

# The Impact Of Emotions On Cognitive Abilities When Building An Entrepreneurial Mind-Set

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## Abstract

This study looked at the impact emotions had on the cognitive ability of the entrepreneur to apply the entrepreneurship lessons, as and when required. The findings show that emotions have a notable impact on the cognitive performance of the entrepreneur. Further findings reveal that physical senses; what you see, hear, feel, taste and smell; are strong triggers in activating emotions. When emotions are triggered, cognitive ability is disabled and an automatic knee-jerk reaction occurs from the individual's subconscious programming; based on the individual's perception and belief system that surrounds the incident or event. The study also indicates subconscious programming; i.e. beliefs and perceptions come from repeated past experiences, types of movies watched, songs listened to or books read.

The findings also show that an entrepreneurial mindset can be taught and the required habit patterns developed. However, the learnings can only be applied when the cognitive ability is utilised. The ability to manage emotions determines whether the entrepreneur goes into an automatic reaction, where cognitive abilities are shut down and the entrepreneur acts out from their subconscious programming, or the cognitive ability kicks in, and the entrepreneur can access and apply the newly learned information, eventually creating new habit patterns, resulting in an entrepreneurial mindset.

Further, this paper presents a methodical approach to managing emotions called S-I-E-P; abbreviated for Spirit, Intellect, Emotions and Physical Senses; the conceptual model and its effectiveness in managing emotions, amongst entrepreneurs in a social business incubator, called ET Ideas in Malaysia, in a cross-sectional qualitative study.

**Keywords:** Emotions, entrepreneurial mind-set, entrepreneurship, entrepreneur, subconscious programming, cognitive thinking

## **Introduction**

Entrepreneurial mindset [EM] refers to the cognitive, behavioural and emotional structures of the student, going much deeper than the intent to be an entrepreneur and different from the surface level of learning knowledge (Jun Cui, 2021). The myth of the entrepreneurial mindset was that it is a ‘special trait’ that you are born with, which was proved otherwise by several researches from 1989 to 2007. The entrepreneurial mindset was what set the entrepreneurs and non-entrepreneurs apart and more importantly, the entrepreneurial mindset could be taught (Naumann, 2017). A simplistic yet accurate definition of an entrepreneurial mindset is the ability to sense, act and mobilize under uncertain conditions (McGrath & MacMillian, 2000). Given the dynamics of the business environment, the ability to adapt the thinking process sets entrepreneurs apart and defines the entrepreneurial mindset, according to the study by Haynie (2010).

## **Literature Review on building an entrepreneurial mindset**

Haynie’s situated metacognitive model studies the cognitive ability to examine and restructure one’s thinking, adapting the thinking structure as required by the new situation presented. The model describes how the entrepreneur’s inert motivation conjoined with the entrepreneurial environment, utilises his/her past experiences and knowledge to produce a cognitive response strategy to a situation based on his/her level of awareness. Metacognitive awareness here refers to one’s general level of awareness, he/she has of his/her cognitive process. Interestingly, the level of awareness grows in an environment of uncertainty.

For example, a manager in a well-established firm, operating in a structured and stable environment, offering incremental improvements to existing products in existing markets, have a very low level of awareness in terms of metacognitive adaptability. On the other hand, an entrepreneur offering new products in new markets, learning and correcting his thinking process through mistakes have a very high level of awareness in metacognitive adaptability (Haynie,2010).

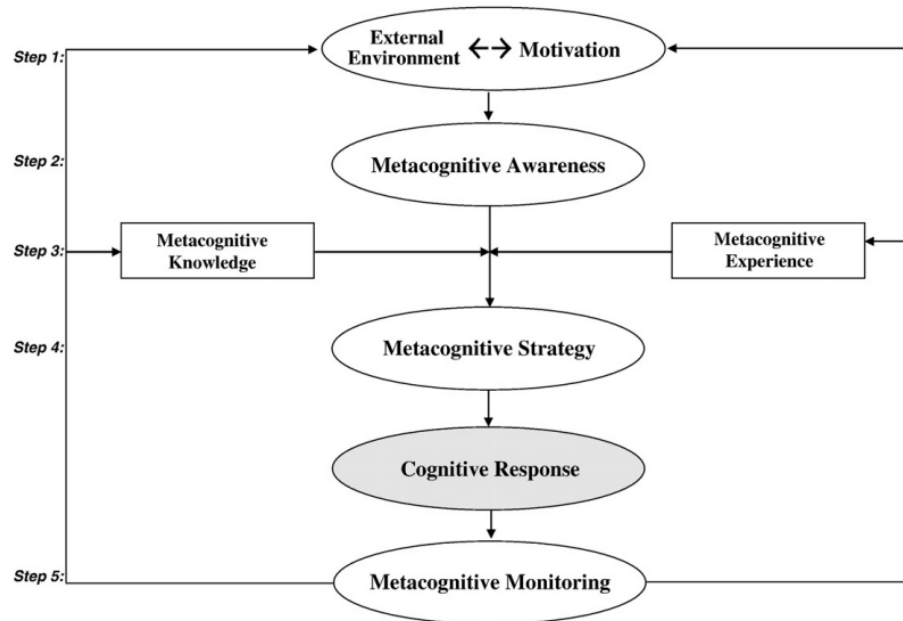


Fig. #1: A situated metacognitive model of the entrepreneurial mindset

Source: Haynie, J. Michael et al. "A situated metacognitive model of the entrepreneurial mindset." *Journal of Business Venturing* 25 (2010): 217-229

Prior studies on entrepreneurship elucidate that market opportunities are interpreted in the mind of the entrepreneur and that ventures only come to fruition when possibilities come together in the mind of the entrepreneur, who persists until a venture is created. The mindset acts as a filter on how the entrepreneur views the world and reasons in a certain way. A kind of lens that blocks out certain information, distorts input and emphasizes some input. Mindset is similar to habit patterns, in that it is an auto-response from subconscious programming. However, in contrast to habit patterns, mindset is usually goal-centric where the strategies will be revised until the desired outcome is achieved. (Lynch, 2021). Further, Lynch introduces the element of failure and learning from the experiences into the definition of the entrepreneurial mindset. He argues that making mistakes, learning from the mistakes, changing the strategy and continuing to pursue the goal sets entrepreneurs apart. Lynch's definition of an entrepreneurial mindset: The sum total of cognitive processes; that lead to an individual's willingness to take action under uncertainty, make errors, learn from failures and shift that learning to specific goals to best solve entrepreneurial tasks.

Expanding on this definition, Lynch introduces two orientations in the entrepreneur’s mindset: the mindset of the entrepreneur when he/she is “elaborating” (deliberating and planning) versus “implementing” (acting and evaluating); oscillating continuously until the goal or task is achieved. Entrepreneurs need to make decisions and move forward with action in uncharted domains where information is limited and uncertainty is high. When action is taken (implementing), shortly, the entrepreneur may realise that the decision or strategy needs to be changed or improved, now based on new information. The entrepreneur now moves into the elaboration stage again, deliberating and planning, then shifting back into the implementing stage. For example, Diagram Fig.#2 illustrates, how the entrepreneur elaborates, decides on opportunity A and starts implementing. Shortly he/she realises that the strategy is not working and goes back into elaborating, tweaks the plan, decides on Opportunity A\* and goes back into implementing. At any point that the strategy doesn’t work, he/she goes back into elaborating, makes adjustments, decides on Opportunity A\*\* and goes back in elaborating.

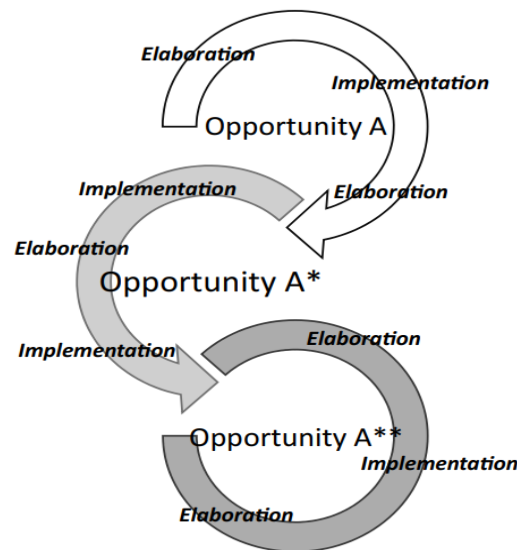


Fig.#2 : Cycles of learning within the entrepreneurial mindset.

Source: Lynch, Matthew Patrick James and Andrew C. Corbett. “Entrepreneurial mindset shift and the role of cycles of learning.” *Journal of Small Business Management* (2021): 1-22.

This cyclic shifting of elaborating and implementing mindsets, done automatically by the subconscious mind, enables the entrepreneur to navigate through the dynamic business environment, continuously learning from mistakes and turning them into new opportunities. This ability to shift between elaborating and implementing with learning attitudes is crucial for the long term success of the start-up. Fortunately, it can be learned as a habit pattern. Lynch's duality in an entrepreneurial mindset and learning cycles gives depth and context to the definition of an entrepreneurial mindset.

A study by Kuratko, 2021 expands the entrepreneurial mindset to include behavioural and emotional considerations as well. He argues that the entrepreneurial mindset has three aspects to it; cognitive, behavioural and emotions (Kuratko DF, 2021). The cognitive aspect studies how entrepreneurs think. The behavioural aspect studies how the entrepreneur acts towards a certain opportunity or risk. Thirdly, the emotional aspects look into how the entrepreneur feels in certain situations.

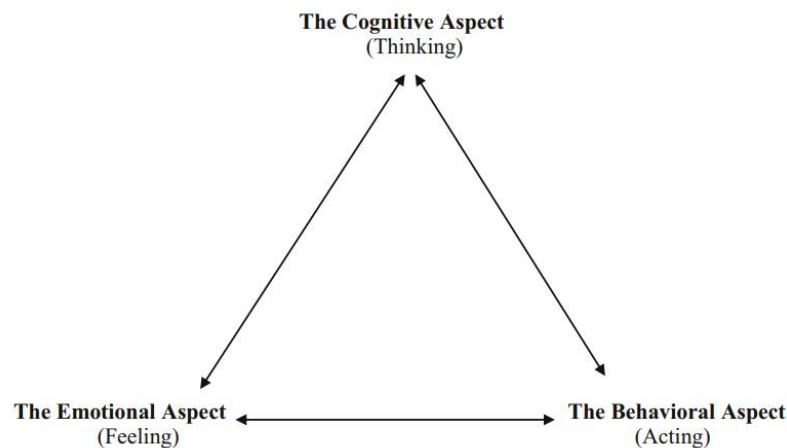


Fig. #3 : The triad of the entrepreneurial mindset

Source: Kuratko DF, Fisher G, Audretsch DB. Unraveling the entrepreneurial mindset. *Small Business Economics*. 2021;57(4):1681-1691. doi:10.1007/s11187-020-00372-6

Adaptable cognitive ability, where one self learns from failures in the entrepreneurs' mindset has been discussed in length using Haynie's models. Lynch's model explains the behavioural aspect where the entrepreneur takes risks, learns from failures, adapts and continues implementation.

Kuratko introduces the third aspect of the entrepreneurial mindset; the emotional aspect of the entrepreneur. The main drive of entrepreneurial emotions stems from uncertainty. Surprise, anticipation, and stress are internally focused, and these emotions the entrepreneur needs to handle in the confines of his or her mind. How the entrepreneur mitigates these feelings is demonstrated in the running of the business, and the managing of relationships. Friends turned business partners also work well together since there is an established emotional understanding that underpins the relationship. As the venture grows, three factors affecting the entrepreneurs' emotions stand out: risk, stress and ego. "Risk" here refers to the entrepreneur's inert ability to digest the uncertainties of entrepreneurship versus a stable corporate career, bringing along financial risk and the risk of losing family and friends who are not aligned with the entrepreneurship goal. This in turn may create a psychological risk that the entrepreneur may not bounce back from. Another factor is the entrepreneur's ability to manage stress when the entrepreneurs' work demands and expectations exceed their abilities to perform as venture initiators, as entrepreneurs have limited resources and need to perform multiple tasks. Lastly, the entrepreneurial ego. In the initial stages, often the idea turns into a venture by the entrepreneurs' belief and strong desire to succeed against all odds. Entrepreneurs maintain high enthusiasm levels that become an external optimism—which allows others to believe in them during rough periods. *Emotions and the cognitive ability*

The ability to manage emotions is essential to being a successful entrepreneur. The obvious reason is that you will manage client relationships better when you can manage your emotions (Cowan, 2021). However, what is often overlooked is the impact emotions have on the cognitive performance of the person. Emotional dissonance occurs when the entrepreneur suppresses the true emotions he/she feels, and instead, the desired emotions for the outcome are expressed. The work and social pressure not to be truthful with one's feelings, create a shield wall against all emotional triggers, causing long-term adverse effects like anger, stress, burnout, lack of empathy, inability to feel love, inability to feel happy etc, adversely affecting his/her cognitive abilities. Emotional dissonance impacts the mental abilities of a person, including learning, thinking, reasoning, remembering, problem-solving, decision-making, focus and attention span (Hofstee, 2020). Meta-cognition is not possible when the entrepreneur is emotional. Hence, the ability to manage emotions is fundamental in building an entrepreneurial mindset and achieving any goal. In this study, we introduce S-I-E-P as a conceptual framework to help manage emotions.

S-I-E-P abbreviated for Spirit, Intellect, Emotions and Physical Senses; is a step-by-step process practiced to manage emotions and catapult meta-cognition. There is no academic publication for the S-I-E-P Model and this study will define and determine how the S-I-E-P Model helps to

manage emotions (Fig. #4) and build resilience in a qualitative study. The S-I-E-P Model is built on taking deep breaths to manage emotions (Brenner J, 2020). Deep breaths engage the conscious mind, cutting off the automatic subconscious reaction. This cuts off oxygen, literally from the emotions to engage the intellect.

Most people are reactive in their thinking process. Physical senses are a strong trigger in activating the subconscious programming. The physical senses referred to are; the sense of hearing, sight, smell, taste and lastly the sense of touch. When these senses are activated, an automatic knee-jerk reaction occurs from the individual's subconscious programming (The Senses, 2020).

Emotions are triggered automatically based on the individual's perception and belief system that surrounds the incident or event. This digs into the individual's subconscious programming; which comes from repeated past experiences, types of movies watched, songs listened to or books read. The other person's tone, gestures and expression, witnessed by the senses, are interpreted, within split seconds to form a judgment or conclusion, corresponding with the individual's subconscious programming. This triggers the related emotions on auto response and the intellect is used to validate the judgment made, usually blaming and finding fault in the situation, the other person, the government, circumstances beyond their control etc. The spirit is not at peace and experiences turmoil given the constant reactive input from the senses, emotions and intellect. This process is called the P-E-I-S way of thinking.

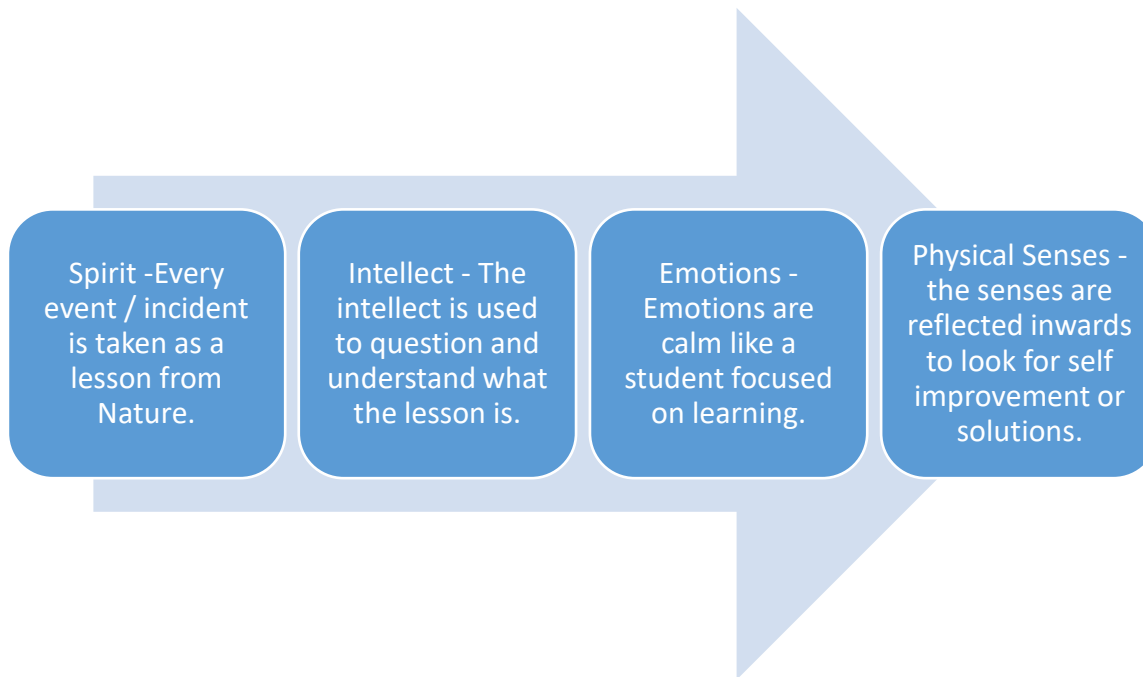


Fig. #4: The SIEP Method of Thinking Conceptual Framework  
Source : Adapted from ET Ideas, Malaysia

To manage emotions, one has to be aware of this P-E-I-S way of thinking taking place first. Then the individual has to choose to stop the process by taking deep, silent breaths for 10 minutes, at least, to disengage from the P-E-I-S process and subconscious mind activation and activate the conscious mind intentionally.

Once the emotions are calm, the individual can choose the S-I-E-P way of thinking, which starts with the spirit instead of the physical senses. The individual has to use willpower to engage the process from the spirit by accepting that Nature is teaching through the person or incident. Once the student's mindset is activated, the emotions will be calm and the intellect will focus on finding how the individual contributed to the incident, what solutions are available, how to prevent this in the future etc, hence critical and objective thinking is activated. This reverse process often results in self-reflection and an increase in awareness of how the individual's subconscious mind is programmed; metacognition occurs. The individual becomes more aware



of their reactive habit patterns and has better awareness to stop this reactive habit the next time around until, over time the habit is replaced by a new habit pattern.

*Proposition 1: The S-I-E-P method is efficacious in managing emotions, starting metacognition, evaluating the subconscious programming and creating new habit patterns.*

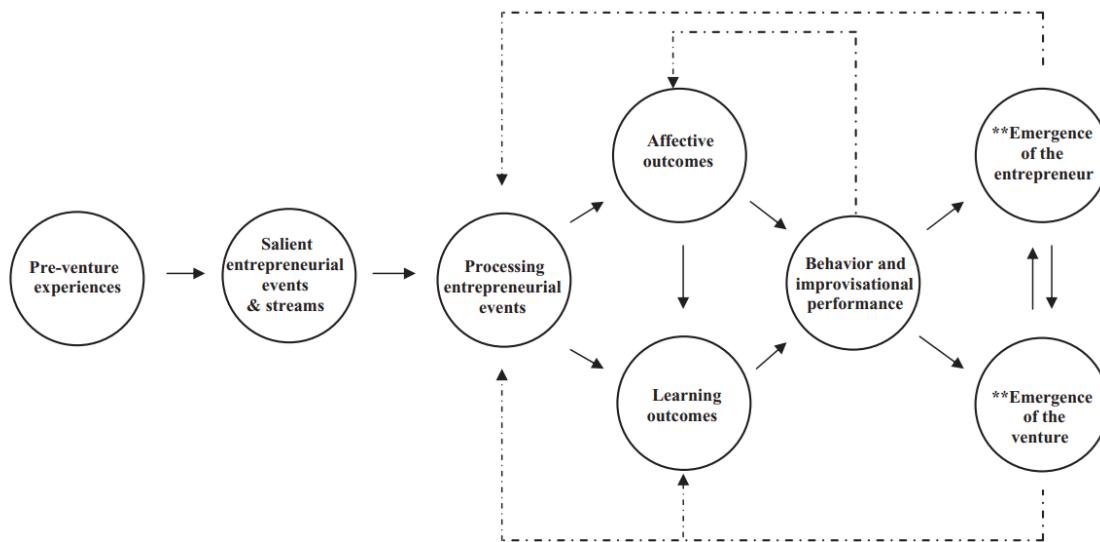
Grichnik (2010)'s study on how emotions affect entrepreneurial opportunity evaluation and exploitation derives from 2 theories: emotions as information theory and the information priming effect concept. The first hypothesis is that emotions offer additional information for decision-making by providing heuristic cues. The latter argues that emotions act as a filter to information (Grichnik 2010). Both seem contradictory but are true depending on which SIEP phase the entrepreneur is on. When the entrepreneur is highly emotional [in phase E], the emotions act as a filter to opportunity evaluation, hence the information priming effect is active. If the emotion is positive, a positive influence is noticed in opportunity evaluation, if the emotion is negative it has a negative influence in opportunity evaluation (Grichnik 2010). For example, the entrepreneur secures a \$100,000 grant; a very optimistic view is adopted in evaluating the opportunity. On the contrary, if the entrepreneur gets fined \$100,000, a pessimistic view will be applied for the same opportunity evaluation. A balanced view is only possible when the entrepreneur passes the emotional [E] phase in the SIEP thought process and engages his/her intellect [I]. Only then meta-cognition is enabled and emotions act as information for heuristic cues, past experience and knowledge come into effect to heighten the entrepreneur's meta-cognitive awareness in decision making. Interestingly, Grichnik's study also showed that when it comes to exploitation (taking action) of the opportunity, both positive and negative emotions have a negative effect. This infers that emotions paralyse action.

Morris (2012) made a salient point that an entrepreneurial mindset is developed through the entrepreneur's experience of venture creation. The entrepreneur is a work in progress and his mindset is built and continuously developed in the entrepreneurial journey. Fig. #5 illustrates Morris's Conceptual Model of Entrepreneurial Experiencing.

Past experiences influence how the entrepreneur perceives and interprets current events. However, the crucial point is how the entrepreneur interprets and processes the current salient entrepreneurial events and streams of events; will result in the feeling and emotions presently experienced. Hence, managing the current feelings and emotions experienced becomes pivotal in managing the experience and interpreting the learning outcomes to build the desired entrepreneurial mindset. This determines the entrepreneur's behaviour, actions and performance.

Over time, the entrepreneurial mindset is built, shaping the entrepreneur alongside the growth of the venture.

*Proposition 2: Emotions paralysis action. Managing the current feelings and emotions experienced becomes pivotal in managing the experience and interpreting the learning outcomes to build the desired entrepreneurial mindset.*



**\*\*Note:** The solid arrows between the emergence of the entrepreneur and the emergence of the venture demonstrate the connection between the two. Please note that emergence does not follow the preceding circles but is continuous and ongoing, happening in tandem with the other circles (variables). Solid lines, direct relationships; dotted lines, feedback loops.

Fig.#5 : Conceptual Model of Entrepreneurial Experiencing

Source: Morris, Michael; “Framing the Entrepreneurial Experience”; (2012)

## Method and Findings

This is a qualitative study of a business incubator in Malaysia, called ET Ideas. ET Ideas started in 2008 and in just 15 years grew over 30 active businesses in various stages of growth. ET Ideas has an astounding 80% success rate in developing start-ups when the worldwide statistics report that only 1 in 10 start-ups succeed. 90% of start-ups fail [Patel, 2015]. A more recent study of tech start-ups in India showed 80% fail within the first 3 years (Kalyanasundaram, 2021). Hence,

an 80% success rate is an amazing feat indeed! Even in 2020, when the pandemic hit, the resilience and adaptability of the ET Ideas companies were remarkable. All the companies adapted, survived and innovated into new services or products, capturing new markets. 95% of the start-ups have come out thriving during the pandemic. The remaining 5% is in the tourism industry, sustaining and waiting for the industry to open up.

The inductive approach was undertaken based on the interpretivism research philosophy. Case studies from the ET Ideas Business Incubator were studied cross-sectionally in this mono-method qualitative study. The sample were entrepreneurs in various stages of business growth. The findings concurred that resilience was built using the S-I-E-P conceptual model.

## **Conclusion**

Gen Zs are a generation that is vocal about what they want, how they study, how they work and how they live (Mann, 2022). These youngsters, born after the year 2000, show a strong inclination towards entrepreneurship. If there is no practical workable framework to guide these youngsters, we face the possibility of higher college drop-outs, higher start-ups and subsequent failures and more frequent job hopping. Worse still is, the failed start-ups, discontent at work and disengagement in college; result in a significant number of disillusioned youngsters who will cause other economic and social issues, collapsing the economic and rebelling social and cultural norms due to the lack of a better way to achieve their goals.

Hence, an entrepreneurship mindset education model, built from scratch, and nurtured by a business incubator, is essential for educating a significant part of the future generation. Failing this, the formal education model as it is now will become redundant and obsolete for a significant percentage of the generation to come. Nestled on the brink of an economic and social evolution, a redefined education model on entrepreneurship is crucial. Managing emotions is the foundation of building an entrepreneurial mindset, which equips the entrepreneur to grow and sustain the start-up over the business dynamics.

## **References**

- Brenner, J., LeBlang, S., Lizotte-Waniewski, M., Schmidt, B., Espinosa, P. S., DeMets, D. L., & Hennekens, C. H. (2020). Mindfulness with paced breathing reduces blood pressure. *Medical hypotheses*, 142, 109780.
- Cowan, P. (2021). *Connecting with Clients: For stronger, more rewarding and longer-lasting client relationships*. Harriman House Limited.
- Cui, J. (2021). The impact of entrepreneurship curriculum with teaching models on sustainable development of entrepreneurial mindset among higher education students in China: the moderating role of the entrepreneurial climate at the institution. *Sustainability*, 13(14), 7950.
- Grichnik, D., Smeja, A., & Welp, I. (2010). The importance of being emotional: How do emotions affect entrepreneurial opportunity evaluation and exploitation?. *Journal of Economic Behavior & Organization*, 76(1), 15-29.
- Haynie, J. M., Shepherd, D., Mosakowski, E., & Earley, P. C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of business venturing*, 25(2), 217-229.
- Hofstee, G., Jansen, P. G., De Lange, A. H., Spisak, B. R., & Swinkels, M. (2021). The cognitive costs of managing emotions: A systematic review of the impact of emotional requirements on cognitive performance. *Work & Stress*, 35(3), 301-326.
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2021). Unraveling the entrepreneurial mindset. *Small Business Economics*, 57, 1681-1691.
- Lynch, M. P., & Corbett, A. C. (2023). Entrepreneurial mindset shift and the role of cycles of learning. *Journal of Small Business Management*, 61(1), 80-101.
- Mann, M. (2022). *No More Stereotypes: Exploring the Work Value Priorities of Generation Z* (Doctoral dissertation, Campbellsville University).

McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management review*, 31(1), 132-152.

Morris, M. H., Kuratko, D. F., Schindehutte, M., & Spivack, A. J. (2012). Framing the entrepreneurial experience. *Entrepreneurship theory and practice*, 36(1), 11-40.

Naumann, C. (2017). Entrepreneurial mindset: A synthetic literature review. *Entrepreneurial Business and Economics Review*, 5 (3), 149-172.

*The Senses: A Comprehensive Reference*. (2020). Academic Press.