they would have noticed some different patterns, or they would have given different weight to certain words or phrases. It is a challenge to leave behind all preconceived biases and filters. I would like to
think that they, too, would have arrived at the same, or similar, open and theoretical codes as I did.

To the best of my abilities, I was earnest, diligent, and disciplined throughout the coding process. When I completed my grounded theory research and finished the three levels of coding, I was genuinely pleased with the integrated model and framework that emerged. The experience reminded me of being in a darkroom and processing a photograph. I knew the identified subject in the picture. I had a method in place to develop the “film,” or, in this case, the research. However, I was not entirely sure what the final picture would look like. Sometimes the picture comes out crystal clear and other times it can be blurred or off center. Even though I knew the subject matter, it needed to go through the entire development process. Only then was I able to take a step back and look at the picture, or, in this case, the conceptual framework, that emerged. I was thrilled to develop a simple yet strong picture that depicted the POTT and the COTT. I liked the fact that the two layers made for an interesting composite and allowed me to present a model and framework to the world that is simple, yet complex, and supported by research.

This study had several limitations due to constraints of time and resources. This study was based on a small sample size of nine individual leaders from multiple professions. The small sample size means that the data could not be used for a quantitative analysis because it would be insufficient. One would need to research a larger population to yield more data that what was emerged from this small sample size. Additionally, this study was done by a single coder, and I
believe it would have benefited from having another coder to compare notes. This study involved transformational thinkers that all had accomplished successful outcomes and it did not include interviews with transformational thinkers who attempted and failed at creating transformational outcomes. It would be useful to do a cross study and compare transformational thinkers with successful outcomes and those with transformational ideas that were not able to achieve successful outcomes. This would provide greater insight into the characteristics of transformational thinkers and whether they worked with in a similar framework. Another limitation was that this study was conducted with thought leaders from North America and, therefore, only offers Western, first world perspectives. It would be interesting to see if the conceptual model and framework of the characteristics of transformational thought leaders and the process would change if studied on a global level. This study was conducted among a broad range of professionals in different fields. Due to limitations with time and resources, I did not have the opportunity to do a “deeper dive” with the interviews or within each professional field that was represented in the study. One might find that certain industries are more conducive to attracting transformational thought leaders and create cultures that foster and support the transformational process. This study did not interview the people who worked alongside the transformational thought leaders. Knowing and understanding the experience of working with transformational thought leaders could be valuable, especially given that every person I interviewed talked about the importance of working with a supportive community. They all said that their transformational contributions were made possible by collaborating with others. The focus on individuals as opposed to organizations was another limitation of this study. It would be
fascinating to do studies working with organizations in the same industry as well as in different industries. Another limitation was the overall breadth of this study, which was extremely broad. A case study working with one transformational organization would allow the researcher to get insight into the experience of the leaders, employees, customers, and vendors who have been impacted by their association with the organization.

Another limitation of my study was its breadth. I did not have the opportunity to go into as much depth as I would have liked to better understand the process of transformational thinking because my interviews were limited to nine individuals and I only had an hour for each interview. The biggest limitation and, therefore, the biggest opportunity, would be to conduct a longitudinal study that works with several people or teams over an extended period to observe and document the transformational process from conception to implementation. This type of research would be invaluable to help us better understand the complexities that make up the process of transformational thinking.

Despite all the limitations and constraints that were related to limited resources, there was a tremendous amount of useful information that has implications for the future in academics and business. Fortunately, there were valuable insights for me professionally and personally as well.

**Future research opportunities**
Innovation has a symbiotic and synergistic relationship with transformation. Innovation creates disruptive transformation. The differences between the two have to do with speed and impact
Innovation happens more quickly than transformation, its impact is sudden, and it is about incremental change. Innovation, like a spark, can lead to a bigger flame, and change something entirely, which is what happens through the process of transformation. Another way to think about the differences between the two is that innovation creates the improvement needed for a product or service to evolve to a transformed state.

There can be a downside to certain types of optimism. For example, the optimistic bias (Flyvbjerg, 2006) contributes to vulnerabilities when people are overly optimistic when it comes to predicting timelines, budgets, and resources. People can also have an optimistic bias in regard to their personal finances (Yang et al., 2006), which can cause people to assume that they are in better financial shape than they really are. People can engage in risk-taking behavior (Prabhakar et al., 1996) because their level of optimism causes them to underestimate levels of risk and dangers. Greenblatt’s (2009) argued that there is a potential dark side to the relentless drive for workers to “think outside the box” and be creative and innovative. When one constantly pushes themselves to develop innovative and transformative solutions to complex problems without taking time to replenish and rejuvenate, they are vulnerable to professional exhaustion and burnout.

We know that creativity and innovation lead to growth for organizations, be it through their products or services. Given that most people will, at some point in their life, work to earn a living, I think it warrants raising the issue of transformative, innovative, and creative thinking in
the workplace. As we move into the knowledge economy, the desire for innovative and creative ideas will continue to rise (Pasmore, 2015). Transformational thinkers and thought leaders are known for their ability to identify the need for change, create a compelling and inspiring vision for the desired future state, and harness the resources to create that transformation (Cameron, 2012; Kraemer, 2011). According to Campbell (2015), “transformational leaders often exhibit traits reflective of being creative and innovative, thus creating a cultural climate that fosters, embraces, and produces effective change” (p. 60). The downside, according to Campbell (2015), is that this can lead to a toxic organizational atmosphere that is characterized by fierce competition, relentless pressure, and a fear-based mentality. Working in this type of environment can lead to chronic stress, anxiety, and other psychological and physical challenges (Greenblatt, 2009). Ultimately, argued Campbell (2015), “successful innovation becomes an expectancy barometer, adding supplemental stress and anxiety about future ideas and initiatives. The unintended consequence of fear can manifest into resistance and an unconscious inhibitor in producing creativity and innovation” (p. 60).

This study made a microscopic scratch on the surface of what has the potential to be a universal topic. We still need an all-encompassing definition of what transformational thinking is and what it is not. We would benefit from having clearer delineations between transformation and innovation, especially because those two words are often used interchangeably, and they mean different things. It would be interesting to see if there is a universal process for transformational thinking or if it varies based upon one’s national or corporate culture or demographic and
psychographic differences. It would be fascinating to do a case study and compare the process of transformational thinking between industries or teams or to explore the relationship between psychological safety and transformational thinking. It would be helpful to be in a position to test my proposed conceptual framework for transformational thinking with a larger sample size. Using a more quantitative approach could provide ways to help replicate and validate the data as well as enhance the reliability of the study. The social contagion of transformational ideas warrants more research, as does better understanding the characteristics of transformational thinkers.

For people who desire to make a positive contribution and are not afraid to embrace bold challenges, I believe it would be immensely helpful to have a process in place for cultivating transformational ideas. I concur that a well-designed process for transformational thinking would benefit people from all walks of life and different professions. There are no boundaries to the future implications of this research; it can foster significant developments in academics, business, and life.

**Future business implications**
We live in a complex, chaotic world. The business environment is rapidly changing, and we are constantly challenged by new social, political, economic, technological, and environmental circumstances (Pasmore, 2015). We have more capabilities due to technological advances and more stressors. We have bigger ambitions and bigger problems to solve with more constraints. We need to have an understandable and effective process in place to help generate the type of
transformational ideas that will build bridges and close gaps where needed (Morgan & Barden, 2015). The implications for future research, as it relates to the process of transformational thinking, is to better understand the type of work environments and organizational cultures conducive to transformational thinking.

It is highly likely that this knowledge could allow us to design better working spaces, create more effective work schedules, and develop healthier cadences to work-life balance (Corser & Magowan, 2010; Harrington, 2013; Rowe, 2000). We could provide coaching that leverages peoples’ strengths and engage in effective perspective-taking, which is essential to transformational thinking (Grant, 2008; Green et al., 2006; Laurin, 2016; Lee & Ybarra, 2017). Teams could be composed of people with complementary skill sets to ensure that convergent and divergent creative problem-solving skills have equal representation at the table. Today, we have the means to be constantly connected, yet people report feeling more disconnected than ever before (Achor, 2012).

Perhaps if we had a better understanding of the process of transformational thinking and found a way to extend that process, we would have the means to create meaningful connections, a sense of community, and work environments where people can flourish. For companies interested in developing innovative products and solutions to meet customer’s needs or providing transformative solutions to needs customers did not even realize they had, transformational thinking could ultimately contribute to a company’s profits, brand awareness, and reputation.
This strikes me as being of immense value. In this sense, the inherent value of transformational thinking extends into our personal lives and well-being.

It is important to be cognizant of the fact that transformational thinking involves multiple iterations before reaching a desired outcome (Morgan & Barden, 2015). That is why ideation, perseverance, and pliability are part of the conceptual framework. Disruption is known to create discomfort and agitation, so it is highly likely that there will be some churn, bumps, and hiccups in the process of creating transformational outcomes.

Additional considerations for future research are to dig deeper into the definition of transformational thinking, the relationship between transformational thinking and transformational outcomes, and ethical and moral implications associated with transformational outcomes. For example, can transformational thinkers be transformational if their ideas fail or go completely unnoticed? What are our criteria for evaluating the merit of a transformational idea? Is transformational status solely dependent on successful implementation? Lastly, what role, if any, do morals and ethics have with transformational thinking and outcomes? If a person creates a transformational solution to bring harm and destruction to the planet and all living beings, do we still give it transformational status? It would be interesting to study transformational outcomes in the context of their contributions, be it positive or negative. It would also be interesting to look at the history or transformational outcomes and study the evolution of ideas, products, and services that were first considered a positive transformation and, over time, their
status changed and became tarnished, or vice-versa. It would be fascinating to understand the social, political, economic, and environmental factors that impacted the change in status and reputation. Is there a timeline when a transformational idea reaches a tipping point and it becomes so engrained in our daily lives that we no longer consider it transformational? There are many implications and opportunities to better understand the characteristics of transformational thinkers and the processes they follow to create transformational outcomes. Transformational outcomes impact us in every dimension of our lives. They influence our discussions and the choices we make about how we wish to participate in the world around us, our work, and our play.

**Future personal implications**

The process of transformational thinking can be applied to any facet of our lives. Transformational thinking is about change, choice, and commitment. Every day, I can engage in practices that have the power to transform my life. I can ask propelling questions, set goals, seek support, contribute, and reflect on my values, vision, and mission to live a life of meaning and purpose. I can work on enhancing my resiliency, take a risk, practice mindfulness, adopt an optimistic outlook, challenge my assumptions, and entertain different perspectives when trying to solve a problem, all to create a transformation. All the pieces that are part of the process of transformational thinking have implications to enhance the quality of my life. Jackson (2017) alluded to this in the following excerpt:

> Transformational Thinking deals with the personal individual first and foremost, believing that it is from the individual that all changes stem. That is why we deal with all three of our human operating systems: The **Belief System**, which is our beliefs defined by our values and perceptions, the **Thinking System**, which is in
the form of skills that we apply when thinking, and then the **Behavior System**, which is how we actually behave when the first two come together. (p. 18)

The science of transformation lies in the process, which is designed to bring forth something entirely new that is inherently expansive. The art is in the way we go about creating our transformation. I contend that the process of transformation begins deep within us, with our awareness of our principles and values. It extends out to others by our choices in the ways in which we behave and engage; as such, it affects our relationships and our communities. It is worth mentioning that I see transformational thinking as something that is powerful and disruptive. Like many of the phenomenon’s we find in nature, many things that are powerful and disruptive can create changes that are catastrophic and leave a path of destruction in their wake. I believe the same is true of transformational thinking. It can be used to create disruption that positively influences the course of events or it can create destructive and negative outcomes.

My hope is that if we were to have a better understanding of the process of transformational thinking, we could leverage that knowledge to improve the quality of our lives. This wisdom could help us make better decisions and choose courses of action more closely aligned to our passions and visions. This way of being would allow us to live wholeheartedly with intention, purpose, and accountability. The future implications of living with authenticity, allowing ourselves to be vulnerable, taking risks, and being innovative are infinite. Living this way not only enhances our own well-being, but also positively impacts others. Jackson (2017) did a nice job expressing this sentiment:
Gradually, as the parameters of our own perceptions are expanded and transformed; as we begin to realize the power of our own decisions and the accompanying responsibility that our choices carry in terms of the effects they create, we will learn the value of including the perceptions of others. This is the true basis of a symbiotic relationship, in which all benefit. This is how to establish and realize the benefits of true synergy. (p. 11)

In closing, I was intrigued by the topic of transformational thinking and the characteristics of those who drive the process. I have a deeper understanding and appreciation for their integration. I read many wonderful books and articles on various aspects of transformational thinking: creativity, problem-solving, cognitive complexity, multiple intelligences, and environments conducive to transformational thinking. Of everything I read, Adam Morgan and Mark Barden’s (2015) book *A Beautiful Constraint: How to Transform Limitations into Advantages and Why It's Everyone’s Business* and Angela Duckworth’s (2016) *Grit: The Power of Passion and Perseverance* resonated the most with me, and they had a profound impact on the way I began to think about transformational thought leaders and thinkers.

Adam Morgan was the first person to say “yes” to my request for an interview, but that is not the reason why the book resonated so deeply within me. It is because, since I began this journey three years ago, my life has been filled with constraints. I have embraced them, created new pathways for solving problems, and have a deep appreciation for what it means to find the sweet spot between having bold ambitions and constraints. In addition, I deeply appreciate the roles that grit, passion, and perseverance play, not only in the process of writing a dissertation, but in accomplishing all worthwhile endeavors.
I have come full circle with the process and now know that the “beginning” and “ending” of what I started out to accomplish are mutually connected in a continuous loop. The completion of this dissertation represents the end and the capstone of my doctoral program. Yet, it is just the beginning of taking what I have learned over the past three years and applying the acquired knowledge and wisdom in all aspects of my life. It is a starting point characterized by asking big, bold questions and taking action to pursue my curiosity.

My quest was to learn about the art and science of transformational thinking. I wanted to know how leading thinkers develop and share ideas that resonate with people around the world, spark global conversations, and positively transform the way we think and act. The opportunity to interview transformational thought leaders, read books, and scour through articles, has given me an appreciation for the characteristics of transformational thought thinkers. My research has led to a deeper understanding of the process that transformational thinkers and thought leaders go through to bring their ideas to fruition. Transformational thinkers represent the “art” of transformation because they are able leverage their creativity and communication styles to inspire and influence others. They create passionate communities that are joined by a common interest and drive, and they harness that energy to do amazing work. The conceptual, integrated framework represents the “science” in that it provides a path of interdependent, actionable steps that, when used in conjunction with one another, can create a desired transformational outcome. Somewhere between the art and science of transformational thinking is a certain type of “magic”
that is hard to define. It reminds me of the magic of Tinker Bell and her pixie dust, and just
knowing it is there makes it easy to believe that anything is possible.
### Appendix A: First List of Interviews Requests

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<tr>
<th>Name</th>
<th>Date Letter Sent</th>
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<tbody>
<tr>
<td>Adam Braun - Pencils of Promise</td>
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<td>Adam Morgan – Founder of Eat Big Fish</td>
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<td>Arianna Huffington</td>
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<td>Ben and Jerry</td>
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<td>Bill Gates</td>
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<td>Blake Mycoskie - Tom’s Shoes</td>
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<td>Bob Geldof – We are the world</td>
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<td>Bono</td>
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<td>Brene Brown</td>
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<td>Bruce Springstein</td>
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<td>Carol Dweck – Growth Mindset</td>
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<td>Carolyn Porco - Cassini</td>
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<td>Dan Gilbert - Happiness</td>
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<td>Ellen DeGenes</td>
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<td>Gordon Bowker - Strabucks</td>
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<td>Jack Canfield</td>
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<td>James Corden – Car Karaoke</td>
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<td>Jerry Baldwin - Starbucks</td>
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<td>Larry Page - Google</td>
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<td>Malcom Gladwell</td>
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<td>Mary Gentile - Voice to Values</td>
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<td>Nick Sinmurn - Zappos</td>
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<td>Simon Sinek</td>
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<td>Tasty Catering</td>
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<td>Tom Patterson</td>
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</table>
Tony Robbins 8/2/2017
Wendy Koop - Teach for America 8/9/2017
Zev Siegl - Starbucks 8/2/2017

HIGH PROBABILITY!
Academia

Further Considerations
Members of CVCL’s Small Giants
Transformation Non-Profits
Cirque du Soliel
Co-Founders of Wikipedia
Appendix B: Questionnaire

Positive Disruption: The Art and Science of Transformational Thinking

How leading thinkers develop and share ideas that resonate with people around the world, spark global conversations, and transform the way we think and act.

1. First, I’d like to learn about the birth or beginnings of _______________. Please think back to when you first started thinking about the need for, or notion of, your idea. What was going on in your mind, your life, your environment or the world at that time that created a need / opportunity for such an organization/mindset/practice/concept? What were the signs or clues that your idea was needed?

2. What were some of the significant milestones or memorable moments that stand out for you and why were they so impactful?

3. Did you have any idea at the time that ______________ would grow as big, reach as far or positively impact as many lives as it is today? Why or why not?
   a. When did you intuitively know your idea created a spark?
   b. When did you know your work was part of a global conversation?
   c. What were the signs or clues that that spark existed?

4. Without being humble, what was it about you – the unique qualities that you possess – that made it possible to mobilize this incredible ______________? Who were the other significant contributors, and what was it about them that made it possible?

5. Was there one challenge or obstacle you encountered that stood out for you? How did you overcome it?

6. What were some of the triumphs you experienced along the way and how did you celebrate them?

7. If you wanted to replicate the social contagion or “viral success” of this with another initiative, what are the 2, 3, 4, or 5 most important factors for finding the spark and reaching this level of success?

8. Are there other pioneers, people with transformational ideas that you suggest I speak with?
Appendix C: Customized Interview Request

September 5, 2017

Dear Mr. Laliberté,

I have been mesmerized by every single Cirque du Solei performance I have ever seen! I saw my first Cirque du Solei performance in San Francisco in the early 90’s, followed by numerous performances in Las Vegas, and Denver. Cirque du Solei was the first cultural event I took my son to as a five-year old and it has now become a favorite family tradition!

In our Values-Driven Leaders doctoral program, we were assigned to write a paper on what it takes to be a global leader. I looked to your yellow and blue stripped tents for inspiration. To date, my paper titled *Everything I Needed to Learn About Global Leadership I Learned Under the Big Tent* was by far my most enjoyable paper to write. It’s also the one I am most proud of.

The experience of Cirque du Solei strongly influenced my dissertation topic. You have literally transformed the circus experience to an elevated art form. Your story fascinates me, and I wondered if you would you be willing to participate in the research I am doing for my dissertation – “Positive Disruption: The Art and Science of Transformational Thinking”

Your input and insight would be invaluable in completing my Ph.D. thesis for Benedictine University. Specifically, here is what I am requesting:

Request: Interview for inclusion in doctoral research project
Time requirement: 45 minutes
Format: Phone, video or in-person, based on your convenience
Deadline: Before 10/10/17

Research question: How do leading thinkers develop and share big ideas – ideas that resonate with others, spark global conversations, and transform the way we think and act?

I know you have competing demands for your time, and I would be truly grateful to incorporate your perspectives on creating transformational ideas and the challenges and triumphs you faced in the process. It would be an absolute honor to speak with you and incorporate your wisdom into my doctoral work.

Feel free to contact me directly at (925) 457-8020 or by my personal email address at marciaskent@yahoo.com. I will follow up the week of September 11, 2017 to see if we can schedule something convenient for you.

Thank you for your kind consideration,

Marcia Kent, Ph.D. Candidate; Center for Values Driven Leadership at Benedictine University
Relentless Optimist, Adventurer, and Lifelong Learner
### Appendix D: Interview Transcripts

| Notes: | **Richard:** Find out some things about it, start publishing, presenting your conferences, and are absolutely baffled. I mean I have people standing up saying you’re destroying the field, I’ve had people stand up and say you’re killing babies, you’re disgusting, you’re commercializing, you’re playing into applications, and just anything negative you could possibly say. I’ve had people say in front of hundreds of people to me and of course to friends about me, and it tends to go in waves. So, the first 10 years it was a lot about the importance of unconscious motivation, and whether it was affiliation or power, alcohol abuse, or leadership. And then it was competencies, which was really the late 70s through the 80s, or late 80s, and then it was around intentional change theory and focusing entirely on that. And then it was on coaching, and somewhere along the line the emotional intelligence crept in, but that wasn’t really different, it was repackaging. I had a very prominent figure in our [Inaudible] site field. I got up in a meeting where I was presenting, and several other colleagues through the use of emotional intelligence held up my first practitioner book of which I was the second author with [Inaudible] and said this is the worst example of what any professor, any psychologist can publish that is so [Inaudible] and disgusting, and this is why I think emotional intelligence is seen in such bad light, and nobody believes it. So, afterwards, I went to visit Ed Locke. So, I went to him, we were standing around talking, and I said oh Ed, we chatted a little bit, and he remembers who I was. I said thanks for the endorsing that book. He said what endorsement? I said when you held up Primal Leadership, I’m the second author. He looked at me and said oh, he told me he didn’t realize that. He said but your work on competency is really good. I had somebody, a major editor of a journal of which I’m on the editorial board all happens to be great, so you think he’d cut me a little slack. This guy just complained about me, and really crucified me on a couple [Inaudible] around emotional intelligence. So, I’m at this editorial board meeting, which he asked me to join, and then I come up to him, and we hadn’t met face to face. I introduced myself. He said by the way, I know we have differences around emotional intelligence, but I think your work as a |
neuroscientist is great. So, whatever it is I do. So, Kylie came back from this conference, and she said one of the presenters was calling you about the fact that you could be leading edge, in which case you’re on the front line, a pioneer, and all that, but you could be bleeding edge, which means you aren’t bleeding edge yet. And as you’re going to bleed a lot. I tend to be bleeding edge.

**Interviewer:** How do you manage that, I mean is it cultivating the thick skin, is it just being so focused on believing what conviction?

**Richard:** [Inaudible] No I mean seriously, it calls for – this is going to sound weird, but it calls for a degree of perseverance, I agree with Angela Duckworth’s notion of grit which is perseverance and passion, and I think it calls for a high degree of self-confidence bordering on as approaching to arrogance. Because if I didn’t think I was right in all these [Inaudible] or heathens were absolutely dinosaurs how could I keep it up?

**Interviewer:** Right, right.

**Richard:** I mean if I get internalized any of this crap. Tony, Jack, and I, and Scott Taylor who was a former doctor student of mine. A current one, Jerry Freeman in [Inaudible] decide to take on the thing of cognitive psychology for the past 15 years saying people have more religious beliefs, or spiritual fate. They are stupid. Now, Tony decided to take it on. He’s British, he grew up in Oxford. His parents were Dons, and it sit within his neuroscience research findings on an answer to that issue, but he wanted to take it on because of the new atheist movement in the UK. I wanted to take it on because I think we have now watched the better part of 16 years of democrats in the US. I won’t even call them liberals anymore because liberals are open minded. Democrats accusing republicans of being stupid because they believe in God, and so I kind of being a moderate, and an independent I rail against anybody getting so self-righteous and characterizing people that way. The Republicans overall have never labeled democrats as stupid. [Inaudible] but the viciousness living in a swing state in Ohio for so many years, decades, you get bombarded with political adds, and you realize this goes back to the early 90s, the amount of democratic [Inaudible] the republican [Inaudible] spiritual beliefs. So, we did several studies, and
then we had the aggregate, so we had eight data sets showing that yes, if you have more religious, or special beliefs you score lower on cognitive analytic tests, but you score higher on anything related to empathy.

Interviewer: Oh, that’s interesting.

Richard: Your behavior, how you feel, building relationships at the community, all of it. So, our argument was neurologically this is the difference between the task positive network and the default mode network, and the two networks suppress each other neurologically, but it’s also could be said could be the difference between cognitive intelligence, and emotional intelligence or more accurate social. So, we published finally we got it published, but the main journal that’s been publishing the stuff we were saying. You’re not studying the whole story the second time, the first time we got rejected we pulled it back a few more studies, changed the whole argument, re wrote it. We submitted it, now our paper is 45 pages double spaced. We got back a [Inaudible] critique from three reviewers that was 23 pages single spaced of absolutely hating every sentence.

Interviewer: Wow.

Richard: It was longer than our paper.

Interviewer: Wow. So…

Richard: So, it was an awful lot of guts and courage. You don’t do something traumatic… [Inaudible] the part of it is you just don’t pay attention to it. Part of it is of course it always hurts, but [Inaudible] but then you find ways to either feel sorry for them, so you invoke some compassion, or you declare them idiots privately, or you –

Interviewer: Oh, go ahead.

Richard: Re invoke your commitment to why you’re doing it. See the larger goal, the mission.

Interviewer: Mm-hm, yeah. I just can’t think of the people that I’ve interviewed that have done something in the realm of transformational thinking that have not encountered resistance, and skepticism, and critics, and it seems like it’s part of the process.

Richard: Yeah. I mean that was a quote from Mackie Avelie in the preludes to the Republic. It wasn’t [Inaudible] and what she said, anybody promoting a change will be met by luke warm accolades and people who want the change,
but they don’t necessarily want to share the credit, and absolute condemnation by everybody who is threatened by it.

Interviewer: Yeah. Do you think, Richard, there was something noticeably different about you versus your colleagues in how you handled some of the critics, or the push back and the resistance?

Richard: It depends on which colleagues. Dan Goleman just avoids them. So, he doesn’t present at those professional conferences, or if he does he presents when he gets invited for key notes. So, you’re not standing in front of a panel. [Inaudible] is the same way. [Inaudible] gets a lot of crap too, but he basically ducks it. He didn’t in the early days, but I think he just got fed up, and decided if you’re going to say something negative he won’t talk to you.

Interviewer: Yeah, and you know you said something that caught my attention, and this is – it feels very similar. I was speaking to Dr. Ken Cameron about his work, right, and he was saying the same thing along the lines around once there was evidence-based science behind the work it seemed like doors opened more easily. People were more willing to hear what he had to say. Can you talk a little bit more about that? It sounded like you said that you think the future is going to depend more on that type of information.

Richard: No, I agree with him in part, but I think it’s a time lag. When by evidence based. I mean I would be advantageous too. The quantitative statistical work that would pass scrutiny. Once you start publishing that, it might still take another eight years to ten years before people start to give the credibility.

Interviewer: Okay.

Richard: They don’t at first. I mean…

Interviewer: Yeah.

Richard: So, I think the evidence, empirical evidence, quantitative empirical evidence does make a difference, and qualitative work always helps there’s a pilot test for the inferential testing, but you must amass a lot of the inferential testing before somebody starts to say, huh, maybe.

Interviewer: Okay, okay. It definitely sounds like a process to go through and to -
Richard: Oh yeah, and Ken has run through that every time. He’s got another person on a ten year cycle with parts of his basic message. That’s what Ken has gone for, I’m jealous of, is a faith. I mean -

Interviewer: What do you mean by that?

Richard: He’s a Mormon.

Interviewer: Oh a faith. I thought you said a face. His faith, yes.

Richard: No, no, a faith. No, he was a very devout Mormon who really believes, and that is his solace. I mean anyway.

Interviewer: No that’s so interesting because when he presented at our class you could just tell how intrinsic that was to who he is, and how he engaged in the world around him. How fundamentally important that is to him. Yeah, it showed through in so many different ways.

Richard: Yeah.

Interviewer: You mention something, so without – you’ve talked about that you feel that you have grit, and resilience, and you also talked about your mother instilled, it sounded like from your family, a sense of curiosity. Are there other qualities about you, Richard, that you feel are have helped you be the transformational thinker that you are?

Richard: Well, I don’t know about transformational thinker because that’s assuming that I’m right, but and then at my age I’ll actually miss the possibility of humility, but I was thinking about this because after eight months I’m getting an honorary doctorate next month [Inaudible]

Interviewer: Oh congratulations.

Richard: About five, it’s the fifth best management school in the world. So, it is quite an honor, and they only give out – [Inaudible] university has four schools in it, and this is one of them. It’s a management law school, and among [Inaudible] only gives out two a year. One in the fall, one in the spring. So, I’m getting the fall one, and theirs is a whole different thing. We give out five of them each time we have graduation. [Inaudible] graduation people don’t say anything. I just get a doctorate, well there they devote a whole Do you A strongly agree, B agree, C strongly disagree, or D just disagree? November 10th, 10am to 5:30 pm about me and my work.

Interviewer: Wow, wow, that’s fantastic.
Richard: So, yeah, and actually it’s pretty cool, but it is humbling in a lot of ways because I’ve had a number of my colleagues posing these questions like what are your core values? What is it that you’ve learned in 50 years of doing this work? Where did you get it, who helped you, what do you see your background coming out? So, I actually have spent time reflecting on it, and I think the drivers not in rank order necessarily, but have been curiosity first and foremost, passion, which if you want to stay in the cs is really calling. Compassion, caring for others, and that’s all the change work, and courage.

Interviewer: Mm-hm, and do you have – I’d be so curious. Can you just expand on what your definition on what you think courage means or that looks like from a behavioral standpoint?

Richard: Keep going whenever other people are telling you you’re wrong or when they’re attacking you.

Interviewer: Mm-hm.

Richard: I mean it’s a more psychological than behavioral with the military courage when you do things in the face of death. I’m just talking about doing it in the face if imminent psychological death.

Interviewer: Yeah, yeah, for – yeah. It sparks to my [Inaudible] Browns’ work on vulnerability and courage, and the willingness to take risks, and the willingness to find your voice in the room even if you’re the only – when you’re out there in that arena to hold onto that.

Richard: Right. Yeah.

Interviewer: Yeah. Well, this has been so enlightening and so helpful for me. Is there anything else that comes to mind when you think about being a thinker. I mean in my mind the transformational thinker. There’s lots of different ways to define it, but somebody who is able to create work that really, and truly inspires people help them pause and think, and make better choices, act differently. Is there anything else that comes to mind around the process, or the social contagion of it? I think certain work reaches a tipping point, and that helps keep the conversation going. Anything else that you think would come to mind?

Richard: Because positive – I mean positive and negative contagion are both strong, and negative is actually stronger, but when you encounter people who can be positive, and
fewer a pragmatist, and a realist as they call themselves you actually rise to the occasion because it’s so refreshing. So, here are a few things that help. If a person has a really nice smile. If a person comes across as warm, and likeable I find it helps to have a British accent, which I don’t.

**Interviewer:** I agree. I think it’s so easy to be enamored with that.

**Richard:** Yeah, and it helps if you are in some way attractive. Now, it doesn’t mean you have to be physically attractive, although that can help, or you could do it through humor, but you’re a magnet. So, I think that’s one that’s harder for people to quantify because it doesn’t have to do with your ideas, it has to do with your persona.

**Interviewer:** Mm-hm, yeah, but you know that also is interesting in the work that’s being done around social DNA or organizations, and how are the energizers, and who do people trust? It doesn’t always have to do with anything on their title. It’s how they extend their energy, their warmth, their inclusion.

**Richard:** Yep.

**Interviewer:** Yeah. Well…

**Richard:** I think that’s why relational energy is one of our three things in qualitative relationships.

**Interviewer:** Well, that makes sense. That makes sense. **Richard:** Ken published an article on that last year. Ken Cameron.

**Interviewer:** Mm-hm. Do you think the business world is open and receptive to – I mean even words like vulnerability and relational energy? Does that – do you -

**Richard:** Not yet.

**Interviewer:** Not yet, do you think they will be?

**Richard:** Tell them to wait 20 years. I mean 20 years ago, 30 years ago I remember Walter Kishull for a while, and helped him out in some articles when he was the editor of One Section of Fortune, and then he became the editor of Fortune, and then he [Inaudible] Business for You, but when he was still one of the section editors at Fortune I called him in 1988, and I said Walter I got a [Inaudible] piece I’d love to send in, and it’s all about the fact that the most important skills that people need are interpersonal, and it doesn’t matter how smart you are. If you can’t get along with people nobody is going to pay attention. So, I wrote
this up on the basis of all these competency studies as before we had the phrase of emotional intelligence, and he called me back, and we were talking on the phone. Thank God this was before email. He said Richard, I can’t do it, I can’t publish it. I said Walter, I can edit it. Do you think there’s something wrong with my data, and the point? He said no actually it’s really good. He said fortunately it’s so conservative. It’s 1988. He said we just recently in an editorial meeting decided to use the term goal setting.

**Interviewer:** Oh my gosh.

**Richard:** So, yeah. I mean I was watching an episode of Scorpion last night about these super smart people who have a diner waitress as their manager because she’s helping them with what she keeps referring to as EQ. When did you expect that to be a positively in the show, and it even comes up in Big Bang Theory when people want to crucify Sheldon. So, I think what was highly controversial 20 years ago is now working its way into a language. It doesn’t mean everybody agrees, but it’s working its way in. Vulnerability started really with Greenleaf’s servant leadership around the theme of humility. Then it got another big boost in the popular literature when Collins said it was a part of level five leadership, and it’s got…

**Richard:** I think the social relevance, and then I -dive in and studied them. Now, I got into the whole field of psychology for aerospace when I used to design space ships because I wanted to know why managers didn’t help their subordinates. And so, in 1967 I got caught up with a new faction member at MIT who’s the one who helped me get into Harvard PhD who basically said when we look at – would you be willing to see how students help each other, and that lead into the whole theory of change, which I’ve worked for steadily for 50 years now, but although it’s morphed a lot, and Dave went into the learning styles, and so he let that go, but I kept working on it, and so what happens is everything I’ve done for 50 years is around that. Now, it varies during the 70s I focused a lot on how do you help alcoholics and drug addicts? I had a new therapy program, I was doing new basic research on aggression, and the [Inaudible] the pieces, and research on how to help them, or not, and then in the late 70s shifted to because I started doing the work during the early 70s on
competencies. I was one of the first researchers in the whole field, and also later on outcome assessment which is do people improve on competencies when they go through college or graduate school. So, what ended up happening is that came back in the late 70s, 79, and I started working on how do you affect the competencies that we know from various performance studies, or predict effectiveness, how do you help to build and develop them? So, that’s what I did in 79, and 87 when I gave out money or research companies became a tenured professor.

The whole issue shifted to how do you, or how do I, end up helping and understand how a 25 to 65-year-old develop these things. And so, that was for the late 80s into the 90s, and then I went back to the basic model in terms of change, and a bit more with the compressor theory, and then in the [Inaudible] I ended up really focusing on as more and more of it became proven with various studies. I focused on pieces that we didn’t have much on, and [Inaudible] for the relationship, and so focusing a lot on [Inaudible] and then 2007 a lot of what are the properties of the relationships to enable people to change in a sustainability desired way. So, it’s all part of my [Inaudible] chase theory, meanwhile, a key part of the things that create the ongoing points, and deposit, and negative emotional attractors, and that’s where I started getting much heavily in 2000, 2002 into the psycho physiology, or I should say returning to it because I was already doing that back in the 70s, and that’s when I started doing some of the [Inaudible] studies on newer imaging issues, and then various students of mine started doing studies on the hormonal system. The [Inaudible] assessor. So, what I ended up doing is I ended up changing arenas, but it’s always around the same central theme of my intentional change theory, and what to use this on. So, I would say right now, the majority of my papers I’m writing, and the research data I’m collecting is really around [Inaudible] wealthy quality of relationships, which in an odd sense brings me right back to what I started with the 1967 one in the first place.

Marcia: Oh my gosh, that’s a full circle.
Richard: Yeah. Well, that’s what it feels like. I mean I did my doctoral dissertation on intimacy drives, unconscious affiliation, and so here I am becoming a major component
in writing for the past 14 years on approaching with compassion, and the real thing that helps people be open, or learn, and how different it is, and the usual way people try to help others, which is really what I call coaching for compliance.

Marcia: That’s such a meaningful distinction.

Richard: Did I answer your question?

Marcia: Yes, you did, absolutely. You did, and you know we had Amy Edmonton come and speak to us about her work in teaming, and so that just resonates around the psychological safety and how important that is in order to even be in a position to coach with compassion, and to coach effectively.

Richard: Well, and she always tells the story about her interactions with [Inaudible] and how Buck was her team mentor, and some of those conversations and experiences and how it changed what she does. I think the same thing is a part of my recognition, and I’ve been doing this exercise called who helped you the most since 1999, and I can assure you that no one ever does anything interesting in life without other people playing a key role. So now what I have been discovering in the past [Inaudible] whether the [Inaudible] empirically for the past 10 years has been the part of the relationship at most seems to be in rank order shared vision, and shared compassion, and then shared energy. Excuse me, I hope you don’t mind if I eat lunch while we’re talking.

Marcia: No please do, and take bites. Please do. So, that sparked two questions. So, I’m going to ask the first one before I forget then. Are there – can you share some people in your life, Richard, that are really significant and memorable, or memorable moments that were your mentors, or people that inspired you?

Richard: Oh yeah. I mean if I go all the way back, my mother, my Father worked seven days a week, three in the afternoon, three in the morning. He was a waiter, and banquet manager. But yeah, she was phenomenal. Every time the New York City public school systems in [Inaudible] wanted to leave me back because of being cognitively slow she would keep me out of school for two or four weeks, catch me back up, and sent me back in because meanwhile she indoctrinated me with how much
these North Americans and Northern Europeans hated those of us who were from the south. My parents were in the [Inaudible] and how much they really wouldtake all of your ideas, and steal things for you, and how you really had to both promote yourself before they took credit for your things, but also be very careful of them. So, while it was a ultimately prejudicial message it also built an amazing amount of confidence, and courage. Next in sequence was a physics teacher in high school who, Max Boison, who engaged us in ways two years of physics that said this is 1961 through 3, engaged us in ways that really made us think we were able to discover things, and had us doing basic experiments, and Newton, and Galileo, and all these folks, and it became very, very exciting. And then, so he I credited him with a huge impact on my curiosity, in shaping my idea to be a scientist, which is fundamentally what I am.

Marcia: Mm-hm.

Richard: And then at MIT Dave Coal was the key one who I’m still close to and periodically still do things with, but and that’s – he’s the one who got me to think about leaving aerospace, and moving into psychology, and going for a PhD and all that, but I also worked with him, and published, and did empirical research, and published with him for, I don’t know, a good 12 years after that. And he was the first one who introduced me to the combination of using qualitative research and quantitative, and then I went to Harvard, and he helped me get into Harvard, and although I was working with some other teachers who became mentors and helped me get into Harvard like Ed Shine, and at a distance, Warren Benes, but it was Dave McClellan at Harvard probably more than anybody who taught me really how to develop measures suited to the phenomena which meant it could be qualitative, it could be quantitative, and use that as a way to establish inferential statistics. So, even if you’re doing – in my 1982 book is based on qualitative interviews, critical incident interviews that were coded of the competences, well, I was able to amass a sample of 12 organizations of 253 people, and I had performance data on them. So, I could actually run statistics to test ideas, not just to be descriptive.

Marcia: Mm-hm.

Richard: So, around the science of it. Those were kind of
key people, if I go into the more modern era. My wife of course continues to help me try to be a person, and try to remember the things that I said were important to life, which I often forget. Because of my nerdiness and intensity. You know and then it starts to be a bunch of friends that I really love working with. Two professors who are both younger than I am, a bit [Inaudible] and Smith is in his 50s, and Ellan Allison is in her 40s at case, and then Dan and I reconnected. We were social friends in school, and we reconnected afterwards and stayed in touch, and when Dan published his 95 book in such fast recognition he called me and said hey, you’re the one who is actually doing this. Can we capitalize on my notoriety? So, we took a bunch of the things that I’ve been doing since 1970 on competencies, and just relatable emotional social intelligence because that’s what most of it was.

Marcia: Oh that’s fascinating, okay.

Richard: So…

Marcia: It sounds like you’ve had a lot of people that have really inspired you, and been along in the journey with you.

Richard: Yeah, and I’m leaving off all the more recent ones, but Ron is late 30s, practically just turned 40 who is a neuroscientist who I started working with eight years ago, nine years ago, and now we’re publishing three articles, and studies a year.

Marcia: Oh that’s fantastic. Richard, you said something just a while ago about three parts of your findings, and I wondered if you could talk a little bit more about some of the outcomes. I know you’ve talked about coaching with compassion, and there were two other items that you highlighted.

Richard: Sorry, about recent findings?

Marcia: Yes, well I thought you had mentioned that coaching with compassion is one of the things that your research has highlighted, and I thought you mentioned there were two other items, and I wondered if you could speak a little bit more about those.

Richard: Well, part of it is that it’s part of my intention of change theory that tipping point allows you to move from one stage or process to another are these slipping from the negative emotional attractor into the positive, and the positive and negative emotional attractor can be rate on a
three dimension array of positive to negative affects default mode network activation, the brain neural network versus task positive neural network, and parasympathetic nervous system in terms of the hormonal system versus sympathetic.

**Marcia:** Okay.

**Richard:** Once you do that you realize that good research is going to have to get into physiological measures. Now, what kind of – the part that is the very edge of the benefit of doing any kind of psychological surveys without some physiological measure along with it, and I think within five years journals won’t even accept articles anymore unless they have some other physiological stuff in it.

**Marcia:** Oh that’s an interesting perspective.

**Richard:** Yeah, because the person is a consistent holistic organism.

**Marcia:** Yeah.

**Richard:** And the thing is about, I mean and surveys people can just distort their answers. That’s why self-assessment is always delusional. Yeah, [Inaudible] that leadership in the 50s, and this clinical sense of body literature on that, and their gender and [Inaudible] affects so professional women tend to be under estimators. You will tend to underestimate your behavior, and your effectiveness in contrast to people around you, and professional men tend to be over estimators. It’s not a shock to women.

**Marcia:** Right. Well, let me ask you this because I have this intuitive feeling that about some of the resistance that you may have encountered. As you were working on your theories, and having new ideas about the complexity of change, and the work that you’ve been doing. What type of resistance did you run into if any?
Appendix E: PMC Scales 1 and 2


**Theme: 1: moral agency**
1. I am the type of person who is unfailing when it comes to doing the right thing at work.
2. When I do my job I regularly take additional measures to ensure my actions reduce harm to others.
3. My work associates would describe me as someone who is always working to achieve ethical performance, making every effort to be honorable in all my actions.

**Theme: 2: multiple values**
4. I am the type of person who uses a guiding set of principles from the organization as when I make ethical decisions on the job.
5. No matter what, I consider how both my organization’s values and my personal values apply to the situation before making decision.
6. When making decisions I often consider how my role in the organization, my command, and my upbringing must be applied to any final action.

**Theme: 3: endurance of threats**
7. When I encounter an ethical challenge, I take it on with moral action, regardless of how it may pose a negative impact on how others see me.
8. When I do my job I regularly take additional measures to ensure my actions reduce harm to others.
9. I am the type of person who wants to keep things subdued, not raise issues, or put myself or others in jeopardy by bringing a moral issue forward.

**Theme: 4: going beyond compliance**
10. My coworkers would say that when I do my job I do more than follow the regulations; I do everything I can to ensure actions are morally sound.
11. When I go about my daily tasks I make sure to comply with the rules, but also look to understand their intent, to ensure that this is being accomplished as well.
12. It is important that we go beyond the legal requirements but seek to accomplish our tasks with ethical action as well.

**Theme 5: moral goals**
13. It is important for me to use prudential judgment in making decisions at work.
14. I think about my motives when achieving the mission, to ensure they are based upon moral ends.
15. When engaged in action, I do not typically consider how virtuous my motives are as I move to accomplish objectives.

PMC Scale 2: items derived from literature analysis

Theme: 1: moral agency
1. I am determined to do the right thing.
2. Others can rely on me to exemplify moral behavior.
3. Engaging in principled action is an ongoing pursuit for me.

Theme: 2: multiple values
4. I draw on my person values to help determine what is right.
5. I draw on the values of those around me to help determine what is right.
6. I draw on my professional values to help determine what is right.

Theme: 3: endurance of threats
7. I hold my ground on moral matters, even if there are opposing social pressures.
8. I act morally even if it puts me in an uncomfortable position with my superiors.
9. I am swayed from acting morally by fear and other negative feelings.

Theme: 4: going beyond compliance
10. I consider more than rules and regulations in deciding what is right.
11. I proactively aspire to behave morally.
12. For me, doing what is right is the same as avoiding what is wrong.

Theme: 5: moral goals
13. When I act morally, my motives are virtuous.
14. I act morally because it is the right thing to do.
15. When I act morally, I like being praised and recognized for it.
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