



Uncovering wellbeing: The complex realities of mompreneurs with additional needs children through Lego® Serious Play®

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ABSTRACT

This paper explores the complexities of identifying the wellbeing of mompreneurs (mother-entrepreneurs) who are also caregivers to children with additional needs. A social constructionist perspective, Lego® Serious Play® was employed in individual interviews to uncover their complex wellbeing realities while pursuing entrepreneurship. A hermeneutic constructivist lens was applied to further conceptualize the language behind their experiences. The findings present three dimensions of wellbeing: 1) Internal conflict and self-neglect 2) Empowerment, Independence, Fulfilment 3) Resilient Control: Keeping the Balance. These dimensions provide an idiographic understanding, contributing to the broader knowledge of wellbeing as a component of entrepreneurship alongside caregiving responsibilities.

1. Introduction

Mothers of children with additional needs (AN),¹ face significant impacts on their wellbeing and career opportunities due to their caregiving responsibilities (Alsa et al., 2021; Blum, 2007; S. Ryan and Runswick-Cole, 2008). Challenges include navigating societal stigmas and internalized motherhood ideologies, which limit their access to flexible, waged work (Derigne and Porterfield, 2017; Dillon-Wallace et al., 2013; Johnston et al., 2006). Additionally, challenges associated with an aging AN child necessitate a workplace that can adapt to unexpected and increased caregiving demands (Baker and Drapela, 2010; Brandon, 2007). Lack of opportunities therefore guide some mothers to pursue entrepreneurship to balance a fulfilling career with caregiving duties. Mompreneurship (mother-entrepreneurship) is a socio-spatial phenomenon wherein mother-created businesses are formed within the time and spatial constraints of caregiving responsibilities (Ekinsmyth, 2013; Korsgaard, 2007). Flexibility and fulfilment of personal goals through the pursuit of entrepreneurship offer key wellbeing benefits despite the inherent challenges of entrepreneurship (Mehta and Parikh, 2022; Newhouse, 2018). For some mothers caring for children with AN, overcoming challenges fosters the development of skills such as networking and strengths like resilience. These attributes are applicable to successful business development and are seen as beneficial to wellbeing (Vrankić Pavon et al., 2023)

Wellbeing is primarily defined from two perspectives: hedonic and eudaimonic, making its definition both subjective and multi-dimensional (Deci and Ryan, 2008; Ryff, 2019). It is also temporal and self-actualized, influenced by various factors such as safety,

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¹ For this study, the term ‘additional needs’ is used to include neurodivergent and physically disabled children. These needs could be developmental, physical, learning, behavioural or sensory. This term is used in clinical diagnostic and functional development to describe individuals with physical, mental or emotional disabilities or with financial, community-related or resource disadvantages. Additional needs may warrant special education, training or therapy (Children and Young People’s Services, National Health Services, UK, 2024).

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health, emotions, fulfilment of basic needs, and relationships, adding to its complexity (Ryan and Deci, 2000; Lomas and VanderWeele, 2022). Given the limited research on the connection between mompreneurs and caring for AN children, this paper aims to better understand the intricate wellbeing experiences of women at this juxtaposition. Lego® Serious Play® and a hermeneutic constructivist lens are used to uncover a deeper appreciation of these mompreneurs' wellbeing in the pursuit of entrepreneurship (Peck and Mummery, 2018). In doing so, this paper bridges traditional entrepreneurship research with the nuanced realities of maternal entrepreneurship, highlighting how personal and professional dimensions intersect to shape well-being.

2. Creating a safe space for exploring varied dimensions of wellbeing

Understanding the self from entrepreneurs' perspectives is crucial in advancing research (Hytti, 2010). Ensuring participants felt psychologically safe to discuss their realities (entrepreneurship, parenting an child, and wellbeing) was a priority. Given the potential for distress relating to the topics at hand, selecting an appropriate interview method was crucial to this study (Bradshaw et al., 2019; McMullen and Dimov, 2013; White et al., 2022). Lego® Serious Play® (LSP), led by a certified facilitator, engages participants and supports emotional expression in a safe environment (Klassen et al., 2023; Roos and Victor, 2018).

To ensure psychological safety, interviews were conducted individually rather than in the typical group setting of the LSP method. This individual approach was crucial given the intimate and vulnerable nature of the topics. Conducting interviews in safe environments like homes or offices allowed for the unencumbered sharing of personal reflections. This was pivotal to the LSP method, enabling a deeper exploration of the complex intersections between entrepreneurship, parenting, and wellbeing (Roos and Victor, 2018).

Nine mompreneurs, seven from England and two from Finland, were interviewed. Five ventures focused on assistive technologies for children and families with AN, two on caregiving assistance, and two on unrelated fields. All participants were primary caregivers to children with AN, aged 7–20. The research, guided by social constructionism, emphasized participants' sense-making of their models (Lear et al., 2020). With LSP facilitating a deeper understanding of the unique wellbeing realities and challenges faced by these entrepreneurial mothers. See [table A1](#) in the Appendix.

Interviews were conducted from March to November 2023, lasting between 17 and 57 min ($M = 38$ min), and transcribed using (Otter.ai, CA, USA). Each interview was meticulously reviewed by re-listening and reading to ensure complete accuracy. The analysis was conducted using a hermeneutic constructivist lens, aligning with LSP's theoretical underpinnings. This approach aimed to understand the interpreted wellbeing behind the models through supportive questioning and critical introspection (Kanagaratnam, 2023).

The author/facilitator recognized the potential for distress or hyper-fixation on the question, acknowledging that some participants might struggle to build meaningful models or engage deeply with the process. This was important to address before starting the session (Thalen et al., 2014). A detailed methodology is provided in [Appendix A](#).

3. Dimensions of wellbeing

LSP metaphor building was used to identify the dimensions of wellbeing, facilitating critical thinking and expanding dialogue beyond the initial question ([Fig. 1](#), and detailed in the Appendix). Statements from individual interviews were grouped into sub-dimensions, which were then consolidated into common dimensions and ultimately condensed into three main categories. Three

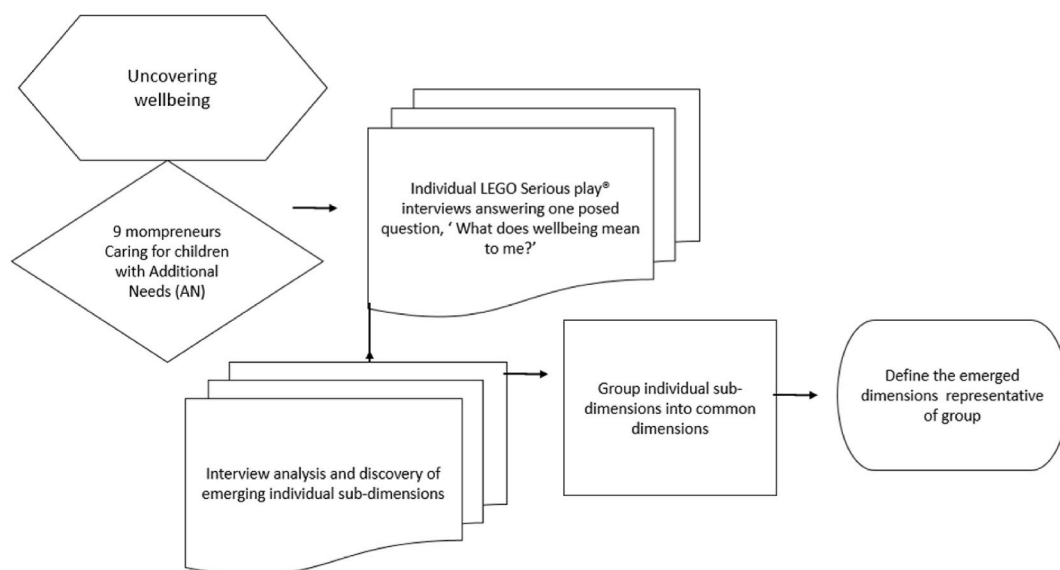


Fig. 1. Flow diagram illustrating the analysis process used to define the dimensions of well-being for mompreneurs with a child diagnosed with AN.

Lego® model examples are provided, each representing an aspect of each of the three dimensions, providing a snapshot into the inductive process. Please see [Table 1](#) below (see [Fig. 2](#)).

The emotional realization of internalized conflict, experienced by all is expressed in Dimension 1, *Internal conflict and self-neglect*.

Alice's model above highlights the shared internalized guilt experienced by all the mompreneurs: "I think this guilt that comes with taking the time we need is so frustrating. Because, who's putting that guilt on you? It's me." (Alice, 625–628).

Dimension 2, "*Empowerment, independence, and fulfilment*" was positively linked to entrepreneurship for many of the participants, which provided financial and wellbeing benefits relating to embracing one's choices. However, one aspect of this primarily positive dimension is the need for setting boundaries, expressed below in [Fig. 3](#).

For Juni, struggling to express a need separate from her son's AN led her to unexpected freedom as she reconciled those feelings illustrated in [Fig. 4](#) above: 'In order for me to be able to be okay, I have to put up my boundaries. I think it might have been when my son got diagnosed, boundaries for him, me, and others. We were all miserable trying to conform to (societal) expectations. So, I stopped, overnight. Stopped forcing him to go to school, stopped going to religious meetings, stopped doing what other people wanted and immediately, things got better for us all.' (Juni 262–265)

Dimension, 3, '*Resilient control: keeping the balance*' is a powerful example of how trauma stemmed from childhood or through experiences with their AN child has led to resilience applicable to entrepreneurship success. In [Fig. 5](#) below, Lucy is the defender. She is resilient, balanced and determined as she moves in flight towards the next challenge.

In addition to managing her business, Lucy asserts control over her son's education by advocating for her son and questioning their methods of instruction. 'I am the defender, and it affects me a lot, a lot! It's the mental load, the things you have to be on top of like, did he get this or that? When is this next therapy? Making sure his teacher is finding the balance that he's challenged, it's a lot. It's really a lot. Stressful, but it would be more stressed if I let go.' (Lucy 358–362)

These demonstrated sub-dimensions provide insights into the realities of mompreneurs, highlighting how their emergence impacted the overall findings. Although some identified dimensions *may* apply broadly to all mompreneurs/entrepreneurs, the inductive process reveals sub-dimensions that are unique to the caregiving and entrepreneurial roles lived by each the participants, impacting entrepreneurial behaviour and overall wellbeing.

4. Identified aspects of complex wellbeing realities

The mompreneurs in this study face challenges similar to traditional (mom)-entrepreneurs, such as uncertainty and financial risks, compounded by caregiving stressors. Added stress however, is managed by leveraging caregiving skills attained through caregiving, such as resilience and networking, setting them apart from other entrepreneurs ([Dillon-Wallace et al., 2013](#)). Based on these findings, three dimensions of wellbeing, including sub-dimensions, are identified below, illustrating the complexities of their realities. 1) Internal conflict and self-neglect 2) Empowerment, Independence, Fulfilment 3) Resilient Control: Keeping the Balance.

4.1. Internal conflict and self-neglect

Participants expressed a compulsion to engage in specific tasks to alleviate anxiety, which manifested as feelings of guilt and self-neglect. Their tone, body language, and words conveyed a sense of unimportance, leading them to perceive engaging in activities beyond their business or caregiving responsibilities as selfish. 'I think maybe I am addicted to my business and use it as an excuse not to take care of myself' (Raven, 643–644). Kit, 'I'm arguing with myself trying to justify taking time for me-away from him. Let's say them because I'm a mum to three, not one (pause) and I'm a wife (pause) and business owner, it's a lot of hats.' (Kit 411–416). Freya acknowledges her compulsion to check in with her clients even if detrimental to her wellbeing, 'I run my own business, I can't be away from my clients for a fifteen-day holiday. I am not able to switch off, so I just need to check in each day, even just for 30 min to see that everything is ok there, then I can continue, but I can't just let it go.' (Freya 673–676). These compulsions echoed by most, expressed as a necessity to relieve anxieties about business growth without being detrimental to their wellbeing, though tinged with guilt for neglecting other areas. Joy was expressed at being mompreneurs but all experienced feelings of inadequacy in balancing parenting and business growth. This guilt often stemmed from the perceived need to choose where to focus their time and energy—between their



Fig. 2. Self neglect by Alice

Bow: Being their protector is always in the background, something she will never be free from.

Fruit, veg, money, and own space: Being healthy, venture growth/stability and time for herself is just out of reach. She is running towards it, but just never quite gets there.

Table 1

Illustrates the identified dimensions and underlying meanings based on individual Lego® models and analysis.

Main dimensions		
1. Internal conflict and self-neglect	2. Empowerment, Independence, Fulfilment	3. Resilient Control: Keeping the Balance
Sub-dimensions of wellbeing		
A1. Experiencing feelings of selfishness when engaging in tasks unrelated to their business (es) or caregiving responsibilities.	B1. Recognizing pride and strength in overcoming childhood challenges rooted in neurodiversity stigma.	C1. Pre-emptive trauma avoidance is crucial, as childhood trauma manifests in adulthood as feelings of inadequacy.
A2. Inability to engage in well-being activities, such as maintaining a healthy diet, exercising, and obtaining sufficient sleep, leading to hyper-fixation on business growth.	B2. Embracing freedom in choosing meaningful connections (both in business and personal life) that empower others.	C2. Diminished energy levels lead to a focus on aspects within their control, as attempting to manage all areas is not feasible. Selective control, can result in feelings of inadequacy regarding areas that remain unaddressed.
A3. Recognizing the tendency to self-medicate through work, exercise, food, or alcohol.	B3. Recognizing entrepreneurship provides more than financial security, but independence, purpose, fulfilment and an opportunity for self-development	C3. Cultivating resilience through trauma applied to entrepreneurial ventures stemmed from employment and other trauma.

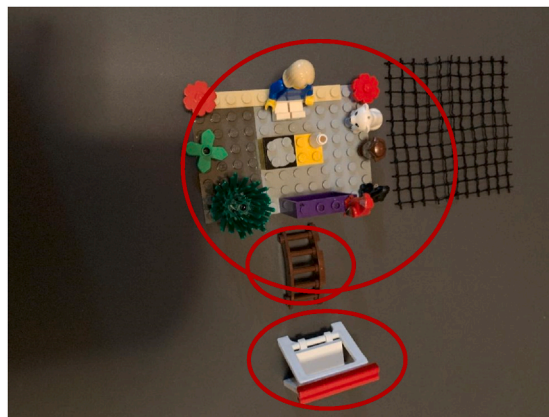


Fig. 3. Juni in her shared safe space

Net: The protective net securing her own space is just outside. Here she sits and welcomes her family, being present, secure, and engaged.

Bridge: Within the shared space the bridge welcomes others to come in.

Door: The door is open, welcoming others.



Fig. 4. Juni's shared safe place, but with boundaries

Net: When Juni needs her own space, she pulls over the net, taking the bridge in with her. In this space with the comforts of home minus family, external input, and judgement she finds her peace, taking solace in knowing the net can be removed, and bridge replaced when she is able to do so.

Door: She closes the door, keeping them out. 'This is my time, and when I come out, I'm a better mum.'

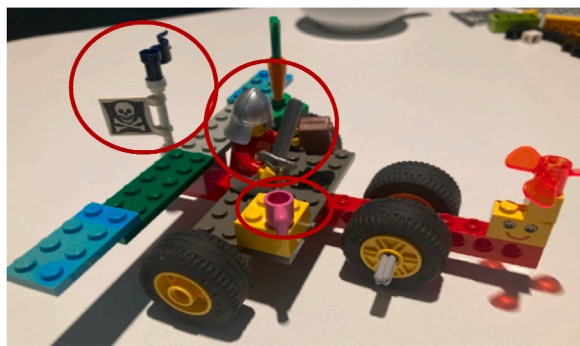


Fig. 5. Lucy the defender, fuelled by coffee

Flag: Illustrates her importance in being silly, playing with her children, and feeling free even through dark waters.

The defender: Lucy sees herself as the only one who can take care of her son's needs, above teachers, doctors etc. Armed for battle, she is ever ready, for the next battle to arise.

Coffee: 'because coffee is my life' and that bit of self-care.

family, their business, or themselves, with their own needs invariably coming "dead last."

Additionally, thoughts and emotions regarding their AN child(ren), plague some with guilt today, '... you know, thinking, I could just fucking walk out the door and that's it, no coming back. Thinking, horrible mother.' (May 537–539). Sally, 'At the end of the day, you're exhausted and you've done everything, you just want to have a glass of wine, you drink too much to get to bedtime. And then oh, God, I've got to get up and do it all again, tomorrow. I mean, there were mornings, I would literally cry as I had to wake them up and start all over.' (Sally 528–539) These narratives highlight an acute awareness of the repetitive nature of their daily lives, with the anticipation that the following day will bring similar challenges pertaining to their children, their personal unmet goals, or their business. Additionally, Freya reflected underlying sadness and guilt: 'I think as parents, when we discovered our children having special needs, we go through a sort of grief. We have to let go of our idea of a perfect child' (Freya, 1161–1163)

Her acceptance of the sentiments of grief and guilt when raising a child was universally acknowledged. For all, entrepreneurship provided not only a career, but a safe place, with some stating the time spent building their business can be seen as creating a future for their child, who might not have other employment options. For them, the compulsion to focus on the business setting aside personal hobbies and social lives, was seen as a means of caring for their AN child and safeguarding their financial future.

4.2. Empowerment, independence, fulfilment

All participants indicated that entrepreneurship positively influences wellbeing. By embracing aesthetics and establishing boundaries, it acts as a catalyst for their pursuit of fulfilment. 'I love colours and my home base is where everything starts, you know, I love to decorate how I like, and to have colours around me. You know, when the disabilities were diagnosed, it was such a hard time it was amazingly hard time, with no colour. But now, I have a lot of colours.' (May 507–518). Echoed by Juni and Maggie, colour, and freedom to express themselves has been a pivotal part of their wellbeing. 'It's my animals, it's colour and its peace that's all I need.' (Juni, 159) and 'I'm a quirky person, love animals, colours all around.' (Maggie, 414) For Freya, being able to express herself through fashion has been important for her, 'I was always mocked for wearing hats, so creating a hat collection was important as an adult. It's an expression of who I am and freedom to wear what I want.' (Freya, 338–341). For most, being surrounded by chosen expressions of freedom was perceived as a means of overcoming adversity and fulfilling what was previously lacking. Having financial stability as addressed by Sally, Lucy, and Freya extends the metaphor of independence concerning entrepreneurship as the catalyst to achieve freedom 'being free means money to do everything I want, and to travel.' (Freya 275) 'It's about being financially sound because one of the bigger worries was that, with special needs children, when I absolutely couldn't work, it was like, what are we going to do? You mapped out life, and I had this job, took a mortgage on the basis of my income, and now I can't work. So, you know, financial security has massive, just massive influence, as it takes away that worry, so that's like a massive part to me.' (Sally 415–425) 'Entrepreneurship allows freedom, you can be flexible with your hours, I can work from anywhere. That's the biggest thing. I built my life that I can be that kind of free with financial freedom. I can maybe let's say have new experiences or travel which is important to me and my family.' (Lucy, 43–54) Sally and Lucy found the topic of freedom an emotional one, suggesting the journey to freedom has been a challenging, yet rewarding one, illustrating the gravity of entrepreneurship on their wellbeing and the influence it has had on their family life. Additionally, others hope their business will provide their child with financial freedom. In contrast to the other narratives, for Kit and Alice, freedom was not expressed as factual, rather as unattainable despite their need, 'I've got a space, but everybody always needs you. Even with my space, I still feel like I've got to ask permission to use it' (Alice, 326–331) and 'I love being around colour, water, the greenery, but he takes me out of my sanctuary where I need to become 100% mom away from my calmness where I am no longer thinking straight.' (Kit 249–253). Both admit to having tried to set boundaries in their self-created sanctuaries, however, the all-consuming realization exists, that they are intrinsically linked to the needs of others. Additionally, all expressed joy in the freedom their businesses provided them in choosing their clients and growing their networks. In choosing entrepreneurship as a career, these

mothers found ways to support others needs as well as fulfil meaning for themselves.

4.3. Resilient control: keeping the balance

All participants emphasized the importance of control and resilience in significantly impacting their lives. They identified the necessity for strategies to support their wellbeing, whether in developing their business(es) or reflecting on their resilience as mothers of a child with AN. Additionally, all participants expressed feelings of powerlessness at various points in their lives while being 'Pro-active in doing what I need to do to get (him) through.' (Kit 430). Stemming from prior traumas the need for control of some area of their lives was a unanimous realization and one they felt strongly support their and their family's wellbeing.

Building their businesses was perceived as a tangible aspect they could control, drawing on resilience developed from past trauma. Entrepreneurship has been 'educating me on my little shallow life and I feel like I've just turned a corner.' (Kit, 574–577) Here Kit dismisses *her* importance, by stating her life is 'little and shallow', but recognizes the positive influence of entrepreneurship regardless. Additionally, others expressed starting a business as means to illustrate their resilience to a wider audience, 'There used to be a criticism levelled against me, at work, and seeing all the trauma of others around me, that chips away at you. Since I've been in charge of me work, I've got control over it, it's liberating.' (Maggie 586–587). 'The business that I do, is dealing with trauma all the time, because the kids are traumatised, the parents too. My entire business is grown from trauma, it's built around trauma.' (Sally 222–228). These statements reveal a clear connection between balancing control and trauma, intrinsically linked to the desire to demonstrate resilience through entrepreneurship, thereby validating their strengths to others.

Embedded traumatic experiences with their AN child are seen as intrinsic reasons to harness control of situations including perceptions of their child and is understood as a fundamental part of their lives. 'All the people around me have been hammered to death with information about his disability, but I have this thing about controlling what I eat, my workouts and steps. I can't control his anxiety, but mine is triggered if I can't achieve my little goals and create the buffer for him to go out in the world and be capable of surviving.' (Frey 992–1006)

'My closest ones know they have a disability, but not the dickheads out there, you know, those that know everything better and who tell you how to raise your child.' (May 418–420).

In contrast, Raven chooses not to control any situation relating to her son's schooling, 'I don't know what he's like at school, you know, I know he's struggling, but I don't know why. I can't see that for my own eyes, but I'm not getting a new job either.' (Raven, 578–580). She passionately discussed her inclusive business, forthrightly recognizing her own energy limitations regarding her multiple roles. However, the time spent on growing her business was described as a positive action that brought her closer each day to her goals and was a positive action.

5. Key insights

This paper explores the complex wellbeing realities of mompreneurs with AN children, providing insights into entrepreneurial resilience and transferable skills amid trauma, internal conflict and uncertainty. Utilizing LSP metaphor building, the study presents an idiographic example of wellbeing and resilience despite challenges and conflicting roles. By embracing their compulsions as part of their identity, participants mitigated the lasting harm to their wellbeing from past traumas (Breakwell, 2021; Nursanti, 2024). All participants reported enhanced wellbeing through their entrepreneurial spirit, despite lacking personal time and acknowledging tendencies toward overwork, overeating, or excessive imbibing (Coughlin and Sethares, 2017; Musyaropah et al., 2023).

Participants reported experiencing newfound freedom through entrepreneurship, which offered financial benefits and the opportunity to build empowering networks within AN communities. Owning a business was seen as essential for balancing caregiving and career goals, with some prioritizing their business without recognizing any negative impact on their wellbeing (Newhouse, 2018; Yoal, 2019). Statements such as, "this business has saved me" and "the business comes before everything else," were expressed by participants without any resistance. These findings highlight the relationship between entrepreneurship, wellbeing, and caregiving responsibilities, indicating that wellbeing is achieved through both entrepreneurial pursuits and the alignment of various aspects of a mompreneur's life. A novel finding was identification of resilient control having a positive influence on wellbeing. Participants expressed a need to elicit control after trauma (from childhood, employment or experiences with their child) and reflected an engagement of processes needed in daily life to feel in control (Hulbert and Anderson, 2018). By acknowledging their experienced trauma, participants derived meaning from wellbeing through entrepreneurship. Additionally, five women identified as neurodiverse, which added complexity to their realities. Although the impact of neurodiversity on their wellbeing was unclear, many indicated it significantly influenced their decision to pursue entrepreneurship.

6. Conclusion

This paper provides an idiographic understanding of the complex wellbeing of nine mompreneurs caring for AN children. Using LSP, emotions and wellbeing linked to multiple roles were uncovered, demonstrating how LSP can be used for sensitive interviews. It is the hope that this paper acts as a resource applicable to further research regarding emotions and entrepreneurship, advancing the use of visual and art-based methods for research.

Findings reveal the interplay between the multiplicity of the role of mompreneur while caring for an child and the intricacies linking entrepreneurship, parenting an child, and wellbeing. Additionally, findings demonstrate how caregiving impacts self-

perception and professional trajectories, enriching our understanding of wellbeing within the broader field of entrepreneurship and recognizes the multifaceted roles of entrepreneurs.

Authors statement

All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

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Declaration of competing interest

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Appendix

Detailed Methodology

Establishing trust with the participants through an open introductory discussion is necessary at the start to highlight the importance of their psychological safety and agency to build as little or much as they felt comfortable with (Adeloye et al., 2019). This qualitative study used a semi-structured interview design, to better understand the lived experiences of mompreneurs who are caregivers to an child. This topic, due its deeply personal nature, can be viewed as a sensitive one to the participants involved (Fernández-Alcántara et al., 2017; Pelchat et al., 2003).

LSP, is both exploratory and reflective, and therefore is seen as a suitable approach to interviewing on sensitive topics. LSP enables an outsider to be engaged in a hermeneutic dialogue, simultaneously as the participants engage in an internal constructivist dialogue, through the reflection and sharing process (Quinn et al., 2022). From this perspective, the research is guided by the participant's internal sensemaking of their model, and assignment of meaning to the bricks, providing control to the participant throughout (Lear et al., 2020).

The outsider, can further unfold this narrative through appreciative questioning, guiding the participant to explore deeper meanings behind their chosen bricks. However, although a large part of the understanding behind the bricks is achieved through questioning, it is the participants, who retain control throughout the interview, sharing as much or as little information as they choose.

The Lego® Serious Play® method a brief history

Since the late 1990s, LSP, has been used to encourage the creative development of metaphor building through the playful constructing of experiences using a hand-mind connection for deeper interpretation of meanings (Roos and Victor, 2018). LSP, is grounded to several theoretical foundations, including Vygotsky's language of play, Huizinga's theory of play, Varela's storytelling, Piaget's constructivism and Papert's constructionism theories (Barton and James, 2017; Beisser, 2012). Together these theories build the foundation for understanding the complexities of identity, which guide the builder to engage in self-reflection and sharing of their own meaning-making through a social constructionist dialogue (Mccusker, 2019).

Predominantly used in areas such as coaching, tourism, teaching, team development and group work as well as for therapeutic purposes, LSP allows for the conceptualizing, narrating and personal meaning-making through the Lego bricks® (Klassen et al., 2023; Roos and Victor, 2018). LSP is accessible to most individuals and is rooted in the premise that 'the answers are already in the room' with an understanding that building is done through 'thinking with your hands' (Kriszan & Nienaber, p 5, 2023).

Throughout the process, participants are guided towards deep reflection of the question at hand, while engaging in an internal dialogue (Hayes and Graham, 2019; Mccusker, 2019). This engagement with play, trusting their hands and the process allows for the emergence of meanings through an alternate voice (their model) combined with interpretive questioning by the facilitator to achieve deeper meaning through reflection (Klassen et al., 2024; Kristiansen and Rasmussen, 2014; Martin-Cruz et al., 2021).

The facilitator

The role of the facilitator² a key element in LSP. Participants are supported throughout the LSP process and are provided with clear

² The researcher/author is a certified facilitator (and is a member of the Association of Master Trainers).

instructions as illustrated in the facilitator handbook. Participants are encouraged to build with as many (or few) bricks they chose under the time allowed. The facilitator's goal is to elicit meaning and significance behind the model allowing for deep discussions through appreciative questioning (Dann, 2018; Graumann and Kallmeyer, 2022). In adhering to the role, the facilitator guides to ensure continuous engagement and 'state of flow' which is paramount to the LSP methodology (Chung, 2019; Pincock and Jones, 2020; Shipway and Henderson, 2023).

It is possible that participants hyper-focus on the questions posed, and some can find the idea of building paralyzing finding it challenging to initiate the building. Through gentle guidance from the facilitator participants are encouraged to touch the bricks, without intention, only to familiarize themselves with the feeling of play. This is further supported by the warm-up exercise(s) used in every workshop and was also used in these interviews.

The Lego® Serious Play® method and materials

The LSP method consists of 4 steps (Hayes and Graham, 2019).

Step 1: **Question** > Step 2: **Construction**: >Step 3: **Share**: > Step 4: **Reflection**.

Guidelines for the build were conveyed prior to construction, elucidating their ownership of the model and the meanings revealed. This is done without haste and is meant to establish trust while preparing a psychologically safe space for the interview (Mccusker, 2019). Prior to the meeting, no preparatory information was gathered, and no previous questions were addressed regarding wellbeing in any form, however, casual small talk preceded the interviews.

Two modifications were made to the LSP method for this study. 1) Custom-made Lego kits were created from a 5 kg box of bricks, matching the requirements of the LSP® 'Starter kit' of 234 pieces as identified in the facilitator handbook. 2) This kit was subsequently augmented by the addition of specific accessories: a witch's hat, a bat, a broom, briefcase, banana, magnifying glass, lipstick, crossbow, shoe, cherries, carrot, monkey, shark, glass, money, cat, crown, flags, helmet, sword, and coffee mug. These additions were added as additional 'visual vocabulary' also known as metaphoric materials intended to offer the participants expressive freedom with familiar objects (Peabody, 2015; Wengel et al., 2019). Augmentation to the Lego® kit(s) has been a source of contention, with support both for both and against. This study augmented the kit, as others have, to add flexibility to suit the theme of research (Wengel, 2019). Other alternative pieces, such as animals, weapons, costumes, and helmets were not chosen as they were not viewed as representative of daily objects the participants would encounter.

The workshop

Prior to the workshop, consent was given by all participants to participate in the LSP session(s), and for the researcher to use the data that resulted from workshop to be presented here. They were also made aware of the ability to withdraw consent at any time.

A warm-up exercise is necessary before any LSP session. During this time the participants were asked to familiarize themselves with the Lego® bricks in a playful manner for 2–3 min. This ensures setting a playful tone and provides the participants an opportunity to ask any questions (Roos and Victor, 2018). During this stage, some of the participants engaged in banter as they discovered interesting pieces sifting through the colours. Next, they were asked to get further acquainted with the Legos® by completing a warm-up exercise, within a time limit of 5min. Warm-up exercises are traditionally of a duck or tower; a dinosaur was chosen as unique alternative, and one used frequently by the facilitator (Mccusker, 2019).

Throughout the process, participants were not aware of the time, only the 'flow' of the build, and were only notified when 1 min remained. A brief discussion then occurred regarding building, followed by an open invitation to ask any further questions before the main build. Participants were informed that they alone provide meaning to their build, including the significance of chosen bricks, colours, and shapes. They were aware that there would be questions relating to the.

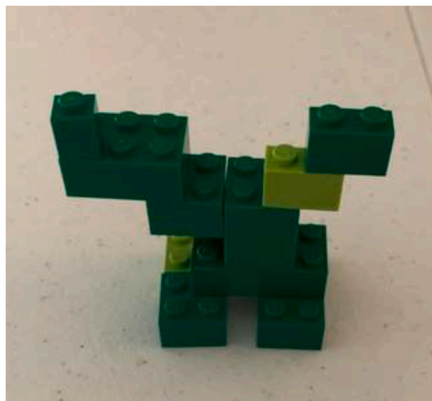


Fig. A1. Model of a dinosaur created in the warm-up, Kit 2023.

model, but that any significance to meaning was assigned by them and would not be altered through any questioning.

Instructions were then given addressing the question, '**What does wellbeing mean to me?**' These included that time (5–8 min was provided initially) would be extended if participants were engaged in active building and were in the 'flow', without them being aware of the facilitator incrementally extending the time until building naturally ceased, and the total building time did not exceed 15 min.

The question was posed, time started, and participants began their build using the Lego® bricks provided.

When building ceased, participants were asked initially about any feelings regarding the method. Three of the participants stretched, sighed, and expressed relief it was ‘over’, finding the question challenging. All participants engaged actively with the bricks; however, two participants found it difficult to start building. One participant noted ‘I’m very much in my head right now’ and another stated, ‘It feels so selfish to talk about my own wellbeing, even through Legos®.’ After the initial trepidation and with the facilitator’s encouragement all were able to focus on the question and build within the time allowed. Six of the nine participants expressed the use of the Legos® aided in the development of their narrative and in representing what was ‘stuck in my head.’ And others expressed they ‘really enjoyed not having to focus on you or what I need to say’. Further it was noted by the participants, that due to the limited number of bricks available, they were able to focus on expressing meaning more clearly without digging through a limitless number of Legos®. Photographs of the models were allowed, with some taking photos.

Understanding complex realities: an analysis

Re-listening to the interviews, re-reading the transcripts in conjunction with close examination of the constructed models was done to elicit key meanings. This included noting any emphasis on personal relationships, values, and events, and were descriptive, linguistic, or concrete in nature. Conducted individually, these interpretations lead to the rise of personal themes/dimensions through the participants engagement with their models. Sense-making was expressed through definition illustrated by the participants and in response to appreciative questioning. Depth was further found in the nuances of language through the complex layers and the re-reading of transcripts. This process was then repeated for each participant using an adapted Interpretive Phenomenological Analysis framework and hermeneutic constructivist lens to further conceptualize how we understand the language behind their experiences (Dwyer et al., 2019). Discernible group themes/dimensions were formed from the unfolded individual themes/dimensions and critically re-assessed with reference to the transcripts until common themes/dimensions and sub-meanings relating to identified theme/dimension emerged. This is illustrated in the results section of this paper and in Table 1 found on page 7 (Smith, 2017).

Table A1
Summary of participants

Participant pseudonyms	Interview time	Age of additional needs child(ren)	Marital Status
Freya	57m	14	Divorced, re-married
Juni	30m	14,17	Divorced, re-married
May	32m	16	Divorced, re-married
Lucy	17m	10, 8	Divorced
Sally	48m	18,17,15,14, 12	Married to father of children
Kit	33m	15, 7	Married to father of children
Raven	39m	8	Married to father of child
Alice	30m	7	Married to father of child
Maggie	57m	20	Married to father of child

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