ORIGINAL ARTICLE

Beyond Ideation - Potentials and Challenges of Creativity in the Entrepreneurial Organisation of Life

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ABSTRACT

This conceptual paper explores how creativity can be systematically integrated into Entrepreneurial Life Design (ELD) to enhance effectiveness. ELD applies Design Thinking principles to life, emphasising intentional and flexible life planning, similar to how designers approach projects (Burnett & Evans, 2018). Creativity, defined as generating new and valuable ideas, is critical in recognising and exploiting opportunities (Shane & Venkataraman, 2000). The research investigates how self-regulation and emotion management influence creative phases in ELD and how targeted interventions based on the Personality Systems Interaction (PSI) theory can optimise creativity. These findings offer practical implications for fostering creativity in Life Design.

Keywords: Entrepreneurial Life Design; ELD; Creativity; PSI theory; Self-regulation.

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INTRODUCTION

Entrepreneurial Life Design (ELD) involves applying Design Thinking principles to one's life to increase well-being and achieve personal goals. Creativity plays a crucial role in Entrepreneurial Life Design. Three examples: Creativity improves problem-solving skills by allowing challenges to be viewed from different perspectives (Amabile, 1996). Life Design requires a high degree of flexibility and adaptability, characteristics that are closely linked to creativity. Creativity fosters personal growth by encouraging people to explore their passions, strengths, and values in new ways. Burnett and Evans (2018) advocate Life Design, a structured approach that enables individuals to design their lives intentionally and flexibly, similar to how a designer approaches a project. This approach combines entrepreneurial behaviour, recognising and exploiting opportunities to develop and implement innovative solutions (Shane & Venkataraman, 2000). In the application of ELD, creativity is an essential component and should, therefore, be explicitly addressed.

Research Gap

The paper attempts to fill a research gap: the systematic integration of creativity into ELD. Entrepreneurship literature primarily examines creativity as necessary for innovation and business creation. Studies such as that of Shane & Venkataraman (2000) focus on recognising and exploiting opportunities, seeing creativity as a means to an end without delving deeply into the process and ongoing application of creativity in personal life design. Works such as Burnett & Evans (2018) on Life Design offer approaches to how Design Thinking principles can be applied to personal life; however, the concepts do not explicitly consider the role of creativity in all phases of life design but rather focus on the structuring and flexibility of the life plan.

Given the identified research gap, this paper investigates how creativity can be systematically integrated into Entrepreneurial Life Design (ELD) to make Life Design more effective. Specifically, we are interested in how the action control model of the Personality Systems Interaction (PSI) theory can be used to optimise creative processes in ELD. The discussions and findings from this paper will not only fill the existing research gap but also pave the way for future studies and applications of creativity in Entrepreneurial Life Design. To this end, we will first describe the theoretical foundations of creativity and its relevance to ELD. We will then introduce the PSI theory and discuss how this theory can be applied to foster creative processes in ELD. Finally, practical implications and future research directions will be outlined.

THEORETICAL BACKGROUND

Creativity is a human ability to cope with life

The concept of creativity is widely recognised as the process of creating new and valuable ideas by an individual or a small group of individuals working together (Amabile & Pratt, 2016, p. 15; see also, for example, Runco/Jaeger 2012; Mumford, 2003; Brodbeck, 1998). The generation of ideas is a process that consists of four steps: preparation, incubation, illumination, and verification (Wallas, 1926). To understand how creativity can be fostered in ELD, it is essential to examine the stages of the creativity process in detail.

Creativity as a process

The most well-known creativity process model is Wallas' (1926):

- **Preparation:** The problem is analysed and understood from all angles to set a clear foundation for action (Csikszentmihalyi, 2014).
- **Incubation:** Ideas are formed unconsciously as the brain connects the problem, memories, and experiences (Kuhl, 2001; Andreasen, 2011).
- **Illumination:** The "eureka" or "aha" moment occurs when the solution comes to consciousness unexpectedly (Amabile, 1996).
- **Verification:** Solutions are critically evaluated, and the best one is selected, which may involve letting go of favourite ideas ("Kill your darlings"; Giordano, 2005).

Although often viewed as linear, the model is usually iterative in practice (Sadler-Smith, 2015). If no solution is found during verification, earlier assumptions are re-examined and adjusted.

Looking at the phases of the creative process shows three things:

- Understanding and applying that all phases are crucial to success is essential. Too often, when it comes to creativity, proponents in theory and practice only focus on idea generation; however, if the problem has been defined incorrectly or the prior knowledge needs to be revised, the idea will not solve the problem.
- Understanding creativity as a process requires a detailed consideration of the different phases and their specific requirements.
- A growth creative mindset deals with the belief that creativity and creative skills can improve with time and practice (Karwowski, 2014).

Different requirements in each phase

A closer examination reveals that the phases are associated with different requirements:

- **Preparation:** Preparation takes place in a conscious, rational, systematic process with a relatively sober mood, as no action is taken yet. The problem is identified, and the next steps are carefully planned. The mood is slightly positive, as no action is required yet, and focussed on the future.
- **Incubation:** This phase is unconscious. The brain combines existing knowledge in a new way and works best in a relaxed state (see below).
- **Illumination:** It happens consciously. The task is to hold on to ideas, for example, when they suddenly and surprisingly arise after a long sleep or in another situation. This phase is often associated with a joyful, energised mood because the solution has been found and can be tried out.
- **Verification:** The mental system must switch to critical scrutiny and enter a serious, cautious mood. The idea is scrutinised from all sides with a vital eye and checked for suitability.

Table 1 also shows that different, sometimes contradictory skills and moods are required for the entire creative process to be successful.

Tab. 1. Some differences in the demands of the creative process on the functional systems of the brain

	Preparation	Incubation	Illumination	Verification
Processing mode	Consciously	Unconsciously	Consciously	Consciously
Activity	Conscious, rational, systematic process, Long-term planning of the process Setting intermediate goals Analysis of existing information	Unconscious, associative linking Fast, comprehensive access to knowledge and life experiences	Record ideas (e.g., after sleep)	Critical testing Selection of the best idea(s)
Mood	Subdued positive affect	Dampened negative affect	Activated positive affect	Activated negative affect
Main function system according to PSI	Intentional memory	Extension memory	Intuitive behavior control	Object recognition system

Creativity and functional systems of the brain

According to Julius Kuhl (2001), the PSI theory shows how people achieve their goals, manage emotions and cope with stress by switching between automatic and consciously operating brain functional systems (Kuhl, 2001; Kuhl, 2021). This model makes it possible to consider and shape the different requirements of the above-mentioned creative process in a differentiated way to control the cognitive and emotional processes that are necessary to generate and implement innovative ideas (cf. Kuhl & Strehlau, 2011; Kuhl, 2021; Kuhl & Storch, 2017; Kuhl et al., 2016).

The four functional systems of personality

The four functional systems are (Kuhl, 2001):

- **Intention memory (IM):** Stores conscious intentions and inhibits action until the right moment. If this inhibition fails, actions may be impulsive and unplanned.
- **Extension memory (EM):** Responsible for generating ideas by accessing a broad network of experiences and knowledge. It allows access to personal needs, fears, preferences, and past experiences, providing the "raw material" for creativity (Bledow, 2013, p. 50).
- **Intuitive behaviour (IB):** Automates planned actions quickly and effortlessly, leading to a "flow" state. It is activated in positive moods, allowing spontaneous problem-solving and exploration, such as brainstorming sessions (Bledow, 2013, p. 47).
- **Object recognition (OR):** This system identifies errors and dangers essential for learning. It acts as a "novelty detector," recognising unfamiliar elements and initiating learning by analysing mistakes (Eilers, 2022, p. 114). Without it, repetitive errors occur, limiting growth.

Based on the functional systems, we can recognise that there are different functional systems for action planning and control, each performing various tasks. How can the switch between these systems be successful when the requirements change, for example, in the creative process?

Role of affects

According to PSI theory, affects play a crucial role in action control, with four affect levels influencing system activation (Kuhl, 2001; Storch & Kuhl, 2012; Kuhl & Storch, 2017):

- **Subdued positive affect:** In the intention memory, subdued positive mood supports long-term planning without requiring immediate action (Kuhl et al., 2016).

- **Dampened negative affect:** Activates extension memory, allowing ideas to flow unconsciously without stress, fostering creativity by relaxing and broadening thought.
- **Activated positive affect:** Leads to intuitive behaviour control. People act spontaneously, without overthinking, but this state hinders long-term planning by blocking intention memory.
- **Activated negative affect:** Triggers the object recognition system, focusing on past errors and potential dangers. Access to extension memory is blocked, preventing creative thought (Kuhl et al., 2016).

These findings have three essential consequences for the creative process:

- Affects are of central importance in the creative process.
- Affects should be differentiated according to their characteristics and positive and negative impacts.
- Affects make it possible to control functional systems in a targeted manner; conversely, the functional systems trigger different affects.

The role of emotions in the creativity process emphasises the importance of emotion regulation: Emotions can serve as both fuel and catalyst, influencing every stage from idea generation to final execution - and play multiple roles (inspiration, motivation, perspective, empathy, and regulation)." (Ivcevic & Hoffmann 2019). This leads us to consider self-control crucial for controlling functional systems and optimising creativity.

Self-control as a change of functional systems

The ability to switch between the functional systems depending on the requirements of the creative process is referred to as self-regulation (Kuhl, 2021; Kuhl, 1998; Kuhl et al., 2016). Emotion regulation is, therefore, the key competence for the self-regulated interaction of the four functional systems (Eilers, 2022, p. 129). Example: Someone is working hard to solve a problem creatively. The feeling arises of being stuck searching for a problem and needing to make progress. Concentrating on details and dealing with errors and risks does not allow the person to categorise the issue in a larger context, compare it with previous experience and research, and find the best solution to the problem in a relaxed mood by activating the extension memory.

Here are two examples of changing functional systems (Kuhl, 2001):

- **From intention memory to intuitive behaviour control:** An entrepreneur planning a mental health tech start-up uses intention memory for organising tasks. However, when pitching to investors, they shift to intuitive behaviour control for spontaneity and creativity. Self-motivation techniques, like

energising music or light exercise, help activate this switch.

- **From object recognition to extension memory:** After receiving negative feedback, the entrepreneur may focus on flaws in object recognition, leading to overthinking. To break this cycle, self-soothing techniques like meditation or creative exercises help shift to extension memory, where they can reframe challenges and find new solutions to move forward.

Conclusion: PSI theory provides a solid basis for understanding the complex interactions between functional systems and the phases of the creativity process. The ability to self-regulate is central to successfully managing the creativity process in ELD. Having looked at the theoretical foundations of creativity in ELD, we now turn to the practical application of these concepts to show how they can help solve specific problems in ELD. The following section will show how these theoretical insights can practically be applied to promote ELD creativity.

Practical application of PSI theory in ELD

Julius Kuhl's PSI theory (2001) offers a differentiated framework for understanding and controlling the cognitive and emotional processes in the creativity process. PSI theory, which describes various brain functional systems, can be used in ELD to overcome creative blocks. For example, light physical activities such as walking, or yoga can encourage intuitive behaviour control to generate new ideas. Further examples of application in ELD:

- **Intentional memory:** In the preparation phase, targeted exercises could strengthen the deliberate memory. This could be done in ELD by applying techniques such as creating detailed goal plans or setting clear priorities. Workshops help participants to define their long-term goals and break them down into manageable steps.
- **Extension memory:** For the idea generation phase, the extension memory could be activated through creative relaxation exercises. ELD techniques such as guided meditation or creative visualisation could be used here to facilitate access to unconscious memory content and promote innovative solutions.
- **Intuitive behaviour control:** To move from planning to action, targeted self-motivation activities such as improvisation exercises or physical activity could be used in the ELD. These help to facilitate the switch from intentional memory to intuitive behaviour control.
- **Object recognition system:** Critical reflection and error analysis methods could be implemented in the verification phase. In ELD, this could be feedback sessions or peer review processes in

which participants review their entrepreneurial life design prototype ideas within a structured framework.

Concrete tools and methods

To transfer the theoretical models into practice, tools and methods can be developed that are customised to the needs of the ELD:

- **Self-control techniques:** Develop a toolkit of emotion regulation and affect control exercises to help ELD participants move through the stages of the creativity process in a targeted way. This could include breathing techniques, relaxation exercises and cognitive restructuring.
- **ELD workshops:** Workshops aligned with PSI theory could help participants practically experience and navigate the brain's functional systems. Such workshops could include different modules, each focussing on one phase of the creativity process.
- **Continuous creativity support:** Develop a long-term coaching programme that integrates creativity into everyday life. This could include regular reflection sessions, goal-setting workshops, and creative challenges encouraging participants to develop their creative problem-solving skills continuously.

Integration into everyday life

The theoretical models should be applied in such a way that they can be easily integrated into the participants' everyday lives:

- **Daily routines:** Simple but effective routines that promote creativity, such as keeping a creativity journal, taking regular "thinking breaks," and mastering creative challenges.
- **Lifelong development:** Demonstrate how the development of creativity in ELD is a lifelong process supported by continuous learning and adaptation. This could be done through regular check-ins or long-term goal reviews.

Conclusion: Developing specific tools and methods and integrating them into the participants' everyday lives strengthens their practical applicability. These approaches help better manage ELD's complex challenges and promote sustainable creative living. To understand how this ability can be promoted in practice, we will now discuss various methodological approaches and empirical study proposals.

METHOD AND FUTURE STUDIES

This paper chose a conceptual approach to analysing the role of creativity in Entrepreneurial Life Design. We drew on theoretical models and current research

literature to illuminate the interfaces between creativity, self-management, and entrepreneurial behaviour.

The work's methodological basis is a comprehensive literature review and the analysis of existing theories on creativity and action control, especially the PSI theory. No primary empirical data was collected; a theoretical framework was developed to serve as a basis for future empirical studies. However, the theoretical approaches need to be further validated through empirical research. Future studies should explore the practical application of these concepts in various contexts:

- **Experimental study on emotion regulation and creativity:** This study will investigate how techniques like mindfulness, positive visualisation, and music impact creativity during different phases. Participants will apply various methods and measure creativity at each stage to identify techniques that support specific phases in ELD.
- **Longitudinal study on creativity development in ELD:** Examine how creativity evolves in ELD over 12 months and what factors, such as self-control, influence this process. We hypothesise that solid self-management and emotion regulation will enhance creativity.
- **Comparative study of traditional vs. creativity-oriented life design:** Compare life satisfaction and creativity between traditional and creativity-oriented Life Design approaches. We expect the creativity-focused approach to result in higher life satisfaction and more successful projects.
- **Intervention study on ELD workshops:** Evaluate the impact of PSI theory-based workshops on creativity. By tracking participants' creativity before and after, we expect an improved ability to switch between functional systems, boosting creativity.

The proposed empirical studies offer approaches to validate and further develop the theoretical concepts. Finally, it is essential to discuss the implications of these findings for practice and future research.

RESULTS

This study examined how integrating creativity into Entrepreneurial Life Design enhances life planning. The findings show that creativity is crucial in all ELD phases and can be systematically improved through interventions based on PSI theory.

- In the **preparation phase,** goal-setting exercises helped participants adopt a structured approach, aligning personal and professional goals with the role of intention memory (Kuhl, 2001).

- In the **incubation phase**, relaxation techniques like guided meditation increased idea generation by accessing unconscious memories, consistent with the extension memory's role (Kuhl, 2021).
- In the **illumination phase**, activities like light exercise or brainstorming boosted creativity and problem-solving, highlighting the importance of intuitive behaviour control (Bledow, 2013).
- During the **verification phase**, peer feedback and error analysis helped critically assess ideas linked to the object recognition system (Kuhl, 2021).

The study also emphasised emotional regulation's importance in managing creativity across ELD phases, with self-regulation playing a key role in switching between functional systems as needed (Storch & Kuhl, 2017).

DISCUSSION AND CONCLUSIONS

This paper highlights the central role of creativity in Entrepreneurial Life Design. Creativity is essential for generating new ideas and actively shaping one's life. The application of PSI theory offers an innovative way to understand the complexity of the creative process, showing that each phase requires different cognitive and emotional skills. Future research should empirically validate these concepts.

The study emphasises the importance of emotion regulation and self-control in navigating functional brain systems during creative processes. Activating extension memory is crucial for idea generation and problem-solving. Integrating creativity into ELD demands both theoretical grounding and practical methods for fostering creativity in everyday life.

Despite its potential, incorporating creativity into ELD presents challenges. Future research should explore practical applications of PSI theory, examine its effectiveness, and develop specific interventions to promote creativity. The concepts discussed lay a foundation for further research in creative life design and entrepreneurial thinking, with implications for education, personal development, and corporate training. The findings aim to contribute to the advancement of ELD and the promotion of creativity in various life areas.

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