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Better Decisions Through the Application of Positive Psychology

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Better Decisions Through the Application of Positive Psychology

Abstract

Decision making is a necessary and integral part of life. This paper examines several specific concepts related to decision making and attempts to demonstrate how to create a positively charged culture that embraces change, attracts talent and improves decision making. First we will discuss how leveraging our personal strengths instead of focusing on our weaknesses can lead to a culture that emboldens people to take appropriate risks and encourages them to focus on the opportunities in change. Second we will discuss how having positive, high quality relationships creates a supportive workplace that attracts and retains talent and fosters collaboration. Third, we will explain how being engaged in what we do, finding meaning in our work and recognizing and acknowledging the role emotions play in our lives can all positively affect our decision making abilities. Fourth, we will discuss how all of us utilize decision making short cuts called heuristics that often serve us well but can sometimes lead to unhelpful biases. We will describe some of the most common heuristics people use and the potential biases they produce and offer some suggestions on how we can overcome these biases, when appropriate, to make the best decisions possible. Finally, we will discuss how positive emotions affect decisions as well as result from the decision making concepts discussed.

Better Decisions Through the Application of Positive Psychology

Bill Fair

University of Pennsylvania

A Capstone Project Submitted

In Partial Fulfillment of the Requirements for the Degree of

Masters of Applied Positive Psychology

Advisor: Andrew Soren

August 1, 2014

Better Decisions Through the Application of Positive Psychology

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Capstone Project

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Abstract

Decision making is a necessary and integral part of life. This paper examines several specific concepts related to decision making and attempts to demonstrate how to create a positively charged culture that embraces change, attracts talent and improves decision making. First we will discuss how leveraging our personal strengths instead of focusing on our weaknesses can lead to a culture that emboldens people to take appropriate risks and encourages them to focus on the opportunities in change. Second we will discuss how having positive, high quality relationships creates a supportive workplace that attracts and retains talent and fosters collaboration. Third, we will explain how being engaged in what we do, finding meaning in our work and recognizing and acknowledging the role emotions play in our lives can all positively affect our decision making abilities. Fourth, we will discuss how all of us utilize decision making short cuts called heuristics that often serve us well but can sometimes lead to unhelpful biases. We will describe some of the most common heuristics people use and the potential biases they produce and offer some suggestions on how we can overcome these biases, when appropriate, to make the best decisions possible. Finally, we will discuss how positive emotions affect decisions as well as result from the decision making concepts discussed.

In a recent Wall Street Journal article some of the top CEOs in the world were asked to comment on what they perceived to be the most challenging and important issues they face (Lies, 2014). Nearly every one of them stated in some form or another that in order to be successful now and in the future, their companies needed to attract and retain the best talent. The best people, however, need a culture that supports them, helping them to make better decisions, allowing them to be creative, effective and efficient. Michel Lies, CEO of Swiss Re stated:

I believe the real issues for today's managers center on people and culture. Can I attract world-class talent, or do I need to develop them? How can I build a culture that allows the organization's talent to embrace new risks and opportunities; a culture that works together to see the possibilities arising from change and not as a threat? If I can create this environment, my organization will be agile and ready to adjust to the world of today and tomorrow, and we will enjoy it. (Lies, 2014)

The nascent field of positive psychology is well suited to help create a culture that Mr. Lies describes. Through empirical research and sound scientific study, positive psychology can offer insights into how we as employees and managers can make better, quicker decisions about risk and change. By focusing on our strengths instead of our weaknesses, collaborating with others, caring about the results of our decisions and mitigating our personal biases, we make better decisions and in the process create a supportive, collaborative culture. We create a culture that engages employees, challenging them to reach their full potential, helping them to optimally contribute to the shared goals of the company, and allowing them to thrive, flourish and enjoy themselves. Positive psychology can help create this culture through the study of such things as

motivation, resilience, productivity, emotions, strengths, engagement, team dynamics, change management, decision making and more.

This paper will begin with a description and brief history on the subject of positive psychology, followed by a discussion on decision making processes and strategies and how positive psychology can contribute to improved decision making. The goal of this paper is to explain how better decision making can create a culture where employees see the opportunities present in various risks, where they recognize and embrace the possibilities in change, and where they find fulfillment and enjoyment, thereby attracting and retaining the best talent in the industry. It will be demonstrated that a better decision making culture is one that empowers its employees to make the best decisions by leveraging their strengths, collaborating with others, truly caring about the decision outcome and reducing personal biases.

History of Positive Psychology

The human race has always been concerned with what makes people happy. We are concerned, not with what makes people happy in the sense of simply generating positive moods or emotions, but what makes people truly, deeply and lastingly happy, what makes them flourish, what positively contributes to their psychological well-being. It is this deeper sense of flourishing that philosophers, theologians, politicians and scientists have struggled with for millennia (Diener, 2009). Psychology as a science concerned with mental processes and behaviors (Huffman, 2012) seems to be perfectly suited to address the question of what contributes to a flourishing human being. Historically, the science of psychology has been focused more on mental illness and dysfunction than on psychological wellbeing (Myers, 2000). Recently, however, the medical community, as well as the general public, has recognized that

mental health is not simply the absence of mental or psychological illness. Dr. David Satcher, the Surgeon General, illustrated this point when he offered this definition of mental health: "a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and to cope with adversity" (U.S. Public Health Service, 1999, p. 4). The World Health Organization offered a similar position, recognizing mental health as not simply the absence of disease or dysfunction, when they described mental health as: "a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2004, p. 12).

The field of positive psychology has arisen to scientifically study what supports and advances psychological wellbeing. Defining flourishing, or psychological wellbeing is a very complicated endeavor and there are now many models of wellbeing, a variety of opinions and perspectives on the subject and a burgeoning field of wellbeing research being conducted within the positive psychology community (Linley, 2009).

While positive psychology is a relatively new field, the study of flourishing or psychological wellbeing is as old as humankind. More than 2,300 years ago Aristotle told us that the ultimate goal, the "highest good in all matters of action" is happiness (Melchert, 2002). He felt that all other lesser goals were merely a means to an end, that end being happiness, or what he called eudaimonia. Although sometimes translated as happiness, eudaimonia is more accurately translated as "flourishing" (Tiberius & Mason, 2009).

The modern study of flourishing and the birth of positive psychology began at the 107th Annual Convention of the American Psychological Association (APA) in Boston, Massachusetts, on August 21, 1999. As the President of the APA, Martin Seligman, in his opening address to

the organization, stated that prior to WWII psychology had three missions: curing mental illness, helping all people lead more productive and fulfilling lives, and identifying and nurturing talent. Seligman went on to say that with the advent of the Veterans Administration in 1946 and the National Institutes of Health in 1947, the field of psychology shifted its focus almost exclusively to healing the sick and virtually ignored its prior goals of helping all people flourish and promoting talent and genius (Linley, 2009). Seligman challenged his audience not to abandon the important work of relieving mental suffering, but simply to recognize that psychology had much more to offer and to therefore shift their focus to a more positive psychology (Linley, 2009).

The following year, Seligman and his colleague, Mihaly Csikszentmihalyi (2000) wrote an article for the "American Psychologist" where they stated their ideology of positive psychology. They stated that positive psychology on a subjective level is about being content and satisfied with the past, having hope and optimism for the future and experiencing flow and happiness in the present. At a group level, positive psychology is about civic virtues such as altruism, responsibility and a strong work ethic. Finally, on an individual level positive psychology is about positive traits or personal strengths such as courage, perseverance, wisdom and our capacity for love, to name a few.

Two years later in his seminal work *Authentic Happiness* Seligman (2002) posits a model of wellbeing that encompasses identifying and nurturing your signature strengths. He states that using them every day in your work, your parenting and any other domains of your life, directly leads to increases in wellbeing (Seligman, 2002). This idea of wellbeing being tied to utilizing and capitalizing on strengths has been widely promoted, from the late business guru Peter Drucker (1993) to the best-selling business writer and Gallop researcher Tom Rath. In recent

Gallop research conducted by Rath (2008), a study found that when companies focus on their employee's strengths, the odds of the employee being engaged in their work goes up eightfold. He further found, that this engagement translates into substantial gains to the company's profitability as well as increased employee wellbeing. Increases in wellbeing, in turn, has been linked to numerous positive outcomes, including improved decision making. Studies suggest that as long as the task is meaningful, interesting or important to the decision maker, positive emotion, created by strengths use or other means, leads to decision making that is more efficient and more thorough (Isen, 2001).

In an effort to create a common language to discuss, study and cultivate people's strengths, Peterson and Seligman (2004) published *Character Strengths and Virtues*. This handbook describes twenty-four strengths in six categories that give researchers and laypeople alike, a common lexicon and system of classification that will further the study and application of strengths and wellbeing (see Appendix 1).

In the interest of further promoting the study and application of wellbeing, several models of what it means to be flourishing have been created and studied. One early model proposed that wellbeing was comprised of six factors: a positive attitude towards the self, growth and development, balance, autonomy, realistic perceptions and environmental mastery (Jahoda, 1958). A more recent model of wellbeing is one proposed by the social psychologist, Jonathan Haidt (2006). In making the case for his model, he describes three approaches to wellbeing. The first approach posits that wellbeing comes from within us and that it can be found by practicing intellectual reflection and detachment and accepting that the world will not conform to our desires. This approach is consistent with some of the ancient sages like Buddha and Epictetus. The second, seemingly contrary approach, states that wellbeing comes from outside of the self,

proposing that a life of calm nonstriving or emotional indifference, while avoiding pain, also eliminates the passion that makes us human and alive. Finally, Haidt proposes a third alternative and states that true wellbeing comes both from within an individual and outside of the individual. To flourish one needs to have coherence among the various parts and levels of one's personality. Additionally, flourishing individuals need other people to love, challenging and engaging work to pursue and a relationship or attachment to something larger than the self.

One of the most widely accepted views on wellbeing is that offered by Seligman. Seligman's (2011) concept of wellbeing, proposes a mnemonic known as PERMA, which stands for Positive emotion, Engagement, positive Relationships, Meaning and Achievement. In Seligman's theory, each element of wellbeing must itself have three properties to count as an element: First, it must contribute to wellbeing. Second, it must be pursued for its own sake, not merely to get any of the other elements. Third, it must be defined and measured independently of the other elements. Positive emotions, also termed "the pleasant life" by Seligman (2011), includes pleasant or desirable situational responses ranging from simple contentment to joy and love (Cohn & Fredrickson, 2009). Engagement describes a situation when one is completely absorbed in the present moment and the experience of the activity being performed is so rewarding, that the end goal is often an excuse for the process (Nakamura & Csikszentmihalyi, 2009). Virtually every modern model of well-being, including Seligman's, recognizes the importance of relationships to psychological health and flourishing (Hone, 2014). The importance of our relationships with others is so important to positive psychological health that when asked to succinctly summarize the entire field and study of positive psychology, one of the founding fathers in the field, psychologist Chris Peterson, summed it up in three words, "other people matter" (Peterson, 2006, p.249). Seligman (2011) defines meaning as belonging to or

serving something bigger than the self. Psychologist Michael Steger (2009) describes meaning as people's beliefs that their lives are significant and that they transcend the fleeting present.

Finally, Seligman (2011) states his final component of flourishing, accomplishment or achievement, also known as success, winning or mastery, is pursued for its own sake and not for any of the other elements of flourishing.

Four of the five PERMA components are intimately related to the process of better decision making. Positive emotion, Engagement, Relationships (through collaboration) and Meaning, all improve our ability to make decisions and will be discussed more fully in subsequent sections of this paper.

Although positive psychology has its supporters, it also has its detractors. One of the main critiques of positive psychology in general, is that it is disproportionately focused on the individual person, rather than considering the wellbeing of social groups or organizations (Diener, 2009). The PERMA model, for example, focuses almost exclusively on the self. One popular model that addresses the issue of being inordinately individual-focused, is Tom Rath's model of wellbeing, encompassing five domains of life. Rath (2010) believes that wellbeing is a function of combining and balancing our love for what we do (career), the quality of our relationships (social), the security of our finances (financial) the vibrancy of our physical health (physical) and the pride we take in our communities (community). Rath's model acknowledges the part other people play in our wellbeing, as you need a society in which to live, not only to have positive social relationships, but also to build a career, attain financial security and thrive in a community. On the other hand, the PERMA model focuses more on internal, individual states such as positive emotions, meaning and achievement. In this way, Rath's model integrates and

recognizes the connections between individual wellbeing and the wellbeing of groups, communities and society at large.

While there are many models of wellbeing, each of them has their strengths and their weaknesses. However, with each new model that is created and debated, the field of positive psychology advances, and we become better informed and equipped to assist people in their pursuit of improved wellbeing. As Seligman and Csikszentmihalyi (2000) state, the advancement in the field of positive psychology will allow psychologists to learn how to build the qualities that help individuals and communities, not just endure and survive, but also to flourish.

One of the abilities that can help people to truly flourish and not just endure or survive is their ability to make good decisions. We are largely a product of all the individual and collective decisions we make in our lives. We can make decisions that lead us down the path toward flourishing, arguably the right path for most of us, or we can make decisions that lead us somewhere else. According to the psychologist Chris Peterson (2006), positive psychology is the scientific study of what goes right in life. Positive psychology can therefore help us better understand the "right" things in life such as the "right" decisions to make and how to make them to help us lead flourishing lives.

Decision Making

Decision making involves evaluating and selecting one or more courses of action from a larger set of options that ultimately leads to a satisfying outcome for a specific individual (Yates, 2003). Decision making is a vital life skill that is important to every domain of life and utilized every day, multiple times a day. According to Yates and Tschirhart (2006) there are many kinds of decisions that we make every day including choices, acceptances or rejections, evaluations

and constructions. Choices involve selecting one or more options from a larger set of courses of action (e.g. what career path to pursue). Acceptance or rejection is a type of binary choice where only one option is selected from a group of two potential courses of action (e.g. accept or reject that new job offer). Evaluations are statements of value supported by a course of action (e.g. how much are you willing to pay for that new car). Finally, constructions are complex problems that require many decisions to arrive at a satisfactory resolution and can therefore include many choices, binary choices and evaluations (e.g. deciding on the amount of your household budget and where to allocate the funds). All of these different types of decisions can be broken down into smaller constituent parts or steps in what psychologists call decision analysis (Keeney, 2004). In decision analysis, decisions are typically broken down into four steps (Raiffa, 1968, Kirkwood, 1997, Clemen & Reilly, 2001). In step one we define the problem to be addressed, generate objectives to be met and create alternative approaches. Step two involves anticipating the consequences of the various alternatives and describing how well they satisfy the objectives. In step three we measure the alternatives relative to the objectives. Finally, in step four we compare and evaluate the various alternative measures and choose or decide on the one that best solves our problem. Breaking down decisions in this way allows us to better understand the process involved and allows us to utilize some decision making theories and tools in an effort to improve our decision(s).

Although many of us learn our decision making ability simply through the trials and errors of our everyday existence, there are decision making theories and formalized decision making tools that can be utilized and applied to the decision making process in an effort to improve our decision making and contribute to more consistent positive outcomes. According to Jonassen (2012) there are two major constructs of decision making, normative and naturalistic.

Normative theories of decision making assume that decision makers are rational people that evaluate and choose the optimal decision choice that maximizes value. These theories are prescriptive in nature in that they specify and recommend how people should decide based on directives or rules. Numerous decision making tools have been developed based on the idea that people make rational decision. Rationally based decision making tools include decision matrices, SWOT analysis and force field analysis to name a few.

Decision matrices are graphically displayed decision making tools with various decision options in a table format (Jonassen, 2012). In a decision matrix options are displayed in rows and decision criteria are displayed in columns. For example, in choosing a car one might display sedan, sports car and minivan in the rows, and gas mileage, number of seats, price, fun to drive, and safety might be displayed in the columns with various weights assigned to each column. After assigning value to each of the categories a quantitative answer reveals the best decision, the car choice that optimized value. Another rationally based decision tool is the SWOT analysis (Armstrong, 1982). A SWOT analysis is typically displayed in a two by two table and evaluates the strengths, weaknesses, opportunities and threats an issue, situation or business proposal may encounter. In this, a SWOT analysis helps us to examine both positive and negative aspects of the situation as well as external and internal forces that could influence the situation and outcome. Developed by social psychologist Lewin (1943), force field analysis is another kind of rational decision making tool. In a force field analysis the individual lists the decision or change to be considered in the middle or at the top of the page and then lists and examines the forces for the decision (pro) in a column on one side and lists and examines the forces against a particular decision (con) in a column on the other side. This tool can be very helpful as it forces the

decision maker to carefully consider and in a sense argue for the pros and cons of a particular decision.

While normative decision making theories work well "in theory" they rely on the specious argument that people react rationally, carefully analyzing the utility of each alternative to optimize value when making decisions. In fact, people frequently make decisions that defy rationality. Influenced by their emotions and biases, they often prefer options with lesser value and greater certainty (Plous, 1993), commonly satisficing rather than optimizing their outcomes (Simon, 1957). "Although normative decision theorists prescribe invariant and regular decision-making processes, human decision makers rarely, if ever, exhibit them" (Rettinger & Hastie, 2001, 338-339). For example, suppose you were offered the following two choices, would you rather receive \$100, or have me flip a coin giving you a 50% chance of receiving \$200 and a 50% chance of receiving nothing. If you are a rational decision maker you should be indifferent to these two choices. However, research shows that most people choose the sure thing of receiving \$100 (Schwartz, 2004). While this is a simplistic scenario, the effects of making irrational choices are extremely prevalent and impactful, affecting the way we make decisions on a daily basis. In one study of business students investing in mutual funds, researchers discovered that contrary to their educational training to the contrary, participants were more likely to shift their portfolio allocation following poorer performance than following better performance, and this tendency had a negative impact on portfolio returns (Moore, Kurtzberg, Fox, & Bazerman, 1999).

Contrary to normative theories, naturalistic decision theories are descriptive in nature and are based on empirical studies of how people actually make decisions in the real world. Naturalistic approaches to decision making recognize the importance of placing the decision and

the decision maker in context. They acknowledge and address the contributions that specific narratives, individual identities and unconscious emotions play in the decision making process (Jonassen, 2012).

Rather than objectively and quantitatively comparing options, people frequently create explanations of decisions in the form of stories about possible decision outcomes. These mental simulations are covert, mental visualizations of different possible decision stories and outcomes. The most compelling story one can think of about the future outcome of the situation, will be most influential on the decision. This type of mental visualization is often used in athletic endeavors. In one study (Rodgers, Hall, & Buckolz, 1991), a group of figure skaters were taught to use visualization techniques over a sixteen week period. Before and after workouts, the group would visualize themselves flawlessly executing difficult jumps and winning competitions. Results suggest that compared to a control group, those skaters that became better at these mental simulations, also became more successful at completing their program elements, especially the more difficult ones. Although useful for rehearsing physical performances, there is research suggesting that this type of mental visualization may actually be more effective for cognitive tasks such as decision making (Driskell, Copper, & Moran, 1994).

Describing an issue and some potential solutions in story form can be extremely helpful to ourselves and others. In one study, researchers found that jurors were twice as likely to find a defendant guilty when the prosecutor's evidence was presented in story form and the defense's evidence was not (Pennington & Hastie, 1988). Moreover, the jurors rated all evidence higher when presented in story form, implying that creating a compelling narrative can help in the comprehension of a situation and possibly effect a subsequent decision.

Personal identities and unconscious drivers also play significant roles in the decision making process (Jonassen, 2012). Personal identities affect decision making by confronting the individual with questions such as "what type of person am I" and "what would a person like me decide in this situation"? This self-identified personality, molded by social norms, influences how the individual views themselves and ultimately affects the decision to be made. Just as each of us are burdened with certain weaknesses, we are also endowed with specific strengths, both of which contribute to our personal identities. A corollary to this is that by focusing on what we do best, applying the full force of our strengths to a particular situation, we may improve the chances that our decision is optimal in the given situation. Additionally, since our personal identities are shaped by our values, they determine what we view as important in our lives. It follows then, that if we deem something important, such as the result of a particular decision, we might invest more of our cognitive resources into that decision in an effort to generate an optimal outcome. In this way, focusing on our strengths as well as being engaged in and truly caring about the outcome of a decision, we might improve the decision and concomitant result.

While determining how one identifies oneself is significant, according to Brooks (2011), the most important factor influencing any naturalistic approach to decision making is the unconscious. Rational models ignore the practical fact that decisions are value-based, where values derive from our emotions and guide our choices (Brooks, 2011). In this way, our emotions are not separate and distinct from reasoning, but are an integral part of reasoning. Unfortunately, with our emotions come unconscious biases that can have a negative effect on our decisions. There are at least two practical ways to combat the negative effects of cognitive biases in our decision making. First we can collaborate with others on a particular decision. Just as each individual brings specific and separate combinations of strengths to a decision, each

individual also brings specific and distinct biases. As additional decision makers are added and contribute to the decision making process, we reduce the chance that an individual bias will be shared within a group and therefore be unconsciously utilized in reaching a decision. Second, it is this awareness of a particular bias that positively influences the decision to be made. While collaborating in a decision is a useful way to identify potential biases, collaboration is not always practical or possible. However, through studying and identifying biases in others, we are more likely to identify and accept them in ourselves. Knowing we possess a particular bias should help us to determine if the bias we are applying to a particular situation is acting as an efficient cognitive "shortcut " or heuristic, or is instead impeding or otherwise negatively influencing the decision making process.

Making Better Decisions

In the pages that follow, I will address four specific concepts that can improve our ability to make better decisions. First I will focus on how leveraging our strengths instead of focusing on our weaknesses leads to a culture that emboldens people to take appropriate risks and encourages them to focus on the opportunities in change. Next I will discuss how having positive, high quality relationships creates a supportive workplace that attracts and retains talent and fosters collaboration. I will then explain how being engaged in what we do, finding meaning in our work and recognizing and acknowledging the role emotions play in our lives can all positively affect our decision making abilities. Finally, I will discuss how all of us utilize decision making short cuts called heuristics that often serve us well but can sometimes lead to unhelpful biases. I will describe some of the most common heuristics people use and the

potential biases they produce and offer some suggestions on how we can overcome these biases, when appropriate, to make the best decisions possible.

Better Decisions Are Made When We Capitalize on our Strengths

To make strengths productive is the unique purpose of organization. It cannot, of course, overcome the weaknesses with which each of us is abundantly endowed. But it can make them irrelevant. Its task is to use the strength of each man as a building block for joint performance. (Drucker, 1967, p. 60)

Better decisions are made when we leverage and capitalize on our strengths instead of simply focusing on trying to mitigate or eliminate our decision making weaknesses. When we focus on our strengths instead of our failures, we simply learn more (Dye, 2009). I recently returned from a business trip and upon checking out of the hotel I was asked by the hotel manager, "how was your stay?". After I uttered a perfunctory, "fine" he followed up with "is there anything we could improve upon to make your stay better?" With this second question my mind immediately began searching for errors their staff made or problems with my room, the lobby, or the food. I began looking for the negative in my stay at the hotel. While the manager's question was offered in an effort to improve the hotel experience for their guests, it addressed only a portion of my experience, the negative portion. Far too often we focus on what is wrong and how to fix it and forget to look at what is right. By examining all that went well with my stay, the manager might be able to understand what is important to his guests, what his hotel's strengths are versus his competition and insure that the next guest experiences the same positive experiences that I experienced. Fixing problems is important, but this heavily weighted deficit based mindset plagues many aspects of our lives including our decision making. Far too often

we focus on improving the problems in our decision making abilities and forget to consider the strengths that we possess that contribute positively to our ability to make the best decisions.

Until the relatively recent introduction of positive psychology, psychology had this deficit based focus. In his book, *Motivation and Personality*, Abraham Maslow (1954) stated that:

The science of psychology has been far more successful on the negative than the positive side. It has revealed to us much about man's shortcomings, his illnesses, his sins, but little about his potentialities, his virtues, his achievable aspirations, or his full psychological height. It is as if psychology has voluntarily restricted itself to only half its rightful jurisdiction, the darker, meaner half. (p. 354)

The individual decisions we make every day build upon each other and largely determine our success or failure. Our performance, therefore, is arguably the compounded effect of all of our decisions. The field of positive psychology turns the traditional psychological model on its head and focuses on leveraging our strengths to improve various aspects of our lives, including our ability to make good decisions. This is not to say we should ignore our weaknesses or what might be wrong in a situation, it merely poses another perspective in a given situation that can lead to significant improvements. Recent research supports the idea that focusing not on fixing our weaknesses but instead on leveraging our strengths can lead to better performance and by implication, better decisions. The Corporate Leadership Council recently conducted research with a sample of more than 19,000 employees and found that a focus on performance strengths enhanced performance by 36.4%, and a focus on personality strengths enhanced performance by 21.3%. In contrast, a focus on performance or personality weaknesses both lead to declines in performance (SHRM, 2008). Although few organizations have implemented a strengths-based focus throughout the entire corporation, there is growing evidence that doing so can create not

only better decision making abilities but other significant positive changes, such as: tapping into unused talent, improved individual performance, attracting and retaining the best people, enhanced employee engagement, increased flexibility, enhanced working relations and stronger teams (Page & Carter, 2009). Additionally, researchers at Gallup (Asplund, 2009) recently demonstrated that investing in employee's strengths development results in significant financial returns. The Gallup study included an estimated 90,000 employees in 900 business units, from 11 different organizations representing five different industries. In addition to large increases in employee engagement, teams whose managers received an intervention focused on strengths, subsequently produced productivity measures that were 12.5% better than teams that did not receive the intervention and profitability measures that were 8.9% higher than teams that did not receive such an intervention. Moreover, individual employees who were taught how to focus on applying their strengths in their jobs, were 14.9% less likely to quit, than employees who did not receive such training (Asplund, 2009).

So if focusing on our strengths can lead to improved performance as well as so many other positive changes in the individual and the organization, how do we identify, define, and focus on our strengths in an effort to specifically improve our decision making? Historically, this would have been very difficult, but recent research and the subsequent publication of a strengths manual has made this task much easier. Unfortunately, people tend to focus disproportionately on the reduction of the negative in life, to the detriment, and the attention to and enhancement of, the positive (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). This has been especially true in the field of psychology. Over the last century, great improvements have been made in understanding, treating and preventing psychological disorders (Peterson & Seligman, 2004). Partially responsible for this progress was the publication of the *Diagnostic*

and Statistical Manual of Mental Disorders (DSM). This seminal treatise focuses on the negative side of mental health or illness in as much as it identifies, defines and categorizes mental disorders and diseases. However, the DSM has allowed researchers, clinicians and the general public to communicate clearly and unambiguously and to measure, much of what is wrong with people. Historically, there had not been a comprehensive tome focused on the positive side of mental health. In answer to this, a project was launched that ultimately led to the publication of a strengths manual called *Character Strengths and Virtues: A Handbook and Classifications (CSV)* (Peterson & Seligman, 2004). The CSV finally provided the common language necessary to advance the study and application of strengths to assist in performance improvement in various domains of life, including our ability to make better decisions. The CSV is a list of 24 strengths arranged within six overarching virtues (see Appendix 1). While not the final word in what constitutes a strength or virtue, the CSV is arguably the most exhaustively researched compendium of strengths that were specifically selected for their consistency across both time and location. The classification of strengths by the CSV is the result of a three-year project reviewing the best thinking on virtue and positive human qualities in philosophy, ethics, moral education, psychology, and theology over the past 2500 years. The authors surveyed more than 150,000 people and took into consideration various philosophies and ideologies including the works of Aristotle, Benjamin Franklin, and King Charlemagne as well as the principles of such organizations as the Boy Scouts and Girl Scouts and the tenets of the major world religions (Peterson & Seligman, 2004).

The CSV now allows for clearer communication surrounding what strengths are most universally valued. Additionally, through a series of simple questions that can be answered online, the subsequently created VIA survey allows for the accurate measurement and classification

of an individual's 24 strengths. Studies derived from VIA survey data have shown that people who use their strengths experience less stress (Wood, 2011) and were more likely to achieve their goals (Linley, 2010). Many other studies have been done using VIA data and many individuals have gained insight into how to leverage their strengths to attain higher levels of wellbeing, achieve their goals and be more effective, possibly through better decision making.

There are some strengths that have a direct link to better decision making. Curiosity, for example, has been specifically shown to facilitate complex decision making (Kreitler, Kreitler, & Zigler, 1974). Other strengths tied to decision making include wisdom/perspective and prudence. We need only look at their definitions to understand their contribution to the decision making process. For example, Peterson and Seligman (2004) define wisdom as representing a superior level of knowledge and judgment that is used for the good of oneself and that of others, and define prudence as a cognitive orientation to the future, a form of practical reasoning and self-management that contributes to the achievement of long term goals. It is easy to imagine utilizing these strengths when we make a decision.

Other strengths such as open-mindedness and hopefulness have less of a direct tie to decision making, but appear to be more helpful to the process when the strength is broken down into such constituent parts. Open-mindedness can be broken down into and clarified as judgment and critical thinking and future orientation is listed as an integral part of hopefulness. Specifically referring to open-mindedness, Yale psychologist Irving Janis (1982) argues that a lack of open-mindedness, or succumbing to what he called "groupthink", was responsible for United States foreign policy failures such as the invasion of the Bay of Pigs in Cuba. Janis asserted that groups could improve their decision making abilities by assigning individuals to act

as devil's advocates, arguing against the prevailing opinions of the group in an attempt to open the minds of all present.

Still other strengths become important when considered in a specific context. Resilience can be vitally important in decision making after an individual or an organization has experienced a significant setback. As an example, resilience would be necessary to bounce back and make a good decision subsequent to making a poor decision or simply a decision that ultimately produced poor results. While focusing on and improving our resiliency should improve our decision making abilities in a general sense, according to psychologists Karen Reivich and Andrew Shatte (2002) resilience is essential when making quick and tough decisions in moments of chaos. Recent research supports the part resilience plays in better decision outcomes. To study resilience, scientists used a stressful task that involved twenty rounds of risky investment choices (Xing & Sun, 2013). The study found that psychological resilience could indeed help explain the study participants enhanced outcomes, including experiencing more positive emotions and embracing higher return, higher risk investments, despite being subject to continuing stressful stimuli.

Although Peterson & Seligman (2004) state that character strengths are relatively stable, they stress that they are influenced by an individual's setting and can be developed and changed. Therefore, it may prove beneficial to our decision making ability to focus on developing and improving some of the character strengths most closely aligned with the decision making process. For example, it may prove beneficial to refine and hone our strength of open-mindedness and critical thinking by arguing the opposite side of a particular decision, identifying and developing a counter-argument to our initial decision. In this way we concurrently develop and apply our strength of open-mindedness to the domain of decision making. Additionally, we

could consciously consider our strength of prudence when making a decision. People high in the strength of prudence display long-term deliberative concern for the consequences of their actions and decisions and successfully resist shorter term goals at the expense of longer term ones (Peterson & Seligman, 2004). We might therefore ask ourselves a pointed question such as, "does this decision adequately value a long term objective or simply satisfy a more immediate one"? In so doing, we make a deliberate use of one of our strengths, prudence.

However, if an individual is low on these strengths an alternative approach is to focus on an individual's top strengths, whatever they may be, with an eye toward applying those strengths to make better decisions. Educational psychologist Donald Clifton was a proponent of this strengths based philosophy, asserting that people are able to gain far more when they expend their resources to build on their talents than when they spend an equal amount of resources to remediate their weaknesses (Clifton & Harter, 2003). Clifton went on to say that strengths are "naturally recurring patterns of thought, feeling, or behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257). Strengths such as courage, curiosity, love of learning or virtually any of the strengths of character could be leveraged and productively applied to the decision making process. A love of learning or curiosity could lead to extensively researching a topic upon which a decision needs to be made, theoretically improving the chances of a positive outcome. When faced with a difficult decision, possessing the strengths of courage or integrity could result in an individual being vulnerable or risking personal loss but despite these possible negative contingencies, the individual ultimately makes a decision that is congruent with their character. Utilizing the strength of humility could lead a decision maker to carefully consider the counterpoints that opponents of the decision may be making. In this way humility does not mean lacking confidence in the ability to make a good decision, instead it opens up the possibility of a

better decision by not blindly accepting one point of view but acknowledging the value others may bring to the decision making process. Similarly, applying the strength of fairness can result in a better decision outcome. By definition, fairness means not letting personal feelings unjustifiably bias your decisions.

Finding a new way to use your top strengths to make better decisions can not only offer a new and perhaps unique perspective to the decision making process but has the added benefit of making you happier and less depressed (Gander, Proyer, Ruch, & Wyss, 2012). Additionally, if you are able to utilize four or more of your strengths in your daily work, possibly in the decision making process, studies have shown that you will have a more positive work experience and are more likely to view your job as a calling and not simply as a job where the main motivation is financial reward (Harzer & Ruch, 2012). Finally, those individuals who have the opportunity to utilize their strengths on their job are six times as likely to be engaged in their jobs and more than three times as likely to report having an excellent quality of life (Rath, 2007).

Although there is ample research demonstrating the various benefits derived from utilizing our strengths more consistently, more research is needed to specifically investigate how leveraging our strengths might result in better decision outcomes. Capitalizing on our strengths in an effort to make better decisions, should theoretically be an excellent way for the individual to improve their decision making ability. However, despite our best efforts we make on our own, sometimes the individual may need help in making the best decision. In these situations it's important to remember that better decisions are made when we collaborate with others.

Better Decisions Are Made When We Collaborate With Others

Although sometimes it is necessary to make decisions on our own, we often have the opportunity to collaborate with others in an effort to arrive at a better decision. Collaboration refers to the degree of cooperation among individuals who seek to achieve a common goal and includes such things as communication and coordination of actions to achieve the goal (Gratton & Erickson, 2007). As discussed in the last section, when we bring our strengths to bear on a problem we are likely to have a better outcome. Each individual is endowed with different sets of strengths and therefore bringing together two or more individuals and their respective strengths should positively impact the quality of a decision to be made. We have all worked in groups, however, that just didn't work; where the decision making process was unwieldy or even disagreeable. It is important, therefore, to study what are the various qualities of a productive, effective working relationship. In so doing we can attempt to form the types of productive relationships that lead to better collaborative decision making.

Psychologist Jane Dutton describes a specific type of positive relationship as one that includes respectful engagement, task enabling, high levels of trust, and play, something she terms a "High Quality Connection" (Dutton, 2003). Respectful engagement includes such things as affirming the other person(s) in the relationship, being fully present in the relationship and communicating and listening in a way that demonstrates an appreciation for the other person's worth. Task enabling basically means assisting others to successfully perform their tasks or responsibilities. Establishing trust in a relationship means acting toward others in a way that communicates a belief in the other person's integrity (consistency between thought and behavior), demonstrating your dependability (your honesty and reliability) as well as your benevolence (desire and willingness to care)(Holmes & Rempel, 1989). Finally, play encourages

people to actively engage with each other in a structured, fun way that reduces stress and allows people to see and know each other in a different way compared to their typical working relationship (Stevens, Heaphy & Dutton, 2009). Establishing strong relationships, as Dutton describes, ensures that collaborative decision making is optimized. There is evidence to suggest that respectfully engaging with others, facilitating their task accomplishments, building trust and playfully engaging, improves individual functioning, including decision making, through improved cognitive, physiological and behavioral processes (Stevens et al., 2009). Moreover, these quality relationships don't necessarily need to be deep or intimate nor do they need to develop over long periods of time with extensive interaction (Dutton, 2003). Research suggests that even small amounts of interaction with others can improve both person's cognitive performance in terms of speed of processing and working memory performance (Ybarra et al., 2008), both of which can be highly beneficial to good decision making. Establishing these high quality relationships can help individual employees recover more quickly after undergoing transitions in their careers (Ibarra, 2003) or adapt more quickly when they need help completing specific tasks (Venkataramani & Dalal, 2007). There is also evidence suggesting that the trust associated with these types of relationships can increase the cooperation that is vital to collaborative decision making (Ferrin, Bligh, & Kohles, 2008) as well as the overall organizational processes involved, such as coordination (Gittell, 2003) and error detection (Vogus, 2004).

Dutton (2003) points out that high quality connections do not require extensive interaction but can be made in an instant. One email exchange, one moment connecting in a meeting, as long as there is mutual regard, trust and active engagement on both sides, a high quality connection can be established. While establishing a high quality connection can be done

in an instant, sometimes those connections develop over time into a true friendship. This longitudinal relationship can be extremely important not only to the individuals involved in the relationship but to the overall organization where those friends work. A recent Gallup study revealed that only 30% of employees have a best friend at work (Christakis & Fowler, 2009). However, those that do are seven times as likely to be engaged in their jobs, are better at engaging their customers, produce higher quality work, have higher wellbeing and are less likely to get injured on the job. The study also showed that those that did not have a best friend at work had just a one in twelve chance of being engaged in their work.

Often times we make collaborative decisions as part of an on-going, formal team, charged with solving a particular problem or providing ongoing services to a client. Alternatively, we may work on a specific project team that is formed for a finite time and again charged with arriving at a particular decision. However, many collaborative decisions are made more informally, for example, one employee asking another employee for help or to offer their opinion on an issue or problem. To optimize collaborative decision making, it is important to create a collaborative culture, that works not only in a formalized team setting, but that encourages employees to give freely to other employees of their time and expertise. In his book *Give and Take*, psychologist Adam Grant (2013) states that when we interact with another person at work we have a choice to make, do we try to get as much value as we can, or do we contribute value without worrying about what we receive in return. Grant categorizes people into three groups, givers, takers and matchers. Takers like to get more than they give, givers like to give more than they get and matchers attempt to preserve the balance between how much they give and how much they get. While it is possible to shift one reciprocity style for another, evidence shows that the vast majority of people at work develop a primary reciprocity style

which captures how they approach most of the people most of the time, and this style can play as much of a role in success as hard work, talent and luck (Grant, 2013). The key to creating a culture that fosters collaborative decision making is to fill that culture with as many givers and matchers as possible and minimize the takers. The reason we want more givers is that givers are not only more willing to offer their help and opinions to others without expecting anything in return, but are also more receptive to expertise from others, arriving at a better decision through collaboration, even if the other person's view challenges their belief (Grant, 2013). Matchers tend to only give when they can get something in return, so they may give once but when they attempt to call in their "payback" other givers and other matchers will reciprocate, however takers likely will not. Unlike givers, matchers are more likely to shut down the takers and expose them for what they are, in this way matchers protect givers from takers, thereby maintaining a collaborative culture. So why not have a culture of matchers? As it turns out, research shows that givers are willing to work harder and longer than takers and matchers, continuing to exert effort toward the goal out of a responsibility to the team (Grant, 2008). If the goal is to arrive at the best decision possible, it follows that givers will work tirelessly to achieve this outcome. As takers are driven by self-interest, it would be counterproductive in attempting to create a culture of collaborative decision making to populate that culture with takers.

Although takers can be quite successful in their own right, when they are successful, they typically have attained that success by selfishly promoting themselves to the exclusion of others and possibly contrary to the best interests of the company overall. Unlike givers, who bring out the best in those around them, takers "drain intelligence, energy and capability from others" (Wiseman & Mckeown, 2010, p. 84). Unfortunately, many Americans idolize the lone taker who creates wealth, power and fame for themselves, viewing independence as a sign of strength,

and interdependence as a sign of weakness (Hamedani, Markus, & Fu, 2011). Givers reject the idea that interdependence is weak. Instead, givers are likely to view interdependence as a sign of strength, a way to combine the abilities and decision making skills of multiple people to arrive at the greater good (Grant, 2013). In this way, givers are ideal collaborators, recognizing the benefits of working interdependently and synergistically.

While it might seem naïve or wishful thinking that a company could populate itself with givers, as it turns out, presented with the choice, most people would prefer to be givers (Schwartz & Bardi, 2001). Research generated from representative samples in countries around the world (Australia, Chile, Finland, France, Germany, Israel, Malaysia, the Netherlands, South Africa, Spain and the United States) revealed that most people rated giving as their most important value. Giving rated higher than freedom, tradition, security, power, achievement, excitement, conformity and pleasure. In fact this was true in more than seventy different countries around the world (Schwartz & Bardi, 2001). Giver values top the list for guiding principles for most people in most countries. If this is the case, then why do people often act as takers in the business environment? Research shows that people who prefer to give or match often feel pressured to act as a taker for fear of being exploited by other takers (Miller, 1999). The fear of being taken advantage of is so severe that Cornell economist Robert Frank writes, "by encouraging us to expect the worst in others it brings out the worst in us: dreading the role of the chump, we are often loath to heed our nobler instincts" (Frank, 1988).

Given the pressure to act as takers, how can we create a giving culture? The best way to create an environment wherein employees selflessly help each other and collaborate in an effort to make the best decisions possible is to encourage, recognize and even reward giver behavior. Givers often go unrecognized by management, quietly working to support and advance their

teams. In an effort to combat this, many companies have instituted peer recognition programs. These programs have been growing in popularity. A recent Mercer study found that 25% of large companies had peer recognition programs in 2001. By 2006 that number had grown to 35% (Corporate Executive Board, 2006). Additionally, management can encourage employees to seek help more often, letting employees know that asking for assistance will not be viewed as a sign of weakness but rather a sign of strength and intelligence and a recognition of the benefits of collaborative decision making. If you want people to be givers, the simplest way to achieve this is to have employees ask each other for help. As we have seen, many people would like to be givers and in asking them for a simple favor such as their opinion on a decision that must be made, you are giving that person the opportunity to express their value of giving and in the process to feel valued (Grant, 2013).

Better Decisions Are Made When We Truly Care About the Outcome

Having meaning in life enables people to organize and interpret their various life experiences, to identify the things that truly matter to them, to understand their own worth and place in life and to efficiently and effectively direct their energies (Steger, 2009). In this way, finding meaning in an issue, situation or problem and therefore caring about the outcome, may be able to help us direct our energies to make the best decisions, the decisions that are congruent with what we deem significant and worthy of our time and resources. An employee can view a client interaction as simply a means to a sale that contributes to his company's revenues and potentially his own pay. Alternatively, an employee can view a client interaction as an opportunity to help another person, to solve an interesting problem or overcome a challenge, to

advance and deepen a personal relationship with another. The meaning we assign to experiences can either enhance or diminish our decision making abilities, and at the same time, significantly affect our overall view of our work. The psychologist Amy Wrzesniewski (2009) states that there are three dominant orientations toward work that people hold. The first orientation is viewing their work as a job. In this case an individual's work is simply a means to an end that allows the person to enjoy their time away from work. Any meaning and enjoyment in life would be typically experienced outside of their work. The second orientation is when people view their work as a career. For those with a career orientation their work offers an opportunity for rewards that accompany advancement through the organization. Increased pay, prestige and power that come with promotion and advancement are the dominant focuses of people with a career orientation. Finally, those with a calling orientation work not for the status or financial rewards, but for the fulfillment that doing the work brings. In callings, the work is an end in itself, it brings meaning and purpose to the individual's life. People who view their work as a calling care about the outcomes that result from their decisions at work because the decisions they make are made not for the financial benefit they may bring to the individual (job) or the individual advancement or recognition that may result (career), but instead, people with a calling orientation make their decisions with the ultimate goal of having the best long term outcome congruent with their values and those of the company. To foster a culture of better decision making we would ideally populate a company full of people who view their work as a calling, but many people do not have the opportunity or ability to find, enact or create their calling (Berg, Grant, & Johnson, 2010). However, each individual does have a relationship to their work that has meaning and the potential to increase the meaning or purpose their work holds in their lives (Wrzesniewski, 2009). According to Seligman (2011) creating meaning in our lives or work

involves belonging to or serving something greater than the self. Therefore, if employees can see how their work benefits not only themselves but others they will have more meaning in their work and lives overall. If employees can realize the part their work, values and goals play in the overall pursuit and attainment of company goals and values, they will experience more meaning in their lives. By increasing the level of purpose or meaning one holds in their work, we likely increase the concern or care they have about the outcomes of their work, including the individual decisions they make that collectively determine those outcomes. Therefore, it is likely that when a decision outcome truly means something to us, we will work harder and longer to attain a better, more satisfying outcome.

Separate but related to the idea of finding meaning in our work is the idea of being engaged in our work. The two concepts are related in that people who express having meaning in their lives are more likely to be engaged in their work (Bonebright, Clay, & Ankenmann, 2000). Psychologists Rothbard and Patil (2009) describe work engagement as the level of psychological presence one has in their work role, or simply "being there". It is the level of an individual's absorption in what they are doing, their focus of attention and their available energy directed toward work-related tasks. As our work tasks and their outcomes are largely a product of our decisions, it follows that if we are directing all of our available energy toward an issue, are focused on and absorbed in what we are doing, we should make better decisions resulting in better overall job performance. In fact, there is significant research linking this sort of employee engagement to improved work outcomes. For example, being engaged in a role is believed to lead individuals to perform their work tasks in a way that better supports organizational effectiveness (Saks, 2008), and there is evidence suggesting that engagement leads people to do what they are supposed to do in their roles better (Bakker & Demerouti, 2008). Other research

indicates that engaged employees partake in discretionary behaviors beyond what they are supposed to do in their roles (Macey & Schneider, 2008). Additional positive outcomes from having an engaged workforce include enhanced overall client-related performance (Salanova et al., 2005), client satisfaction (Bakker & Demerouti, 2008), improved employee retention and increased revenues and profits (Harter, Schmidt, & Hayes, 2002) and employees that are more responsive and adaptive to change (Griffen, Parker, & Neal, 2008). While additional research is needed to explore the potential link that better decision making makes between engaged employees and positive outcomes, we know from existing research that engaged employees direct more time and effort to the task at hand and this engagement produces numerous positive outcomes, some of which could be the result of a better decision making process.

How then do we improve employee engagement. Stairs (2005) argues for two ways to drive employee engagement. The first way is to create a culture where employees find their work meaningful, that is, they believe they are making a valuable contribution to the larger company goals. One way to do this is to clearly communicate how an individual employee's goals contributes to the company goals and give consistent, on-going feedback to employees on how their efforts are helping the company progress towards reaching its larger objectives. Second, create a culture with a strong organizational identity that connects with the employees' sense of social identity and belonging. Creating a strong corporate identity is not easy nor does it come quickly. Employees must understand the culture and why it's important and leaders can drive this understanding by continuous, unambiguous communication of the corporate values, goals and mission. Finally, as we have discussed previously, creating a culture wherein employees can consistently utilize their strengths increases both productivity as well as employee engagement (Lopez & Ackerman, 2009).

A strong corporate culture engenders a sense of belonging and striving for common goals, congruent with deeper held values. However, even in the strongest of cultures, individualism is present, manifested by differing ideas, beliefs and understandings. The fact that we are all unique in this way can prove very beneficial to our decision making ability through the application of unique strengths and collaboration with those possessing different, contrary or complementary strengths. However, just as each of us is endowed with a unique set of strengths, and abilities we also possess a unique set of preferences or biases that can influence our decisions.

Better Decision Making: Cognitive Bias

Each of us are faced with making hundreds or even thousands of decisions every day, some large and important and some relatively small and seemingly inconsequential. If we have jobs in the professional services sector, providing information and counsel to our clients, we are probably on the higher end of this decision making spectrum. While the speed of our decision making is always a significant factor, we need to strike a balance between on the one hand, gathering and evaluating an adequate amount of information and subsequently making the best decisions we can, with on the other hand, communicating our decision and taking appropriate action in a timely fashion. In order to make all these relatively quick decisions, humans have evolved to use mental short cuts, also known as heuristics or "rules of thumb"(Schwartz, 2004). The definition of heuristic is a simple procedure that helps us find adequate, though often imperfect, answers to difficult questions. The word comes from the same root word as eureka, an interjection uttered in excitement at the discovery of a solution (Kahneman, 2011). These mental short cuts were adaptive, allowing early man to quickly recognize objects, orient attention

and avoid threats in their environment, but while making a quick decision could literally be a matter of life and death for our ancestors, much of modern man's decision making is undertaken in a larger temporal context where we have the luxury of evaluating more completely the available data and making decisions in minutes, days or even longer. This is not to say that mental shortcuts are not still valuable, but rather that we need to recognize that sometimes these shortcuts serve us well and sometimes they create cognitive biases that lead to poor or inferior decisions. Biases are preferences or inclinations that can be irrational and therefore detract from our ability to make the best decisions based on an impartial evaluation and interpretation of the information available (Vaughan, 1936).

In this section I will discuss several cognitive biases. It will begin with a discussion on what they are and some ideas on why we make them. I will offer some examples of these biases as well as provide some thoughts on how we might approach or overcome these biases to contribute to better decisions and outcomes. Focusing on these biases does not suggest that they should be always be eliminated or are always harmful. As we make decisions, often our intuitions serve us well, however this is not always the case. Becoming aware of our biases and learning ways to recognize when our intuition is helpful and when it may be harmful is extremely important to making better decisions.

Anchoring

Definition: The anchoring effect occurs when people are unduly influenced by an initially presented value, and therefore make judgments that are biased toward that initial value. Essentially, what happens in the anchoring effect is that the estimates people make when trying to determine an unknown value (e.g. the length of the Mississippi) stay close to the number or

figure that was suggested for consideration (e.g. 1,000 miles), also known as the anchor number (McElroy & Dowd, 2007). **Everyday example:** For example, if you are shopping for a new car, you will be influenced by the price listed for the car. In a general sense, a high list price will cause you to value the car higher than a low list price, even if you are determined to resist the influence the anchoring effect has on your judgment. **Study Example:** In an example of this, visitors to a museum in San Francisco were asked two questions: Is the height of the tallest redwood more or less than 1,200 feet? What is your best guess about the height of the tallest redwood? Visitors given these two questions estimated that the height of the tallest redwood was 844 feet. Another set of visitors were given the same second question, but the first question asked: Is the height of the tallest redwood more or less than 180 feet? The second group guessed the tallest redwood to be 282 feet (Jacowitz & Kahneman, 1995). The anchoring effect in this case caused the subjects to differ by more than 664 feet in their estimate of the tallest redwood, an obviously significant difference. A helpful way to measure the often significant differences caused by the anchoring effect is utilizing a standard measure of deviation caused by the effect. The anchoring effect in this case resulted in a measure of 55%. The measure, known as the "anchoring index" is derived by dividing the difference of the guesses ($844 - 282 = 562$) by the difference in the anchors ($1,200 - 180 = 1,020$), and expressing it as a percentage (thus $562 / 1,020 = 55\%$) (Kahneman, 2011). If the anchors had no effect on the subjects' estimates the measure would be zero. If the subjects estimated the tallest redwood to be exactly equal to the two disparate anchors they were told to consider, the measure would be 100%.

In the first example above, a car's listed for sale price is arguably a relevant piece of information and one could be forgiven for being influenced by this number. Even in the redwood experiment, the subjects were asked to consider a redwood tree's height as being more

or less than a given number, suggesting the anchors were generated by someone that knew the height of a tree and considered this when they posed the questions. However, numerous studies have shown that even irrelevant and randomly generated data can induce the anchoring effect. In one of the most famous examples of this, Tversky and Kahneman (1974) asked people to estimate whether a number that resulted from the spin of a "wheel of fortune" was more or less than the percentage of African countries in the United Nations. They then asked those same people to guess the correct percentage of countries in the United Nations that are from Africa. As you might now be able to predict, people's guesses were substantially lower if they were given a low anchor number than they were if they were given a higher anchor number. In the experiment the wheel was rigged to land on either 10 or 65. If the wheel landed on 10, the subject's average estimate was 25%. If the wheel landed on 65, the subject's average estimate was 45%. Surprisingly, our judgment is often influenced by information that would rationally be thought of as irrelevant (Gilovich, Griffin, & Kahnemann, 2002). So, even though the number generated by the wheel had no relation to the question, people were influenced by the wheel's presumptively random number.

While knowledgeable people are less susceptible to basic anchoring effects (Houston, Etling & Brekke, 1996), they can still succumb to its influence. A study was done involving professional real estate agents (Northcraft & Neale, 1987). The agents were asked to review a comprehensive booklet describing a house that was for sale. The booklet included a great deal of relevant information about the house, including the listed sale price. The agents were also asked to visit the house and conduct a thorough tour. They were then requested to render their professional opinion on the reasonable buying price for the house as well as the lowest price they would accept for sale if they owned the house. When asked about the factors affecting their

judgment the asking price of the house was not mentioned as the agents considered themselves experienced real estate professionals that were able to ignore this information. In fact, they insisted that the listing price had no effect on their valuations. However, they were wrong. One set of agents was given a list price that was 12% over the actual list price and another set of agents was given a list price that was 12% below the actual price. The anchoring effect was 41%. Amazingly, these real estate professionals were almost as influenced by the anchoring effect as a group of business school students with no real-estate experience, whose anchoring index was 48%.

Insurance Example: In an insurance contract negotiation, it is not difficult to envision the underwriting and pricing of a risk being influenced by the anchoring effect. For example, an underwriter may arrive at a price of \$100,000 based on covering the risk of loss to a particular small manufacturing company. While the underwriter draws on her experience and judgment she may also utilize her company's predictive models and other tools to arrive at her proposed pricing. This may seem to negate any chance of undue bias, after all, the underwriter is an experienced professional, drawing upon her expertise and utilizing all of the tools of the trade to arrive at her conclusion. However, as we have seen in the real estate example, professionals with years of experience and seemingly adequate information upon which to base their decision can still be influenced by anchors. If a broker had previously proposed a much lower price for the piece of business, it is quite likely that this "anchor" will have an effect on the ultimate pricing offered by the underwriter.

Combating Bias: So what can we do to combat the influence of the anchoring effect. Psychologists Adam Galinsky and Thomas Mussweiler (2001) suggest that when you are in a negotiation and an anchor number is proposed, you should marshal your cognitive abilities to

counteract the anchor and focus on other aspects of the negotiation, such as the minimum price the other side would accept or on the costs to the opponent of failing to reach an agreement. In so doing, we focus our minds and thoughts on other aspects of the overall deal as well as searching our minds for evidence that supports the viability of a number different than the anchor number that was offered.

Kahneman (2011) suggests a slightly different and much less subtle strategy. He states that when he taught students negotiation techniques, if your opponent moved first with what you perceived to be an outrageous proposal, you should not offer an equally outrageous proposal in hopes of settling on something reasonable. He believed the differences in the two outrageous proposals would be so extreme as to render a reasonable agreement unlikely. Instead he counseled his students to dismiss the first proposal out of hand. If necessary, making a scene about how ridiculous the first offer is and making it clear to all that the negotiations would not continue with such an unrealistic being offered for consideration. While this display might be appropriate in a flea market, it is likely not the most professional way to behave in a business context. Referring back to our underwriting example, if an underwriter estimated a reasonable price to be \$100,000 and a broker lead with a suggested price of \$10,000, instead of making a scene, the appropriate action may be simply to inform the broker that our pricing is multiples of what they are looking for and perhaps they should pursue another market for a quote. If they would still like to negotiate, it might be wise to discuss other aspects of the deal before getting back into the price and perhaps enlist the assistance of a colleague unfamiliar with the negotiation and therefore not biased regarding the price.

As we have seen, anchors can hold a powerful influence on our decision making ability. The first step in addressing this cognitive bias is to recognize its existence. We may recognize

that bias does exist in the world and we may even be able to recognize it in other people, however it can be very difficult to acknowledge bias in ourselves. Even if we are aware of anchors and their potential effects, we are not aware of the effect they have had on our evaluation of a situation or our ultimate decision, because once we are introduced to the anchor, we cannot imagine how we would have evaluated the situation or offer had the anchor been different or not offered at all (Kahneman, 2011). The next step, therefore is to recognize that the anchor likely has an effect on our decision, albeit an unknown effect. If possible, we should therefore consider all relevant information we can and come to our own conclusion before receiving the anchor information. If this is not possible we should focus on information other than the anchor in an effort to create a narrative that is both closer to our reality and advantageous to a negotiated outcome. For example, in evaluating and pricing an insurance risk to be covered, one should endeavor to arrive at a price prior to receiving or considering a brokers proposed pricing. Additionally, collaborating with a colleague that has not been biased by any pricing anchors would also prove beneficial in reducing or eliminating the anchoring bias.

Availability Heuristic

Definition: The availability heuristic is a decision making tool that assumes the more available some piece of data is within our memories, the more frequently it must have occurred in the past (Schwartz, 2004). A risk that is familiar or easy to recall such as terrorism after 9/11 will be assumed to be more common or serious than one that is less familiar or salient in our memories, like sunbathing or skin cancer. For example, homicides are more available in our memories than suicides and therefore, wrongly, perceived to be more common (Thaler & Sunstein, 2009). Accessibility, salience and events that have happened most recently are all

aspects of the availability heuristic. Like most cognitive biases, there is some truth in them. In the availability bias the frequency of experience does affect the availability in our memories. The problem is, that frequency is not the only thing that affects the availability to our memory, salience and vividness matter as well. **Everyday Example:** For example, how would you answer the following question, "what is more common in the English language, words that begin with the letter "t" or words that have the letter "t" as the third letter in the word?" The general process you would go through would be to try to remember all of the words you can that begin with the letter "t". You would then try to remember all the words that have "t" as the third letter. You will undoubtedly be able to remember many more words that begin with the letter "t" than words with "t" as the third letter. You will then reason that since you can remember more words that begin with "t", that you must have encountered more words that begin with "t" and therefore, the English language must contain more words that begin with "t" than words that have "t" as the third letter. While this all seems very reasonable, your conclusion would be wrong (Schwartz, 2004). In this example, it is much easier to come up with words that begin with "t" because they are much more salient, they stand out more than words that have "t" as the third letter. Most people then mistakenly believe it is the frequency of these words that make them easier to remember, instead of their salience. How we assess risks is another example of how the availability heuristic can affect our judgment. **Study Example:** In one study subjects were asked to estimate the number of deaths per year that occur due to various causes such as disease, accidents, natural disasters and intentional acts of violence such as murder. The researchers then compared the subjects responses to the actual death rates from various causes. The subjects estimated that accidents of all types cause as many deaths as diseases of all types, when in fact diseases cause sixteen times more deaths than accidents. The subjects also estimated murder to

occur as frequently as death from a stroke, when in fact eleven times more people die of stroke than are murdered every year (Slovic, Fischhoff, & Lichtenstein, 1982). The vividness with which the more gruesome or shocking memories could be recalled, caused the subjects to wrongly believe that the more vivid, salient memories occurred more often than they actually did.

Insurance Example: The availability heuristic can explain a great deal about people's risk taking decisions and behaviors (Thaler & Sunstein, 2009). Whether or not people buy insurance to cover natural disasters is greatly influenced by the recent occurrence of a natural disaster (Slovic, Kunreuther, & White, 1974). Directly following the occurrence of an earthquake, purchases on earthquake insurance rise sharply, but decline steadily over time as people's memories of the earthquake begin to fade. People who live in areas prone to floods are less likely to purchase flood insurance if no floods have occurred recently and people who hear about flooding or know someone that has experienced a flood are more likely to buy flood insurance even if there has been no change in the likelihood that they themselves will experience a flood (Thaler & Sunstein, 2009).

Combating Bias: As in most biases, the first step to overcome the bias is to become aware that the bias exists. In an effort to become aware of the availability bias and therefore be better prepared to deal with it, Kahneman and Tversky (2011) suggest listing factors other than frequency that make it easy to remember specific instances or situations. They list three examples of reasons that information may be easy to recall, other than its frequency of occurrence in the world and consequently your memory. First, a salient event might capture your attention in the media, such as a political sex scandal that may exaggerate the frequency with which you believe these events happen. Second, a particularly vivid and dramatic event

may be easily recalled, such as a shark attack, that again, causes you to believe shark attacks are more common than they actually are. Finally, personal experiences are much easier to recall than incidents that happen to other people, however, simply because you can easily recall this event in your life, does not mean it occurs frequently to others.

While Kahneman and Tversky suggest listing reasons for the ease of recall other than frequency of occurrence, Thaler and Sunstein (2009) suggest a slightly different approach to overcoming the availability bias. They state that decisions can be improved and the bias overcome by arguing against your easily recalled memories of particular situations. To increase your caution in instances where you easily remember positive outcomes, remind yourself of those times in similar situations that things did not work out well. Similarly, in instances where a bad outcome comes to mind, think of all the times you were in a similar situation and the outcome was favorable.

Improving Decisions Indirectly – Broaden and Build

By becoming aware of and potentially limiting our cognitive biases we can directly impact the quality of our decisions. We consciously and deliberately consider our potential to be influenced by a particular bias and then evaluate whether the bias is helpful or harmful. If harmful, we attempt to reduce or eliminate its influence. Similarly, leveraging our strengths, collaborating with others and caring about the outcome of a decision, all directly impact the quality of our decision. However, utilizing strengths, collaborating and caring also have ancillary benefits that can indirectly improve our decision making ability. Doing any or all of these things can improve our wellbeing by increasing our positive emotions, and research

indicates that positive emotions provide numerous benefits, some of which could improve our decision making.

Studies have shown that when individuals utilize their character strengths they experience greater wellbeing, relating to both physical as well as mental health (Proctor, Maltby, & Linley, 2009). Other studies have shown that utilizing character strengths not only reduces depressive symptoms but also increases levels of positive emotion (Gander et al, 2012). Collaborating with others through high quality connections has also been shown to facilitate physical and psychological health (Ryff & Singer, 2001). Additionally, research indicates that people who have more high quality interactions throughout the day report greater wellbeing, as evidenced by increases in positive emotions (Reiss, 2000). Finally, there are numerous studies that demonstrate in various ways that people with meaning in their lives are better off. For example, studies indicate that people with meaning in their lives profess greater overall wellbeing (Bonebright et al., 2000), life satisfaction (Steger, Kashdan, Sullivan, & Lorentz, 2008) and control over their lives (Ryff, 1989) as well as feeling more engaged in their work (Bonebright et al., 2000) and reporting higher levels of positive emotion (Debats, van der Lubbe, & Wezeman, 1993). A common theme emerging from the research is that people are happier and report higher levels of positive emotion when they utilize their strengths, when they collaborate with others and when they have meaning in their lives. So what does all this have to do with improving our decision making ability? As it turns out, research suggests that positive emotions can help broaden the range of thoughts and activities to which we are normally inclined and that this sustained broadening of our thoughts and perspectives can result in increased future cognitive resources. Psychologist Barbara Fredrickson (2009) has named this the broaden and build theory of positive emotions. Broaden and build suggests that positive emotions lead to broadened

repertoires of thoughts and actions that ultimately build resources that contribute to future successful outcomes. Fredrickson (2009) states that negative emotions were adaptive to the human race in that they helped to narrowly focus our ideas and decisions regarding immediate dangers. Alternatively, positive emotions served to broaden people's ideas about possible actions, opening our awareness to a wider range of thoughts, decisions, actions and consequences. Recent research has provided ample evidence of the broadening effects of positive emotions in various studies using neuroimaging (Schmitz, De Rosa, & Anderson, 2009), eye tracking (Wadlinger & Isaacowitz, 2006), and autobiographical memory recall tasks (Talarico, Berntsen, & Rubin, 2009), demonstrating that positive emotions shifts the research subjects' attention to perceive a wider scope. Scientists have shown that negativity and even neutrality constrain our views on the world, while positive emotions open our minds to exploration and experimentation resulting in improved learning and more accurate mental maps of the world (Fazio, Eiser, & Shook, 2004).

Over time, the learning made possible by positive emotions significantly contributed to our ancestors resources, increasing the development of useful traits and abilities, thereby equipping them to better handle later threats to survival (Fredrickson, 2009). In an effort to test the build hypothesis, Fredrickson and her colleagues (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008), trained participants in a research group how to self-generate positive emotions through a specific type of meditation. After eight weeks, compared to a control group, meditators showed increases in physical health, greater levels of mindfulness, self-acceptance, fewer symptoms of depression and more positive relations with others. The research suggests that the participants were able to build these resources that could later serve them in facing the challenges that they might encounter in the future.

Research shows that positive emotions can result from using our strengths, collaborating with others and finding meaning in what we do, and this positivity can broaden our perspectives, increase our awareness and improve creativity in the short run. In the long run, positivity transforms us for the better, over time, creating a better version of ourselves, giving us the education and tools to make better decisions in the future that will contribute to our survival and our success.

Limitation and Future Research

Further research is needed to directly link utilization of strengths to improved decision making abilities. It is possible that future research could not only confirm the hypothesis that utilizing our strengths in the decision making process improves the decision outcome, but could reveal which strengths are most closely tied with good decisions. Additionally, it would be helpful to know which strengths could inhibit the decision process or potentially contribute to declines in decision outcomes. Future studies along these lines could provide insight into these issues.

Additional studies would be helpful to investigate the role high quality connections play in the quality of collaboration and decision outcomes. It is possible that research could discover that collaboration in general is tied to better decision outcomes but that collaboration within groups of "high quality connection" individuals is more strongly correlated to improved decision outcomes.

We know from existing research that engaged employees direct more time and effort to the task at hand and this engagement produces numerous positive outcomes. However,

additional research is needed to explore the potential link between better decision making, engaged employees and positive decision outcomes.

The use of strengths, the presence of high quality connections and the existence of significant meaning in one's life, all contribute to positive emotions. A study researching the potential spiral effect of positive emotions both contributing to better decision outcomes as well as resulting from improved decisions would be extremely helpful. Such research would advance the study of emotions as they relate to decision making as an adaptive, evolutionary process.

Conclusion

Decision making can be a complicated process, yet it is a process that each of us goes through virtually every minute of our waking lives. We make small, seemingly inconsequential decisions, as well as large, potentially life changing ones. It is the cumulative effect of all of these decisions that determines the direction our lives will take, as well as profoundly affecting the various outcomes we will experience. Improving our decision making abilities should improve the quality and consistency of our decision outcomes, and consequently improve the quality of our lives overall. There are various ways we can improve our decision making, including applying our personal strengths to the decision process, collaborating with others in making a decision or being fully engaged in an issue and finding meaning in its outcome.

We can improve our decisions through the application of strengths in at least two specific ways. First, we can focus on using and improving strengths that are particularly well suited to the decision process. By applying a strength like perspective, we broaden our view of an issue and consider various aspects of the issue. This allows us to more fully contemplate the decision and its potential outcomes. Similarly, applying a strength like creativity might allow us to

consider a new and unique solution to a problem. Second, an alternative to utilizing decision related strengths would be to focus on using our top strengths, whatever they may be, to bring about a better decision. For example, hopefulness might not be as directly linked to better decision making as some strengths, however, if you have this as a top strength, it might be beneficial to contemplate the future orientation aspect of hopefulness. Focusing optimistically on the future could cause us to persevere in the face of a challenging issue and improve our chances of making a better decision. In this way, virtually any character strength could be leveraged in the decision making process.

All of us possess different sets of strengths as well as different sets of weaknesses. If we can collaborate with others on a decision to be made, we can minimize or eliminate the impact of the individual weaknesses of the group members and capitalize on the group's collective strengths. Key to the effectiveness of collaboration is the existence of strong, positive relationships. As an added benefit, most psychologists agree that positive relationships form an integral part of our psychological wellbeing.

Being fully engaged in an issue and finding meaning in the pursuit of a solution or positive outcome can also greatly improve the decision process. If we truly care about the outcome of a specific decision to be made, we are much more likely to persevere and work diligently to improve the quality of the decision outcome. An example of this in my own life involves the decision surrounding the purchase of a new car. I have a passion for cars, so when it comes to deciding on what car to buy I dedicate a great deal of time and resources to the decision making process. I read all of the newest magazines consult dozens of websites and visit numerous dealerships to take test drives before making a final decision. While I still might

choose a lemon, the odds of doing so are greatly reduced by the amount of work I put into the decision process.

While we strive to make the best decisions, we are all subject to biases in our decision making. Often these biases are helpful, creating quick and efficient shortcuts to help us arrive at a beneficial or at least acceptable outcome. However, sometimes these biases are harmful, distorting our views and contributing to erroneous decisions. When we determine a bias is harmful, we can attempt to mitigate the bias by the conscious application of various thoughts and actions. Just as we can use strengths, collaboration with others or finding meaning to directly improve a decision, so to can we use them to overcome a bias.

This paper began with a quote from Swiss Re CEO Michel Lies stating that the main issue facing managers today involves people and culture. Lies believes that an agile, successful company needs to create a corporate culture that attracts the best talent, and that works together to see the opportunities in risk and change. We can create such a culture.

A culture that supports its members in consistently utilizing their strengths and collaborating with others, as well as striving to assist them to find meaning in what they do, can improve the members decision making abilities. Through improving and supporting the decision making process we create a culture that encourages employees to approach risk and change enthusiastically, secure in the belief that they are making better decisions regarding these uncertainties. We have seen that a culture rife with strength utilization, collaboration and meaning creates positive emotion. A positive emotionally charged culture is not only more effective and efficient but serves to attract and retain the best talent. Positive emotions are not only pleasurable, but can broaden our perspective and build our resources to better equip us to handle future challenges and potentially improve our future decision making ability. Mr. Lies

ends his statement claiming that if we can create the culture he describes, the company will not only be successful, but the individuals involved "will enjoy it". A positive emotionally charged culture is indeed an enjoyable culture, and one where decision outcomes are improved, creating a future that is better than the present.

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Appendix 1: The VIA Classification of Character Strengths

1. **Wisdom and Knowledge** – Cognitive strengths that entail the acquisition and use of knowledge

- **Creativity** [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it
- **Curiosity** [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering
- **Open-mindedness** [judgment,critical thinking]: Thinking things through and examining them from all sides; not jumping to conclusions; being able to change one’s mind in light of evidence; weighing all evidence fairly
- **Love of Learning**: Mastering new skills, topics, and bodies of knowledge, whether on one’s own or formally; obviously related to the strength of curiosity but goes beyond it to describe the tendency to add systematically to what one knows
- **Perspective** [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people

2. **Courage** – Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal

- **Bravery** [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it
- **Perseverance** [persistence, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; “getting it out the door”; taking pleasure in completing tasks

- **Honesty** [authenticity, integrity]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions

- **Zest** [vitality, enthusiasm, vigor, energy]: Approaching life with excitement and energy; not doing things halfway or halfheartedly; living life as an adventure; feeling alive and activated

3. **Humanity** - Interpersonal strengths that involve tending and befriending others

- **Love**: Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people

- **Kindness** [generosity, nurturance, care, compassion, altruistic love, "niceness"]: Doing favors and good deeds for others; helping them; taking care of them

- **Social Intelligence** [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick

4. **Justice** - Civic strengths that underlie healthy community life

- **Teamwork** [citizenship, social responsibility, loyalty]: Working well as a member of a group or team; being loyal to the group; doing one's share

- **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance.

- **Leadership**: Encouraging a group of which one is a member to get things done and at the time maintain time good relations within the group; organizing group activities and seeing that they happen.

5. **Temperance** – Strengths that protect against excess

- **Forgiveness:** Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; not being vengeful
- **Humility:** Letting one's accomplishments speak for themselves; not regarding oneself as more special than one is
- **Prudence:** Being careful about one's choices; not taking undue risks; not saying or doing things that might later be regretted
- **Self-Regulation** [self-control]: Regulating what one feels and does; being disciplined; controlling one's appetites and emotions

6. **Transcendence** - Strengths that forge connections to the larger universe and provide meaning

- **Appreciation of Beauty and Excellence** [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience
- **Gratitude:** Being aware of and thankful for the good things that happen; taking time to express thanks
- **Hope** [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about
- **Humor** [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes

- **Spirituality** [faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort