



2017

Doing Well and Good: An Exploration of the Role of Mindfulness in the Entrepreneurial Opportunity Recognition and Evaluation Process

Louise Kelly

University of La Verne, lkelly@laverne.edu

Marina Dorian

Alliant International University

Follow this and additional works at: <https://digitalcommons.sacredheart.edu/neje>



Part of the [Entrepreneurial and Small Business Operations Commons](#)

Recommended Citation

Kelly, Louise and Dorian, Marina (2017) "Doing Well and Good: An Exploration of the Role of Mindfulness in the Entrepreneurial Opportunity Recognition and Evaluation Process," *New England Journal of Entrepreneurship*: Vol. 20 : No. 2 , Article 2.

Available at: <https://digitalcommons.sacredheart.edu/neje/vol20/iss2/2>

This Research Article is brought to you for free and open access by the Jack Welch College of Business at DigitalCommons@SHU. It has been accepted for inclusion in New England Journal of Entrepreneurship by an authorized editor of DigitalCommons@SHU. For more information, please contact ferribyp@sacredheart.edu, lysobeyb@sacredheart.edu.

Doing Well and Good:

An Exploration of the Role of Mindfulness in the Entrepreneurial Opportunity Recognition and Evaluation Process

Louise Kelly
Marina Dorian

The purpose of this conceptual paper is to integrate two previously disparate areas of research: mindfulness and the entrepreneurial process. This present study conceptualizes the impact of mindfulness on the choices entrepreneurs face. Specifically, the research theorizes the positive effects of mindfulness on the opportunity recognition process, including evaluation of entrepreneurs. Furthermore, we propose that metacognition mediates this relationship, and emotional self-regulation moderates it. This conceptual research also suggests that mindfulness is positively related to the ethical decision-making and opportunity recognition and evaluation. Finally, compassion is proposed as a factor that mediates the relationship between mindfulness and ethical choices in opportunity recognition.

Keywords: mindfulness; ethics; opportunity recognition; entrepreneurs; emotional self-regulation; metacognition; compassion

The relationship between mindfulness and strategic choices among entrepreneurs has not been extensively researched (Bryant, 2009). This topic merits further examination, as mindfulness practices are being adopted widely in corporate settings (Capel, 2014; Bazarko, Cate, Azocar, & Kreitzer, 2013). Mindfulness refers to the state of actively having one's attention on experiences occurring in the present moment without judgment. There has been an increase in the integration of mindfulness and business with the formation of the Institute for Mindful Leadership as well as an influx of mindfulness programs and conferences used by technology and business leaders from companies such as Google and Twitter (Hardman, 2010). Empirically supported mindfulness-based interventions, such as Mindfulness Based Stress Reduction (MBSR), combined with the positive results of numerous efficacy studies in recent mindfulness research show that mindfulness can have significant positive benefits in a business setting (Hülshager, Alberts, Feinholdt, & Lang, 2013). However, few studies have looked at the effect of mindfulness on entrepreneurs as a subset of the larger business population (Amit & Zott, 2015). Opportunity

recognition, evaluation, and ethical decision-making are key parts of the entrepreneurial process (Zahra, Pati, & Zhao, 2013; Bosma & Levie, 2010; Yan, 2010; Baron, 2006) and this present research focuses on the effect of mindfulness on these dimensions. The purpose of this paper is to conceptually explore the potential contribution of mindfulness practice on ethical decision-making, opportunity recognition, and evaluation among entrepreneurs.

There are an increasing number of scholarly articles on mindfulness and how it affects decision-making equally in small and large firms (Oly Ndubisi, 2012). Many of these articles provide fascinating reviews of the latest research on mindfulness in general (Bergomi, Tschacher, & Kupper, 2013). Oly Ndubisi (2012) uses secondary data to track the effect of mindfulness on quality and reliability in small and large firms, which give some insight into mindfulness in the business context. Their findings suggest that mindfulness enhances quality. Their review of secondary data also suggests that mindfulness in business generates a more resilient and sustainable approach to quality and reliability issues in organizations, as opposed to a more routine-based approach.

Scholars have examined the personalities, capabilities, and contexts underlying the contributions of entrepreneurs (Agokei, 2014; Gupta, Ibrahim, Guo, & Markin, 2016; Felin, Foss, Heimeriks, & Madsen, 2012). As Miller (2014) points out, the positive entrepreneurial attributes such as energy, self-confidence, need for achievement, and independence may sometimes devolve naturally into aggressiveness, narcissism, ruthlessness, and irresponsibility, all of which can lead to unethical choices by entrepreneurs (Bourne, 2009). Furthermore, successful entrepreneurs are able to navigate the open-ended process of opportunity recognition (Estrin, Mickiewicz, & Stephan, 2016; Chell, 2007). Through mindfulness courses, thousands of attendees have learned to focus their attention and free up mental space for creative thinking (Hargadon & Bechky, 2006).

Literature Review

So what exactly is mindfulness, and what are its benefits? One definition of mindfulness is “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience, moment by moment” (Kabat-Zinn, 2003, p. 145). “Mindfulness involves intentionally bringing one’s attention to the internal and external experiences occurring in the present moment, and is often taught through a variety of meditation exercises” (Baer, 2003). Meditation is the formal expression of mindfulness and is one of the most thoroughly researched self-help interventions to date (Walsh & Shapiro, 2006). Mindfulness training has been shown to have many benefits. It not only reduces stress and elevates well-being (Baer, 2003), but it also increases awareness, empathy, compassion, and the ability to self-observe (Germer, 2005), as well as providing cognitive and behavioral flexibility (Shapiro, 2009).

Shapiro, Carlson, and Astin (2006) postulate a working model to elucidate the core components of mindfulness. “The Axioms” (Intention, Attention, and Attitude [IAA]) as they refer to them, are based on the definition of mindfulness put forward by Kabat-Zinn: “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (1994, p. 4). These mechanisms, or axioms, act as the “building blocks of mindfulness” and are broken down as follows (Shapiro, Carlson, & Astin, 2006, p. 374–375): “On purpose” or intention, “Paying Attention” or attention, “In a particular way” or attitude.

Intention involves the “why” you are practicing. At a basic level, the purpose of practicing mindfulness is to simply pay attention or “attend” (Shapiro et al., 2006). Attention, the second axiom, is at the core of mindfulness (Shapiro et al., 2006). Maintaining an attentive presence is essential to successful opportunity recognition and scanning of the environment (Elkins, 2012; Gordon & King Schaller, 2014). The ability to attend is a prerequisite of all of the mindfulness skills, as paying attention is essential to being in the present moment. Attention is thought to have a mediating role between mindfulness and self-efficacy (Greason & Cashwell, 2009). Successful entrepreneurs speak of “being in the zone,” the same way that athletes and artists can be while working (Dacin, Dacin, & Matear, 2010; Haynie, Shepherd, & Patzelt, 2010). This ability to be present, pay attention, and avoid distractions is related to mindfulness. This presence entails an “empathic witnessing,” which leads into the final axiom Shapiro et al. (2006) posit, the “how,” attitude.

The very definition of mindfulness delineates an attitude of non-judgment and openness. By cultivating an attitude of non-judgment, we generate acceptance—an “extension of non-judgment” (Germer, 2005, p. 7). A non-judgmental, accepting attitude sets the stage to develop empathy, a necessary component in relationships (Hick & Bien, 2008). Empathy is defined by Rogers (1980) as one’s ability to understand another’s feelings moment to moment. He emphasized that these are not simply a set of tools or techniques but a way of being. Mindfulness-based practices allow an individual to embody these humanistic ideals, evident in all relationships, including business (Dahan, Doh, Oetzel, & Yaziji, 2010; Christopher & Maris, 2010).

Mindfulness and the Entrepreneurial Opportunity Recognition and Evaluation Process

One of the most important topics of entrepreneurship is the recognition of new opportunities by recognizing patterns (Baron & Ensley, 2006). Opportunity recognition and evaluation is a conceptual process, which is typical of the strategic management process, particularly necessary in the entrepreneurial context (Baron, 2006). Baron and Ensley (2006) make the argument that the ability to recognize shifts in technology, markets, or government policy and to integrate those insights into meaningful connections is how new product ideas emerge—and is essentially a pattern-recognition process. Baron and Ensley (2006) further make the argument that mindfulness enhances the pattern-recognition process and individual qualities that can help facilitate the identification and processing of information necessary for market and opportunity analysis (Gaglio & Katz, 2001). When we consider the entrepreneurial process, there is a need to look at idea creation, entrepreneurial action, entrepreneurial discovery, and opportunity recognition and evaluation (Chell, 2013; Shane & Venkataraman, 2000). Gordon and Schaller (2014) found that there is a definite relationship between mindfulness and the market analysis that is necessary for entrepreneurial discovery and idea creation.

Opportunity evaluation is a challenging cognitive task for the entrepreneur (Keh, Foo, & Lim, 2002). The entrepreneur has to manage risk by accurately assessing an opportunity. Entrepreneurs can evaluate an opportunity using their contextual awareness of both the external conditions as well as the internal capabilities of the organization needed to achieve a good value proposition (Pryor, Webb, Ireland, & Ketchen, 2016). This contextual awareness implies seeing things clearly without

being unduly swayed by one's own biases. Mindfulness enhances the metacognition of entrepreneurs, which aids in opportunity evaluation under risky conditions (Cho & Jung, 2014).

In this paper, we propose that mindfulness training can help the entrepreneur to become more successful by improving the opportunity recognition and evaluation process, as noted in the following:

Proposition 1: There is a positive relationship between mindfulness and entrepreneurial opportunity recognition and evaluation.

Metacognition is a term used to describe self-awareness and understanding of one's own thinking. Haynie and Shepherd (2009) define metacognitive knowledge as the degree to which the individual can reflect on their own thinking process. Metacognition also applies to an understanding and awareness other people's thought processes (Haynie, Shepherd, & Patzelt, 2010). Furthermore, metacognition is particularly needed to deal with evolving situations where there is significant uncertainty. Haynie and Shepherd (2009) suggest that the beneficial effect of metacognition may be especially important for entrepreneurs who need to access different cognitive strategies given their dynamic environment. With the increased metacognition that comes from mindfulness, ideas can be considered with less emotional bias clouding the decision-making process (Jankowski & Holas, 2014).

Shapiro et al. (2006) propose metacognition as a key mechanism of mindfulness also known as re-perceiving, which is described as a "significant shift in perspective" (Shapiro et al., 2006, p. 377). Perspective-taking enables us to dis-identify from thoughts and feelings in order to engage in the present moment with increased objectivity. Marlatt and Kristeller (1999) claim that the process of self-observing, which entails objectivity, is inherent in mindful awareness and is possibly the most significant capacity as it facilitates self-monitoring, which helps avoid over-identifying. Research suggests this cognitive adaptability enabled by metacognition is especially important in the dynamic environment of an entrepreneur (Haynie and Shepherd, 2009; Gemmell & Kolb, 2013). Greater metacognition will increase the entrepreneur's ability to become aware of an opportunity and then to evaluate that opportunity in a way that corrects for their biases and emotional reactions.

Proposition 2: Metacognition mediates the relationship between mindfulness and entrepreneurial opportunity recognition and evaluation.

Emotion is linked to the intention to pursue these ideas (Hayton & Cholakova, 2011; Fayolle & Liñán, 2014). Shapiro et al. (2006) completed their analyses of potential mechanisms of mindfulness by adding self-management, values clarification, exposure, and cognitive, emotional, and behavioral flexibility. It is evident that mindfulness practice develops core mental processes that lay a foundation for opportunity recognition and evaluation in entrepreneurs (Uslay, & Erdogan, 2014). The entrepreneurial experience is represented by a series of interdependent events with challenging decisions often rooted in personality and emotion (Morris et al., 2011). Cardon et al. (2012) posit the existence of entrepreneurial emotion—the affect, emotions, moods, and feelings that are concurrent with or a consequence of the entrepreneurial process.

These feelings can help significantly in the opportunity recognition and evaluation stages. However, they need to be modulated through a process of emotional control to achieve superior financial performance (Munoz & Cacciotti, 2014). Foo (2009) has shown emotions to be a major factor of how entrepreneurs evaluate business opportunities. Furthermore, "by understanding where they stand on their trait emotions, entrepreneurs can take steps to counteract the tendencies linked to the emotions" (Foo, 2009, p. 388). Entrepreneurs could benefit from learning how to delay decision-making while experiencing strong emotions that could influence their actions.

There is research linking emotion to entrepreneurial idea perception through its influence on attention, memory, and creativity (Gundry, Ofstein, & Kickul, 2014). Furthermore, emotion is linked to the intention to pursue these ideas (Hayton & Cholakova, 2011; Fayolle & Liñán, 2014). Our present research suggests that a mindful approach means entrepreneurs can regulate their emotions and thereby succeed in looking at the evidence, including failure, in a curious and nonjudgmental way in order to derive lessons that will be useful for improving future entrepreneurial endeavors.

Emotional self-regulation is the ability to respond to the ongoing challenges of life and regulate one's range of emotions in a way that one's behavior is acceptable within society's norms but also spontaneous when needed (Koole, 2009). The entrepreneur, often under strong pressure to get the maximum output from limited resources, is exposed to a variety of potentially arousing stimuli (Bryant, 2009). For example, it may look like the

entrepreneur is going to close the deal and get the financing, but then the deal falls through. In addition, customers can change their minds and the internal processes of the business may not be as efficient or as organized as entrepreneurs would like them to be. In order to cope with this high level of uncertainty and sometimes frustration or disappointment, the entrepreneur has to regulate their emotions.

High levels of emotional regulation are associated with greater social competence (Camras & Halberstadt, 2017). A process model of emotional regulation includes becoming aware of the situation, evaluating it, and finally choosing an emotional response and coordinating that response with action (Harley, Lajoie, Frasson, & Hall, 2017). Emotional self-regulation is a key component of emotional intelligence and has been linked to entrepreneurial success (Cross & Travaglione, 2003).

Improved attention, focus, and increased creativity as well as awareness of both opportunities and one's own biases result from increased mindfulness (Khedhaouria, Gurău, & Torrès, 2015). These are key components of entrepreneurial cognition essential for success (Fillis & Rentschler, 2010; Khedhaouria, Gurău, & Torrès, 2015; Tang, Kacmar, & Busenitz, 2012). These outcomes follow from Shapiro's Axioms of Mindfulness with intention leading to clear intention for the business, attention leading to focus and creativity, and the attitude being one of non-judgment, fostering potential opportunity recognition and recognition of biases (Tomassini, 2016). Also, mindfulness has been linked to emotional self-regulation, and this emotional self-regulation can modulate the risk-taking behavior of the entrepreneur, so there is neither too little nor too much risk-taking (Hayward, Shepherd, & Griffin, 2006).

Proposition 3: Emotional self-regulation positively moderates the relationship between mindfulness and entrepreneurial opportunity recognition and evaluation.

Mindfulness and Ethical Decision-Making in Opportunity Recognition

Decision-making is a critical entrepreneurial activity in opportunity recognition and evaluation, and there are suggestions that mindfulness can enhance this aspect of entrepreneurship.

When considering the impact of mindfulness and mindfulness training on entrepreneurs, one area that deserves attention is ethical decision-making. We have discussed the importance of entrepreneurs perceiving

the entrepreneurial opportunity and evaluating those opportunities. This perception is based on their interpretation of reality and the meaning that they give to that reality. This argument can come from their sense of an identity and their level of awareness. Hunter (2011) and Daly, Cobb, & Cobb (1994) make the argument for a new paradigm of ethics that can be predicated on the idea of a sustainable society and that this sustainability can only be achieved by training individuals to achieve humility and personal mastery. We make the argument that greater mindfulness would result in more creative and productive entrepreneurs who integrate ethics and sustainability into their worldview and choices (Dutton & Spreitzer, 2014; Benkler, 2006).

Traditionally, ethics taught in a business context deals with the context of large corporations. A significant portion of the population is now pursuing entrepreneurship. These budding entrepreneurs and small businesses are more aware of the social implications of their activities and choices (Estrin, Mickiewicz, & Stephan, 2013; Chhokar, Brodbeck, & House, 2013; Carr, 2003). As a result, if we want to improve ethics in business, then the entrepreneurial context merits significant attention (Chell & Allman, 2003).

There are sometimes unintended consequences in promoting entrepreneurship. For example, a study looking at the Brazilian context found that entrepreneurship and innovation coupled with weak institutions created some negative ethical outcomes, especially if economic policies were based solely on economic indicators (Hall et al., 2012). There is an argument that as developing countries turn to entrepreneurship as a way of increasing inclusion in the workforce, attention must be paid both to the ethical choices that these entrepreneurs are faced with and ways to help them to make better moral decisions.

Mindfulness has been linked to increased self-compassion and compassion for others (Elices et al., 2017). This paper argues that mindfulness practices will contribute to increasing awareness of opportunities and that the increased compassion will translate into more ethical decisions that involve others. With greater mindfulness, individuals can become aware of choices that they were not aware of previously. Mindfulness can create an increased awareness of multiple perspectives by allowing the entrepreneur to look at things from others' points of view, which creates more empathy, and in turn can lead to more compassionate and ethical decisions.

There is empirical support for the relationship between mindfulness and compassion as an increase in mindfulness has been shown to raise levels of compassion (McCullum & Gehart, 2010; Shapiro, Brown, & Biegel, 2007; Shapiro et al., 2005; Shapiro et al., 2007). Compassion is described as an awareness of suffering and a genuine desire to end that suffering (Neff, Kirkpatrick, & Rude, 2007). Essentially, self-compassion is a mindfulness of self-kindness (Neff, 2009), crucial for self-care. Furthermore, research has established a link between self-compassion and compassion for others, psychological well-being, optimism, curiosity, and connectedness in addition to decreased anxiety, depression, rumination, and fear of failure (Neff, 2009), elemental qualities to engender in the entrepreneur. There has also been a link established between compassion and the outcomes of social entrepreneurs (Grimes, McMullen, Vogus, & Miller, 2013). From the literature integration, the present research generates the following propositions:

Proposition 4: There is a positive relationship between mindfulness and ethical decision-making in the opportunity recognition process and evaluation.

Proposition 5: Compassion mediates the relationship between mindfulness and ethical decision-making in the opportunity recognition process and evaluation.

Improved attention, focus, and increased compassion as well as awareness of opportunities and one's own biases all result from increased mindfulness. These are key components of entrepreneurial cognition essential for success (Tang, Kacmar, & Busenitz, 2012). These outcomes follow from Shapiro's Axioms of Mindfulness with intention leading to clear intention for the business, attention leading to focus and creativity, the attitude being one of non-judgment, fostering potential opportunity recognition and recognition of biases (Tomassini, 2016). Also, mindfulness has been linked to emotional self-regulation, and this emotional self-regulation can modulate the risk-taking behavior of the entrepreneur, so there is neither too little nor too much risk-taking (Hayward, Shepherd, & Griffin, 2006).

There is an argument that a significant aspect of the entrepreneurial labor is emotional (Zampetakis, Kafetsios, Lerakis, & Moustakis, 2017). The entrepreneur has to deal with a veritable rollercoaster of emotions from the highs of successful product launch to the lows of rejection by a customer or investor. To manage these extremes, the entrepreneur has to practice significant emotional regulation. There have been some high-profile examples

of entrepreneurs not regulating their emotions effectively and losing their positions and damaging their company as a result. Two examples are Martin Shkreli of MSMB, who increased the price of a life-saving drug by 4,000%, and Travis Kalanick of Uber, whose relentless pursuit of competitive strategy ended up creating a corporate culture where sexual harassment by managers was rampant. This lack of compassion in the ethical decision-making could be remedied by increased regulation of emotions such as greed and aggressiveness.

Proposition 6: Emotional self-regulation positively moderates the relationship between mindfulness and ethical decision-making in the opportunity recognition process and evaluation.

Discussion

The entrepreneurial process, as defined by McMullen and Shepherd (2006), involves the ongoing successful recognition of or creation of an opportunity. The pursuit of new opportunities and the possibility of failure are inherent to the entrepreneurial process (Munoz & Cacciotti, 2014). The primary purpose of this paper is to explore the impact of mindfulness on an entrepreneur's cognitive ability to recognize and evaluate opportunities and to make ethical decisions in the opportunity recognition and evaluation processes. The present research integrates multiple research streams: the mindfulness research on the benefits of mindfulness practice for psychological health and resilience, the entrepreneurial cognition literature on the process of opportunity recognition and evaluation, and the work on compassion and entrepreneurs. Integrating these three streams of research have brought new insights into some of the intervening variables between mindfulness and opportunity recognition and evaluation. This research helps entrepreneurs and academicians understand the unique impact of mindfulness on entrepreneurial opportunity recognition and ethical decision-making.

In particular, the study introduces the concept of metacognition as a mediating variable between mindfulness and opportunity recognition and evaluation. Also emotional self-regulation, which is closely associated with mindfulness, may have a further positive impact on the opportunity recognition and evaluation process. Specifically, the emotional self-regulation that arises from mindfulness may positively moderate the relationship between mindfulness and opportunity recognition and evaluation by allowing the entrepreneur to see his or her

own emotions and detach from those emotions, rather than over-identifying with the feelings. For example, the entrepreneur may discount an excessively risky approach or, conversely, may be risk-avoidant, and will consequently correct his or herself for either situation. This self-correction through mindfulness and emotional self-regulation means that mindfulness will help entrepreneurs to take an appropriate amount of risk.

An essential part of the opportunity recognition and evaluation process involves making ethical decisions about opportunities. Not all entrepreneurial opportunities should be pursued if, for example, they are violating basic moral precepts. Through the mechanism of self-compassion, mindfulness allows entrepreneurs to non-judgmentally see their pain and as a result to be more open to the pain, suffering, or negative impact on others brought about by any given entrepreneurial decision. Moral decisions may involve decisions about an impact on the environment or an impact on the workforce or a specific social issue. Even if this altruistic perspective is not the primary focus of the entrepreneurial venture, there may be ethical components affected by the entrepreneurial decision-making process.

Emotional self-regulation is also hypothesized as having an impact on ethical decision-making. This conceptual paper takes the research on compassion that is developing in the social entrepreneurship area and extends it into the general entrepreneurship process where compassion can increase ethical decision-making. When there is increased emotional self-regulation, this allows entrepreneurs to use mindfulness to successfully recognize and evaluate opportunities. Mindfulness allows entrepreneurs to manage risk for their business by pursuing ethical practices and avoiding unethical choices that may in fact jeopardize the success of their venture and damage the reputation of their enterprise.

The exploration of mindfulness on the entrepreneurial opportunity recognition process is still in its infancy. A next step would be for researchers to empirically test these relationships using primary or secondary data. It is a significant limitation of this paper that we do not yet have empirical evidence. However, the intent is to lay out a set of relationships that would lend themselves to empirical testing.

For entrepreneurs who are starting new ventures or already running entrepreneurial ventures, this research gives some insight into how the popular practice of mindfulness is being accepted by the business community and may be applied in their entrepreneurial context. Many

entrepreneurs may not be conversant or knowledgeable of the potential effects of mindfulness, and this study will help them to understand some of the documented effects mindfulness has in the opportunity recognition and evaluation process, which are fundamental components of launching new ventures and ensuring the continued success of enterprises. The integration of these two disparate research streams brings some surprising results. In particular, the idea of metacognition and emotional self-regulation having an influence on the entrepreneurial opportunity recognition and evaluation processes through mindfulness is a surprising and understated set of relationships deserving of further research and consideration.

Mindfulness can help with many aspects of opportunity recognition and evaluation, and the research of the Scandinavian group (Baron & Ensley, 2006; Byrne, 2017) suggests that entrepreneurs would benefit in particular from the mindfulness approach. Furthermore, emotion is linked to the intention to pursue these ideas (Hayton & Cholakova, 2011; Fayolle & Liñán, 2014).

This conceptual paper suggests that entrepreneurs who are interested in improving their opportunity recognition and evaluation ability would do well to pursue mindfulness training. There are two popular approaches that have been adopted in the corporate milieu that could also be helpful for entrepreneurs. These include Mindfulness Based Stress Reduction (MBSR), originally developed by Jon Kabat-Zinn. Another option is to independently develop a daily meditation practice using one of the many meditation apps. Entrepreneurs could benefit significantly from these initiatives. Our present research suggests that a mindful approach means entrepreneurs can look at evidence, including failure, in a curious and nonjudgmental way to derive lessons that will be useful for improving future entrepreneurial endeavors.

REFERENCES

- Agokei, R. C. (2014). Entrepreneurial self-efficacy and entrepreneurial actions among graduates: the mediating role of mindfulness and opportunity identification for facilitating reduction in unemployment. *African Journal for the Psychological Study of Social Issues, 16*(2), 192–202.
- Amit, R., & Zott, C. (2015). Crafting business architecture: The antecedents of business model design. *Strategic Entrepreneurship Journal, 9*(4), 331–350.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*(2), 125–143. doi:10.1093/clipsy/bpg015
- Baron, R. A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs “connect the dots” to identify new business opportunities. *The Academy of Management Perspectives, 20*(1), 104–119.
- Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science, 52*(9), 1331–1344.
- Bazarko, D., Cate, R. A., Azocar, F., & Kreitzer, M. J. (2013). The impact of an innovative mindfulness-based stress reduction program on the health and well-being of nurses employed in a corporate setting. *Journal of Workplace Behavioral Health, 28*(2), 107–133.
- Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*: Yale University Press.
- Bergomi, C., Tschacher, W., & Kupper, Z. (2013). The assessment of mindfulness with self-report measures: Existing scales and open issues. *Mindfulness, 1*–12.
- Bosma, N. S., & Levie, J. (2010). *Global entrepreneurship monitor 2009 executive report*.
- Bourne, E. (2009). *Global shift: How a new worldview is transforming humanity*: New Harbinger Publications.
- Bryant, P. (2009). Self-regulation and moral awareness among entrepreneurs. *Journal of Business Venturing, 24*(5), 505–518.
- Byrne, E. K. (2017). Mindful creativity: An exploration of a mindfulness intervention on workgroup creativity (*Doctoral dissertation*, Fielding Graduate University).
- Camras, L. A., & Halberstadt, A. G. (2017). Emotional development through the lens of affective social competence. *Current Opinion in Psychology, 17*, 113–117.
- Capel, C. (2014). Mindfulness, indigenous knowledge, indigenous innovations and entrepreneurship. *Journal of Research in Marketing and Entrepreneurship, 16*(1), 63–83.
- Cardon, M., Foo, M., Shepherd, D., & Wiklund, J. (2012). Exploring the heart: Entrepreneurial emotion is a hot topic. *Entrepreneurship Theory and Practice, 36*(1), 1–10. doi:10.1111/j.1540-6520.2011.00501.x
- Carr, P. (2003). Revisiting the protestant ethic and the spirit of capitalism: understanding the relationship between ethics and enterprise. *Journal of Business Ethics, 47*(1), 7–16.
- Chell, E. (2007). Social enterprise and entrepreneurship: Towards a convergent theory of the entrepreneurial process. *International Small Business Journal, 25*(1), 5–26.
- Chell, E. (2013). Review of skill and the entrepreneurial process. *International Journal of Entrepreneurial Behavior & Research, 19*(1), 6–31.
- Chell, E., & Allman, K. (2003). Mapping the motivations and intentions of technology orientated entrepreneurs. *R&D Management, 33*(2), 117–134.

- Chhokar, J. S., Brodbeck, F. C., & House, R. J. (2013). *culture and leadership across the world: The globe book of in-depth studies of 25 societies*: Routledge.
- Cho, Y. S., & Jung, J. Y. (2014). The relationship between metacognition, entrepreneurial orientation, and firm performance: an empirical investigation. *Academy of Entrepreneurship Journal*, 20(2), 71.
- Christopher, J., & Maris, J. A. (2010). Integrating mindfulness as self-care into counseling and psychotherapy training. *Counselling & Psychotherapy Research*, 10(2), 114–125. doi:10.1080/14733141003750285
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *The Academy of Management Perspectives*, 24(3), 37–57.
- Dahan, N. M., Doh, J. P., Oetzel, J., & Yaziji, M. (2010). Corporate-NGO collaboration: Co-creating new business models for developing markets. *Long Range Planning*, 43(2), 326–342.
- Daly, H. E., Cobb, J. B., & Cobb, C. W. (1994). *For the common good: Redirecting the Economy toward community, the environment, and a sustainable future*: Beacon Press.
- Dutton, J. E., & Spreitzer, G. M. (2014). *How to be a positive leader: Small actions, big impact*: Berrett-Koehler Publishers.
- Elices, M., Carmona, C., Pascual, J. C., Feliu-Soler, A., Martin-Blanco, A., & Soler, J. (2017). Compassion and self-compassion: Construct and measurement. *Mindfulness & Compassion*.
- Elkins, D. N. (2012). Toward a common focus in psychotherapy research. *Psychotherapy*, 49(4), 450.
- Estrin, S., Mickiewicz, T., & Stephan, U. (2013). Entrepreneurship, social capital, and institutions: Social and commercial entrepreneurship across nations. *Entrepreneurship Theory and Practice*, 37(3), 479–504.
- Estrin, S., Mickiewicz, T., & Stephan, U. (2016). Human capital in social and commercial entrepreneurship. *Journal of Business Venturing*, 31(4), 449–467.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663–666.
- Felin, T., Foss, N. J., Heimeriks, K. H., & Madsen, T. L. (2012). Microfoundations of routines and capabilities: Individuals, processes, and structure. *Journal of Management Studies*, 49(8), 1351–1374.
- Fillis, I. & Rentschler, R. (2010). The role of creativity in entrepreneurship. *Enterprising Culture* 18(01), 49–81. doi:10.1142/s0218495810000501
- Foo, M. (2009). Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship Theory and Practice*, 35(2), 375–393. doi:10.1111/j.1540-6520.2009.00357.x
- Gaglio, C. M., & Katz, J. A. (2001). The psychological basis of opportunity identification: Entrepreneurial alertness. *Small Business Economics*, 16(2), 95–111.
- Gemmell, R. M., & Kolb, D. A. (2013). Experiential learning and creativity in entrepreneurship. In *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* (pp. 702–710). Springer New York.
- Germer, C. K. (2005). Mindfulness: What is it? What does it matter? In C. K. Germer, R. D. Siegel, P. R. Fulton, C. K. Germer, R. D. Siegel, P. R. Fulton (Eds.), *Mindfulness and psychotherapy*, 3–27. New York: Guilford Press.
- Gordon, J., & King Schaller, T. (2014). The role of mindfulness in entrepreneurial market analysis. *Journal of Research in Marketing and Entrepreneurship*, 16(1), 7–25.
- Greason, P., & Cashwell, C. S. (2009). Mindfulness and counseling self-efficacy: the mediating role of attention and empathy. *Counselor Education & Supervision*, 49(1), 2–19.

- Grimes, M. G., McMullen, J. S., Vogus, T. J., & Miller, T. L. (2013). Studying the origins of social entrepreneurship: compassion and the role of embedded agency. *Academy of management review*, 38(3), 460–463.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57(1), 35–43. doi:10.1016/S0022-3999(03)00573-7
- Gundry, L. K., Ofstein, L. F., & Kickul, J. R. (2014). Seeing around corners: How creativity skills in entrepreneurship education influence innovation in business. *The International Journal of Management Education*, 12(3), 529–538.
- Gupta, Vishal K., Ibrahim, Sajna, Guo, Grace, & Markin, Erik (2016). Entrepreneurship research in management and organizational studies: a contribution-based assessment of the literature." *New England Journal of Entrepreneurship*, 19(1). Available at: <http://digitalcommons.sacredheart.edu/neje/vol19/iss1/6>Gupta, V.,
- Hall, J., Matos, S., Sheehan, L., & Silvestre, B. (2012). Entrepreneurship and innovation at the base of the pyramid: a recipe for inclusive growth or social exclusion? *Journal of Management Studies*, 49(4), 785–812.
- Hardman, J. (2010). Regenerative Leadership: A model for transforming people and organizations for sustainability in business, education, and community. *Integral Leadership Review*, 10(5), 1–17.
- Hargadon, A. B., & Bechky, B. A. (2006). When collections of creatives become creative collectives: A field study of problem-solving at work. *Organization Science*, 17(4), 484–500.
- Harley, J. M., Lajoie, S. P., Frasson, C., & Hall, N. C. (2017). Developing emotion-aware, advanced learning technologies: A taxonomy of approaches and features. *International Journal of Artificial Intelligence in Education*, 27(2), 268–297.
- Haynie, M., & Shepherd, D. (2009). A measure of adaptive cognition for entrepreneurship research. *Entrepreneurship Theory and Practice*, 33(3), 695–714. doi:10.1111/j.1540-6520.2009.00322.x
- Haynie, J., Shepherd, D., & Patzelt, H. (2010). Cognitive adaptability and an entrepreneurial task: The role of metacognitive ability and feedback. *Entrepreneurship Theory and Practice*, 36(2), 237–265. doi:10.1111/j.1540-6520.2010.00410.x
- Hayton, J., & Cholakova, M. (2011). The role of affect in the creation and intentional pursuit of entrepreneurial Ideas. *Entrepreneurship Theory and Practice*, 36(1), 41–68. doi:10.1111/j.1540-6520.2011.00458.x
- Hayward, M. L., Shepherd, D. A., & Griffin, D. (2006). A hubris theory of entrepreneurship. *Management Science*, 52(2), 160–172.
- Hick, S. & Bien, T. (2008) *Mindfulness and the Therapeutic Relationship*. New York: Guilford.
- Hülshager, U. R., Alberts, H. J., Feinholdt, A., & Lang, J. W. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 310.
- Hunter, M. (2011). Perpetual self conflict: Self awareness as a key to our ethical drive, personal mastery, and perception of entrepreneurial opportunities. *Contemporary Readings in Law and Social Justice*, (2), 96–137.
- Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition*, 28, 64–80.
- Kabat-Zinn, J. (1994). *Wherever you go there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. doi:10.1093/clipsy/bpg016
- Keh, H. T., Foo, M. D., & Lim, B. C. (2002). Opportunity evaluation under risky conditions: The cognitive processes of entrepreneurs. *Entrepreneurship Theory and Practice*, 27(2), 125–148.
- Khedhaouria, A., Gurău, C., & Torrès, O. (2015). Creativity, self-efficacy, and small-firm performance: the mediating role of entrepreneurial orientation. *Small Business Economics*, 44(3), 485–504.

- Marlatt, G., & Kristeller, J. L. (1999). Mindfulness and meditation. In W. R. Miller (Ed.), *Integrating spirituality into treatment: Resources for practitioners*, 67–84. American Psychological Association. doi:10.1037/10327-004
- McCullum, E. E., Gehart, D.R. (2010). Using mindfulness meditation to teach beginning therapists therapeutic presence: A qualitative study. *Journal of Marital and Family Therapy*, 36(3), 347–360.
- Miller, D. (2014). A downside to the entrepreneurial personality? *Entrepreneurship Theory and Practice*, 39(1), 1–8. doi:10.1111/etap.12130
- Morris, M., Kuratko, D., Schindehutte, M., & Spivack, A. (2011). Framing the entrepreneurial experience. *Entrepreneurship Theory and Practice*, 36(1), 11–40. doi:10.1111/j.1540-6520.2011.00471.x
- Munoz, P., & Cacciotti, G. (2014). Understanding failure and exit in social entrepreneurship: a protocol analysis of coping strategies. *Frontiers of Entrepreneurship Research*, 34(18), 1.
- Neff, K. D. (2009). The role of self-compassion in development: A healthier way to relate to oneself. *Human Development* (0018716X), 52(4), 211–214. doi:10.1159/000215071
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139–154.
- Oly Ndubisi, N. (2012). Mindfulness, quality and reliability in small and large firms. *International Journal of Quality & Reliability Management*, 29(6), 600–606.
- Pryor, C., Webb, J. W., Ireland, R. D., & Ketchen Jr, D. J. (2016). Toward an integration of the behavioral and cognitive influences on the entrepreneurship process. *Strategic Entrepreneurship Journal*, 10(1), 21–42.
- Rogers, C. R. (1980). *A way of being*. Boston: Houghton Mifflin.
- Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25: 217–226.
- Shapiro, S. (2009). The integration of mindfulness and psychology. *Journal of Clinical Psychology*, 65(6), 555–560.
- Shapiro, S., Astin, J., Bishop, S., & Cordove, M. (2005). Mindfulness-based stress reduction for health care professionals: results from a randomized trial. *International Journal of Stress Management*, 12(2), 164–176.
- Shapiro, S., Carlson, L., Astin, J., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373–386.
- Shapiro, S. L., Brown, K., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology*, 1(2), 105–115. doi:10.1037/1931-3918.1.2.105
- Tang, J., Kacmar, K. M. M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, 27(1), 77–94.
- Tomassini, M. (2016). The Advent of organizational mindfulness. *Handbook of Mindfulness*, 215.
- Uslay, C., & Erdogan, E. (2014). The mediating role of mindful entrepreneurial marketing (MEM) between production and consumption. *Journal of Research in Marketing and Entrepreneurship*, 16(1), 47–62.
- Walsh, R. & Shapiro, S. (2006). The meeting of meditative disciplines and western psychology: a mutually enriching dialogue. *American Psychologist*, 61(3), 227–239.
- Yan, Jun (2010). The Impact of entrepreneurial personality traits on perception of new venture opportunity. *New England Journal of Entrepreneurship*, 13(2). Retrieved from <http://digitalcommons.sacredheart.edu/neje/vol13/iss2/4>

Zahra, S. A., Pati, R. K., & Zhao, L. (2013). How does counterproductive entrepreneurship undermine social wealth creation?. F. Welter, R., Blackburn., L. Ljunggren and BW Amo (Eds), *Entrepreneurial Business and Society: Frontiers in European Entrepreneurship Research*. Cheltenham: Edward Elgar, 11–36.

Zampetakis, L. A., Kafetsios, K., Lerakis, M., & Moustakis, V. S. (2017). An Emotional Experience of Entrepreneurship: Self-Construal, Emotion Regulation, and Expressions to Anticipatory Emotions. *Journal of Career Development*, 44(2), 144–158.

ABOUT THE AUTHORS



Louise Kelly is a Professor of Management and Leadership at University of La Verne, California. She specializes in strategic and entrepreneurial research and women leadership. Dr. Kelly publishes widely in academic journals and has authored five books including, *A Dictionary of Strategy*, *The Psychologist Manager*, and *Entrepreneurial Women*.



Marina Dorian is an Associate Professor at the California School of Professional Psychology at Alliant International University, San Diego. Dr. Dorian teaches courses on integrative psychology, mindfulness and psychotherapy, and family systems. Her research interests include incorporating mindfulness in clinical training and the workplace and family resilience in international contexts.