

Enabling interaction and reflection

Theoretical background

Written by:

Stephan van de Ven & Jetske Erisman, MSc.

Scientific advisor: Dr. E.V. Syurina, Assistant professor Global Mental Health at the Athena Institute, Vrije Universiteit, Amsterdam.

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1. Brain Blocks: translating and reflecting the subjective experience

Brain Blocks is a communication and reflection tool, created by Stephan van de Ven. It aims to improve the social-emotional development of children, adolescences and adults, by working on self-other differentiation, underlying convictions, psychoeducation and improving communication. Brain Blocks consists of a box filled with two drawn outlines of a head, five sheets, a filter and balls, blocks and cylinders in different colours and can be used within and alongside other interventions.

This document explains the theoretical basis and background of Brain Blocks and forms an addition to the Reader, the practical guide. The first section of the Theoretical Background is an explanation of the intervention and an introduction to the theories it is built on. Section 2 focuses on the Self, Other and Self-reflection and discusses how they are linked to the social and emotional development of people. In the next sections, theory is linked to practice: starting with an explanation on how to use Brain Blocks and its theory to find out the needs of the client, after which the four aims of Brain Blocks are elaborated on. Firstly, the self-other differentiation is discussed, exploring its meaning, use and how Brain Blocks can be used to improve it. Secondly, the focus lies on 'underlying convictions' and explores how ideas on the Self, other and environment can lead to negative conceptions of how interactions with other work. After it is explained how Brain Blocks can be used to come to the core of these underlying convictions and how they can be rescripted in less troublesome ideas, it will be discussed how psychoeducation can be a part of this process. Lastly, 'improving communication' will elaborated on. Brain Blocks enables the creation of a shared language between client, environment and therapist. This language is both descriptive and performative: allowing communication, understanding and self-awareness. Examples of cases and definitions of main concepts can be found in the Appendices.

1.1 What is Brain Blocks?

Brain Blocks consists of a box filled with materials: two identical drawn outlines of a head, coloured blocks, balls, cylinders and a filter (Figure 2). It was created to provide psychoeducation for children with autism, but its use was widened with the help of clients and users. Nowadays, it is not only used for psychoeducation, but it has become a personalised reflection tool that teaches persons with difficulties in their emotional and social development to self-reflect and to establish a better relationship with their environment. This



Figure 1: Brain Blocks

allows for growth in one's social and emotional development. Brain Blocks is thus not a therapy in itself, but a tool that enhances therapies and allows for a common understanding between therapist, client and environment. It is based on a patient-centred approach and a developmental perspective, which means that the use and aim of the tool is built around the development and personal needs of the client.

Clients use the tool by laying down groupings of blocks that represent their experience and emotions in situations. The groupings of blocks are at the centre of the conversation and are interpreted together with the practitioner, who may ask about particularities of the situation, the meaning of the blocks and their formation or the process of laying them down. This allows for a better understanding of the thought processes of clients and invites and guides change in behaviour through reflection. The blocks are simple to use: they come in distinct colours, can be moved around, stacked on top of each other or changed when necessary.

1.2 For whom?

Brain Blocks can be used for clients with difficulties in their social or emotional development, either stemming from delays in development or (diagnosed) problems. It can be applied from approximately the age of four, and can be used with both children and adults. Professionals working with Brain Blocks have a wide variety of backgrounds within school systems and healthcare, such as psychologists, youth workers, social workers, outpatient counsellors and other professionals who encounter clients with the aforementioned obstacles. In this text, the users of Brain Blocks will be referred to as 'clients' and the professionals working with them as 'the therapist'.

1.3 The history and development of Brain Blocks

In 2005, Stephan van de Ven started working as a freelance psychomotor therapist. As he was just starting out, he did not have his own practice and had to go to the schools and houses of the children he was working with. Coming into the everyday lives and surroundings of his clients, he realised how different contexts and interactions made problems worse or better. He mainly worked with children with autism and felt like he lacked a tool with which he could get the children in sync with their environment, by improving their communication and understanding. He noticed that metaphors and images stuck with the children and he started thinking about ways to use this in his therapies. One night, he woke up with an idea: to visualise the difference between thinking and understanding of a

person with and without autism. He started going through toy boxes and found materials that could represent this. Then, he drew two heads on pieces of paper and started experimenting. By trying out different shapes, sizes and materials, he soon realised that he was drawn to the wooden blocks and how he could lay down a brain that was thinking in straight lines and one that was more flexible. After a while, he started showing it to the children he was working with and after a quick explanation, they often took over and explained their therapist how their brains were working: providing psychoeducation to their therapist. Often he was asked to use his blocks and heads to create a better understanding amongst family members, to provide them with an explanation of what the client was going through.

Over the years, Brain Blocks has grown into a tool that can be used in many other therapies and interventions. It has been developed and expanded, always co-creation with clients. Through experience, it became evident that it is not only useful in psychoeducation for people with autism, but that a much wider group of clients could benefit from it. Nowadays, Brain Blocks is used in the therapies of people with issues or delays in their social or emotional development.

At the moment, health care professionals (such as psychologists, social workers and child and youth health care workers) are trained to use Brain Blocks throughout the Netherlands and Belgium. The training consists of three days, each with their own theme. After completion of the training days, the professionals write a report on their practice with Brain Blocks. At the same time, research is being conducted on the tool. In 2017, the Athena Institute of the Vrije Universiteit Amsterdam has conducted research on the effects of Brain Blocks. The results of this study are used to further improve Brain Blocks, so that it is tailored to the needs of its users.

1.4 The aims of Brain Blocks

Brain Blocks is an intervention or tool that can be used within a treatment. The aim is to improve or restore communication between the client and their environment in such a way that building on this relationship is possible again and the client can continue to grow in their social-emotional development. Brain Blocks invites a client to reflect and to be able to understand their feelings, thoughts and actions so that they have a better communication with their environment, which improves not only the state of the client, but also their relationships. The specific aim will be determined for each client, depending on their needs and social and emotional development.

There are four categories of aims

- 1. Establishing a Self-other differentiation
- 2. Working on underlying convictions
- 3. Psychoeducation
- 4. Improving communication and reflection

Brain Blocks can be used to work on two main themes that can be problematic in the social and emotional development of people: *self and other differentiation* and *underlying convictions and expectations,* both presented in Figure 3. The 'self and other differentiation' is an understanding that allows people to gain a sense of self and individuality, but also their relation to others, their social context, materialities, time and space (Labouvie-Vief, 2003; Oppenheimer, Warnars-Kleverlaan, & Molenaar, 1990; Stern, 1985). This understanding is not only to be learned by children and adolescents, but can also become problematic in later stages in life due to (diagnosed) problems or fluctuations in social-emotional development level which can occur, for example, in stressful times (Labouvie-Vief, 2003; Vonk & Hosmar, 2009).

Building on the emotions and perceptions established through a self-other differentiation, people construct beliefs on how the world works and desires on what they want or need (Bartsch & Wellman, 1989). 'Underlying convictions' are negative ideas and beliefs on how the Self, others and environment affect each other, resulting for example in a fear of failure, a fear to be left alone or the belief that no one is supportive of them (Wearden, Peters, Berry, Barrowclough, & Liversidge, 2008; Young, Klosko, & Weishaar, 2003; Young & Pijnaker, 1999). The social and emotional development of a person and the self-other differentiation are linked to the creation of an identity and underlying convictions (Kerr, Crowe, & Oades, 2013; Young et al., 2003). Therefore, it is important to tackle hick-ups and problems in this field at a young age. When there are problems with 'underlying convictions' at a later age, they negatively affect the person's behaviour and identity, which can result in problematic social functioning (Bartsch & Wellman, 1989; Vonk & Hosmar, 2009). Clients with problems in both themes may need treatment on them simultaneously.

The third aim of Brain Blocks is *psychoeducation*. Psychoeducation is a form of therapy that allows clients and their environment to create an understanding of their mental health diagnosis and can be embedded into working on 'underlying convictions'. It is aimed at empowering them, which is also believed to increase compliance of treatment (Bäuml, Froböse, Kraemer, Rentrop, & Pitschel-Walz, 2006; Ekhtiari, Rezapour, Aupperle, & Paulus, 2017). Brain Blocks can help to visualise differences in

organisations of thoughts due to diagnoses or experiences and reframe narratives on the self or illnesses. This enables a better understanding amongst both clients and their environment.

Improvement of communication and reflection is the last aim, which is a continuous underlying objective. With Brain Blocks, clients, their environment and their therapists learn a common language (the blocks) through which everyone's needs and thoughts can be communicated, improving communication and understanding (Morrell, 2011). Moreover, the blocks contribute to the ability to give words to feelings, which, in return, helps people to become more aware of these feelings as well (Mol & Law, 2004).

1.5 The intrinsic theoretical assumptions of Brain Blocks

Brain Blocks is built on five underlying theoretical assumptions, of which the first three focus on the client and the last two on therapy. As mentioned above, the first assumption is that people are complex dynamic systems: they are constantly being influenced by their experiences, environment and people around them, which is more complex than was previously thought (Kaplan & Garner, 2017; Ruch, 2005; Thelen, 2005). This also means that people develop in different ways and that they should be regarded as delays in their development, rather than their defects (Delfos, 2002; Delfos & Groot, 2016). This allows for a different focus in therapy. When clients as seen as 'defective', the focus on therapy moves towards managing defects, yet, when people are seen as 'delayed', the focus shifts towards enabling and supporting developmental or personal growth. This is the second assumption: a developmental perspective is more beneficial than a perspective that focuses on defects. The theories on developmental cascades combine the two perspectives mentioned above and state that the many interactions and transactions within developing systems, which occur throughout generations, have effect on the system as a whole. This means that interactions can have consequences on the system as whole (the system is a person, in this case), but also on smaller levels of the system (Masten & Cicchetti, 2010). This also shows that well-timed interventions on smaller levels, focusing on interaction, can have large effects on the overall well-being of the system, or the person (Masten, Long, Kuo, McCormick, & Desjardins, 2009). "They can alter the course of development" (Masten & Cicchetti, 2010: 491).

The third assumption also focuses on the development of people: as they develop in relation to others and their environment, these *relationships* should be taken into account and not taken for granted (Hartup, 1989; Hinde & Stevenson-Hinde, 1987; Ruch, 2005). Relationships enable development, but at the same time, development alters social relationships. This means that not only the individual is

developing through interaction, but also others with whom they interact (Hartup, 1989). Social relationships can both shed a light on why clients have certain issues, but can also have a positive influence on the progress of the client when taken into the process of therapy. Brain Blocks thus has a relationship-based approach to health care (Ruch, 2005).

The last two underlying theoretical assumptions are focused on therapy: patient-centred care and the need for a reflexive practitioner. In *patient-centred care*, patients or clients are treated as complex and unique individuals, which is in line with the aforementioned theoretical assumptions (Pelzang, 2010). The perspectives and worlds of the patients or clients are explored and taken into account in the treatment. Both practitioner and patient work together on establishing a therapeutic relationship. Moreover, the treatment options are discussed with patients and an understanding is ensured (Stewart, 2001).

In order to work with all the assumptions mentioned above, it is of importance for the therapist to be able to reflect upon their actions within a therapeutic setting, as their clients are complex and dynamic and are at the centre of the treatment (Ruch, 2005; Thelen, 2005). The last assumption, therefore, is that the therapist needs to be a reflexive practitioner and able to *critically reflect* in their practice: they need to reflect on the role of their own Self in therapy, work, assumptions, choices and (re)evaluate on them in the moment (Kondrat, 1999; White, Fook, & Gardner, 2006). With Brain Blocks, practitioners need to embrace the "uniqueness, uncertainty and relationships" of clients, based on a "dynamic and situated" practice (Ruch, 2005: 114, 119). This means that they need to view clients as individual cases that may differ from average diagnoses or developmental patterns, which can bring uncertainty for the therapist. Yet, when they are reflective and dynamic as well, they have the ability to reflect upon the situation in the moment and to alter their approach if necessary.

2. The road to development: awareness of the Self and reflection

The study of child development stems from a concern about misbehaving adults in society. As societies are built on the trust that the majority of people will obey the social rules, it became necessary to study why some are showing deviant behaviour (Sameroff, 2010). Philosophers started to study the development of people and focused on why people behave in certain ways and how they know what is morally right. This study of human development was closely related to the study of ethics: how do people turn into good, hard-working and morally responsible adults? (Bee & Boyd, 2013; Sameroff, 2010). Nowadays, the study of child development focuses on how, when and why children grow and develop through their childhood and into adulthood. The results of the studies are not solely focused on outcomes in adults anymore, but now aim to improve care for children and to better understand their needs and problems. The question 'How do people grow and develop?' is centuries-old and still sparks discussions in multiple scientific fields. While the question was first raised in philosophy, it later moved to psychology and newer fields such as learning and educational sciences. The discussion around the answer to the question is still alive and debated (Bee & Boyd, 2013; Matthews, 2018; Sameroff, 2010).

One of the more recent answers to the question 'How do people grow and develop?' is that people can be seen as *complex and dynamic systems* that are in constant movement and are influenced by others and experiences that they encounter: friends, family, school, events and situations (Bronfenbrenner, 1994; Maggi, Irwin, Siddiqi, & Hertzman, 2010; Thelen, 2005). Nowadays, it has been accepted that, therefore, every individual has different ways to develop, and paths towards and in adulthood (Bee & Boyd, 2013; Piaget, 1964). For some, this is a relatively straight line, with a few minor bumps along the way and for others, this is a long, winding road full of potholes (Masten & Cicchetti, 2010). The majority of the people will be somewhere in between. Development is not a linear process towards a goal or a series of set stages, but a continuous process of growth, guided by some milestones (Bee & Boyd, 2013; Stern, 1985). How children develop emotionally and socially remains unclear, even though it is essential for their functioning in society, to have positive social relationships and to make responsible decisions and decrease the risk of mental health issues (Bee & Boyd, 2013; Payton et al., 2000; Stern, 1985). The next section will dive deeper into the social and emotional development of people.

2.1 Emotional development and the social environment

The emotional development of people is defined as "a dynamic process in which the basic primary emotions develop and crystallise into a broad emotional life, which attributes to the formation of a personality. The emotional development plays a pivotal role in the forming of perceptions and behaviour of the individual, throughout their life" (Vonk & Hosmar, 2009: 24). The development of emotions thus influences the way in which persons view the world around them and forms their personality. Emotions form the base of behaviour, even though this is often unconscious. When a person is tensed or relaxed, it alters the way in which they perceive their environment and respond to others. For example, when a person is stressed, they can have an annoyed response to someone who is asking them for help, whilst in another situation or emotion, they would be happy to help out (Vonk & Hosmar, 2009). At the same time, one can express behaviour that does not match their emotion, for example, one can laugh at another person's joke, without finding it funny (Lewis & Brooks, 1978). This shows two main points: firstly, emotions are linked to behaviour, but people can assert control over what they show and secondly, emotions are to be seen in the social and cultural context of the person and are linked to social development and past experiences (Lewis & Brooks, 1978; Vonk & Hosmar, 2009).

As emotions shape personalities and perceptions of the world, it is important for a person to become aware of their emotions and to be able to express and regulate them, which is learned through interaction with family and other actors in the social environment. Awareness and expression of emotions allows a person to learn, develop and understand themselves and others. By being aware of one's feelings, people can reflect on how this affected a situation or the emotions of others and learn from this (Vonk & Hosmar, 2009). They may decide to change the way they feel about the situation or the other person, or change their own behaviour (Von Wright, 1992). When people are aiming to change their perspectives or behaviour, for example with the use of therapy, their necessary step is to thus become aware of their emotions and to learn how to express them. In return, the therapist or practitioner should become aware of the level of emotional development of the client, in order to become a right fit for the client and to help them grow in this (Vonk & Hosmar, 2009).

Working on emotional development is of great importance. Negative emotions can affect learning and social interactions, obstructing the creation of understanding. Yet when they occur over long periods of time, they create high stress levels and will leave people with fears and convictions that stop them from forming healthy relationships later in life. For example, when a child experiences trauma in their childhood, they can have less confidence later on in life or suffer from fears, such as being afraid to be

left alone (Vonk & Hosmar, 2009). These fears or convictions can also lead to maladaptive behaviours, thoughts and coping strategies, which do not offer healthy long-term solutions (Vonk & Hosmar, 2009; Young et al., 2003). Even though emotions are personal, they are always in interplay with others. To be able to work on them and develop, the first step is to become aware of the self and the distinction with others (Lewis & Brooks, 1978; Vonk & Hosmar, 2009). This process is discussed in the next section.

2.2 Development of the Self and Other

Stern (1985) focuses on the development of the *Self* and *Other* in children. He explains how the different aspects of development (cognitive, emotional and social) are guided by the child's underlying understanding of their Self, and their Self in relation to others. Stern recognizes five different phases in this process, but also states that there is continuous progress and that each stage will stay with the child for the remainder of their life. When a child moves towards the next phase, the previous one will be incorporated into the new understanding of the Self and Others. He recognises the first phases as the formation of an *emergent Self*, in which a child gains consciousness about their mental processes as a response to the situation they are in. The *sense of a core Self* is the second phase, in which the child starts to recognise emotions and their mental processes as continuous and coherent. In the third phase, the child realises that they are separate from others, which is called the *sense of core Self-with-another*. Next, the child understands that their mind is different from others: the *sense of an intersubjective Self* (Stern, 1985). Lastly, the *verbal Self* emerges, which is the 'ability to tell a narrative about your own experience' (Stern, 1985: xxiii). The phases are visualised in Figure 2.

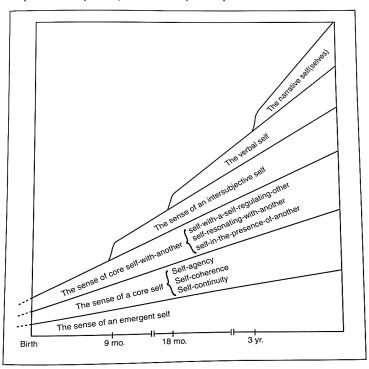


Figure 2: The five phases of the development of the Self and Others (Stern, 1985: xxv)

The development of the Self and Other happens when both the child and the environment are in sync (Stern, 1985). Stern describes how each have rhythms and how, in order for a child to use this to learn and develop, they must understand each other's cadence and build on this. An example of the use of this rhythm is when infants move a toy around and how their mother laughs in the same rhythm as the child moved the toy. This provides the infant with recognition and the realization that their actions affect others (Stern, 1985). The use of rhythm to create new advancements is explained simply by illustrating what occurs when two friends start tapping on a table: when the first person starts tapping a rhythm, the other will be likely to follow that rhythm by first copying it and then answering it by creating an echo. When the two are in sync, the original rhythm can be used as a basis to explore different and more complex rhythms together, as one can built on and around the other person's rhythm. It is important to note that this creation of new rhythms or developments can only be created when the two rhythms are in sync in the first place. When this analogy is taken back to child development, it shows that children and their environment can tap their own rhythm, but when this is not in sync, the child will experience difficulties in their development of the differentiation between the Self and others. As this development is considered as the basis of other kinds of development, such as cognitive, emotional and social, their progress in these other aspects can be obstructed as well (Delfos, 2002; Oatly, 1992; Payton et al., 2000; Stern, 1985).

2.3 Innovation through communication

Fogel & Garvey (2007) describe the process of change and innovation through dynamic interaction as *alive communication*, in which they recognise three levels of communication: the first level is called *co-regulation*, which describes situations where two people interact and adapt according to known patterns and structures. There can be variations, but they exist within a certain frame. In the previous example of tapping on tables, this would be the first stage: the two friends tap the same rhythm. The next level is *ordinary variability*, where changes occur, but they are still within a framework: the two friends try out new tapping rhythms on the table and make changes by listening and responding to each other (Fogel & Garvey, 2007). Fogel and Garvey take the example of two people having lunch together regularly (co-regulation), who then decide to go for dinner together (ordinary variability), which presents a meaningful change in their interaction, but is still within the same frame. The last level of interaction is *innovation* and this describes how, through interaction, a new development is made which presents the people engaged in communication within a new frame. For example, the two people who went for dinner, can get into a relationship and start doing more things together. Their actions are now framed as 'being a couple', which is a significantly different frame than the one they

started with: as friends going for lunch together (Fogel & Garvey, 2007). In the example of the tapping on the table, innovation could mean that they not only create new rhythms, but also start singing or dancing together on the rhythms they form. The theories on the 'Self and Other' and 'alive communication' thus show that when the two parties are understanding each other on the same level first, meaningful variations are necessary to allow for the development of new frames and innovation. People need to be in a dynamic interaction, in which they can experience variations, which then allow for innovation and development.

2.4 Self-reflection

In order to make the step from novel experiences to new developments and frames, it is not only important to understand the difference between the Self and the other, but also to recognise that it is possible to have different perceptions on the world. It is essential to first understand that creating a different frame is a possibility (Von Wright, 1992). This can be explained by taking the example of a child who throws a tantrum after they lose a game. In order to allow for variation and innovation and development in the interaction around the tantrum later on, the child needs to first understand several things: a) that there are Others who may experience consequences of the behaviour and may not like it, b) that they have a Self and that they do not like losing, which upsets them, c) others may enjoy winning and d) that there are other ways or frames of responding to situations: they could learn to understand that losing a game is not that important, that they have to let others win in order for them to enjoy it or to see the lost game as an opportunity to explore how they can get better. These understandings will allow the child to alter their behaviour and become less upset when they lose a game. Yet, in order to get these understandings, the child must be able to *reflect* on the situation, others and their own responses to it (Payton et al., 2000; Von Wright, 1992).

The capability of reflecting on one's experiences, thoughts and consequences is essential in the social and emotional development of a child and can be improved and explored with the use of Brain Blocks. Two levels of reflection can be distinguished: reflection on the world and Self-reflection. Children often possess the first, while adults are expected to be capable of the second as well. A child can reflect on familiar things around them; they can have purposeful actions and predict what happens in everyday situations, but they are unlikely to be able to make themselves 'the subject of reflections of their actions' (Von Wright, 1992). In order to be able to Self-reflect, a sense of *Self* is necessary to develop. One needs to recognise that the Self is a construction based on the ideas on themselves and the reaction of others on oneself. One needs to understand that they can think about their own beliefs and actions and direct or change them when they evoke unwanted responses (Oatly, 1992).

Self-reflection is the deeper level of reflection, in which one interprets their own actions, thoughts and intentions and place them in perspective and context. This brings new information, for example on the consequences of certain behaviour or the possibility to relativize one's own beliefs in relation to their actions. With Self-reflection, a person is capable of asking themselves why they act, belief or respond in a certain way and how this fits into the context and different perspectives around them (Oatly, 1992; Payton et al., 2000; Von Wright, 1992). This can lead to meaningful changes and regulations in one's behaviour, to adjust in social situations and to recognise that there are multiple ways of responding to a situation (Grant, Franklin, & Langford, 2002; Payton et al., 2000; Von Wright, 1992). Moreover, it has been proven that this new knowledge allows for growth in other cognitive abilities: it opens new pathways of thinking. Furthermore, when it is understood that there are multiple realities and worldviews and that it is possible to choose between them, one becomes able to learn new ways of seeing the world (Oatly, 1992; Von Wright, 1992). When children and adults are capable of Selfreflection through which they can reflect on a deeper level on themselves, it will allow them to more easily have positive relationships with others, deal with and adapt to complex social and emotional situations and divert from risky or deviant behaviour than with solely the possibility of the first level reflection where they reflect upon the world around them and responding to it (Payton et al., 2000; Von Wright, 1992).

3. Getting started with Brain Blocks

As people are complex, dynamic systems, there is a need for personalised care and guidance from professionals (Thelen, 2005). People with a smooth development may need directions, whilst the ones with the more challenging roads may need some adjustments and interventions in order to provide them with tools with which they can reflect on situations themselves and adjust and fit into different social contexts. When people are having issues in their emotional or social development, are in conflict with their environment or are showing structural misbehaviour, they can be guided in the right direction by taking the analogy of rhythm and providing them with tools that allow them to restore the synchronization between themselves and their environment. They often experience difficulties in the ability to reflect on their own emotions, actions and thoughts, can have a lack of understanding on how this affects others (and their emotions, actions and thoughts) and on what kind of behaviour is appropriate in different contexts. When this is the case, they will not be helped by interventions that measure their cognitive or social abilities and act upon this, but they need tools that allow both practitioner and client to understand the subjective experience of the client (Stern, 1985). *Brain Blocks* is an intervention that does exactly that.

In Figure 3, two of the aims of Brain Blocks are presented: the self-other differentiation and the underlying convictions. Both themes are linked to the self-image of a client and how they relate and interact with others in their environment. The two aims are closely related and interdependent, this is visualized by the arrow in the middle. In the self-other differentiation, people gain an understanding of what consists of their Self and how others respond to this. Some experiences lead to negative convictions on how people respond or how one should act, which can come up at a later age. These underlying convictions, such as: 'I am never good enough' or 'I'm afraid to be left alone' shape the way in which people perceive the world around them and the way in which they view themselves, or their identity (Bartsch & Wellman, 1989; Berzonsky, 2004). The two aims of 'self-other differentiation' and 'underlying convictions' are thus interrelated and interdependent: the first forms a basis for the latter. Clients can have issues in either section, or in complex cases, have problems in both. Brain Blocks can be used, firstly, to find out what the client needs, this process will be discussed below. Then, it can be used to improve the aspects that need work by being implemented in other therapies.

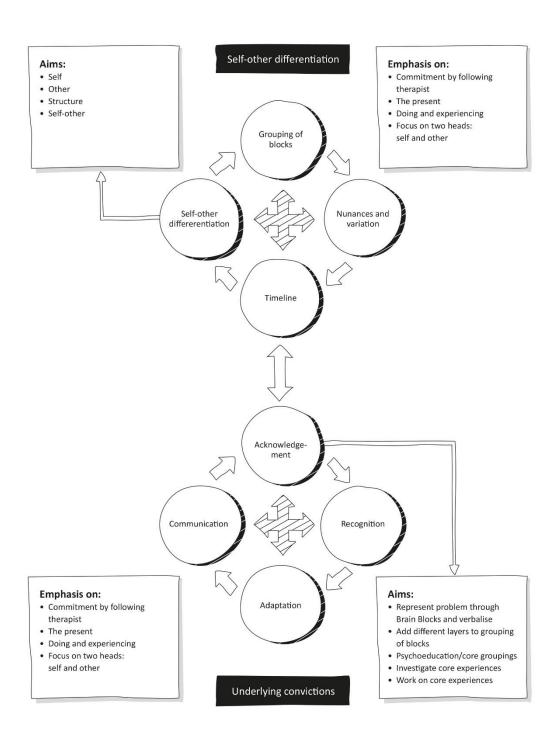
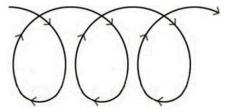


Figure 3: Working on the self-Other differentiation and underlying convictions with Brain Blocks

3.1 Finding out the needs of clients

As seen above, clients can have issues with differentiating between the self and other, underlying convictions that hinder them in daily life or struggle with both. There are several elements that guide the practitioner in this search, which will be described in steps. Yet, the process of assessing the client Figure 4: An iterative process and their needs is iterative: a hypothesis is formed and adapted



after new information is brought in. This process can be visualised as a string of interconnected loops in which one goes back to their hypothesis or (therapy) plan to adapt it to new information, see Figure 4 (BusinessDictionary, 2019).

The first step in finding out what a client needs, is to gain some information on the background of the client: their age, approximate intelligence level, their living situation, history of therapy and their request for help (Corcoran & Walsh, 2010; Vonk & Hosmar, 2009). This provides the therapist with an overview of the client's situation and a first idea to where they may fit in on the scheme in Figure 3. The next step for the therapist is to interact with them. Through interaction, the therapist can create an understanding of the needs of a client and establish a bond of trust in their therapeutic relationship, which is of vital importance in treatment (Weck, Grikscheit, Jakob, Höfling, & Stangier, 2015). In interaction, the therapist can become aware of how this communication is maintained and what is being expressed, which provides an insight into the social and emotional development of the client (Stern, 2010; Vonk & Hosmar, 2009). Guiding questions are:

- 1. How does the client maintain attention?
- 2. Can they follow the lead of the therapist in communication?
- 3. Can they bring in new elements into the communication?
- 4. Can they express their preferences?
- 5. Can they express basic emotions?
- 6. Can they nuance emotions or express sentiments in relation to others and their environment (such as jealousy, pride, shame)?

The therapist is thus scanning for the level of social and emotional development and needs of the client, focusing on interaction and expression of emotions (Vonk & Hosmar, 2009). As the process is iterative, it is necessary to keep fine-tuning ideas on the needs of clients and to keep adapting the hypothesis and ideas on where they fit into Figure 3. Besides scanning for the level of social and emotional development of the client, it is also important to check for past experiences and coping strategies, which will help in creating a better understanding of the behaviour of the client (Young et al., 2003). The past experiences and coping strategies can point towards underlying convictions, but it can also mean that certain types of therapy will not suit the client. For example, when they have a long history of therapy and do not want a new therapist to come in, they may need more interesting and less conventional methods in which they can take the lead, instead of a form of therapy in which they are required to tell the same story that they have told all the other therapists many times before.

Through interaction, the therapist and client establish a therapeutic relationship, an essential element of therapy (Shattell, Starr, & Thomas, 2007; Stamoulos et al., 2016; Vandereycken & van Deth, 2009; Weck et al., 2015). An example of establishing a bond is given in Appendix 4: the case of Freya. This bond between therapist and client is seen by some as contributing more to the improvement of the client than technical interventions. In this relationship, the therapist needs to be reflective and evaluate the needs of the client, rather than the theory on how to build a good therapeutic relationship in theory (Horvath, 2000). The therapist thus needs to become suited to the client, sensing their needs (Horvath, 2000; Stamoulos et al., 2016). As Brain Blocks is an intervention that intervenes in interaction and relational issues, building a therapeutic relationship with the client is a prerequisite for using it.

In order to guide a client, therapists need to be sensitive and reflexive: they need to be able to reflect and act upon their thoughts immediately. The therapist is required to pay attention to the client's thoughts, verbal and body language and give meaning to this: translating it into what the clients might mean and into a framework of therapy (Maeyens, 2009). They also need to guide the thought process of the client, by inviting them to reflect upon their experiences and story and to go back and forth between the different perspectives: of the client, practitioner and environment. Lastly, they need to be able to sense and decide on what next steps are necessary to make and how to construct the appropriate help (Lock & Nguyen, 2010). They use their own practitioner-Self to "feel their way around bodies, patterns and narratives" and to make decisions upon this (Lock & Nguyen, 2010: 290). The therapist needs to invite the client to take this next step, which can only be done if it is an appropriate question and if the client feels committed to the cause (Bosman, 2008). This is done by mirroring the other person in interaction and sensing what next step is feasible and welcome for them. The therapist forms a role model for the client: they mirror them and show them how the next step can be taken, for example by bringing in slightly more variation in the groupings of blocks that they lay down, or by showcasing more nuanced or complex emotions than the client. Brain Blocks helps the therapist in understanding the client's perspective and needs and is simultaneously a tool to translate the perspective of the therapist to the language and world of the client.

3.2 Using Brain Blocks

When there is enough information to make a guess on where the client is in Figure 3, and there is a therapeutic relationship with a bond of trust between client and therapist, the next step is to use Brain Blocks to test the assumption. This is done by asking the client to lay down blocks that represent a certain situation or experience. The complexity of the situation that is being asked about depends on their position in Figure 3 (which will be elaborated on below), their mood, abilities and experience with the intervention, but is based on a set of possibilities: it can be an everyday experience, an activity that they partook in or something fun/less fun that happened during their week or something that they have just done together with the therapist.



Figure 5: An example of an image laid out by a client

When using Brain Blocks, the client assigns their own meaning to the blocks, so that they can use it to narrate their experience of the situation. The practitioner can guide this process by asking questions, such as: What happened next? Where were you when this happened? Did you enjoy it? The question needs to suit the conversation and should be related to the needs and questions that the client has, so that they feel interested in answering it. The client is guided towards using the blocks, but with as little intervening from the therapist as possible. The guiding is aimed at getting the client to use the blocks and start laying them down, but it cannot be steering client towards certain blocks or formations.

Both the process of laying down blocks and the end-result represent the way in which the client experiences, thinks and organises these thoughts and feelings. The therapist interprets the image that the client has created with Brain Blocks in conversation with them. They can do so by asking about the meaning of the blocks and their formation and may reconsider the position of the client in Figure 3. When this is understood, the therapist can invite the client to start reflecting on this: Can you show me how that made you feel? How do you think others felt? Why do others respond that way? These questions allow the therapist to feel where the friction lies for the client and where they may need help.

After this first test of the hypothesis, therapist and client can engage in an activity together, something that lies closely to the interests of the client, such as playing football, creating a bowling game with balls of paper and the cylinders in the Brain Blocks box or engage in another activity in which two people can have different experiences. This new shared experience can then be taken to reflect upon

and investigate the client's abilities to differentiate between the self and the other, or to check for underlying convictions. It forms an opportunity to discuss different emotions that one can have to the same experience. Again, the therapist is required to adapt their ideas and hypothesis to the needs of the client if necessary. It is important to note that the questions and activities that are being asked of a client should lie within their window of tolerance, which is a range of topics, activities and invitations in which the client can be challenged, but still feels comfortable and safe. When something is being asked that lies outside their window of tolerance, defence mechanisms and coping strategies will kick in (Minton, Ogden, Pain, Siegel, & van der Kolk, 2006; Siegel, 1999). An example of being mindful of a person's window of tolerance is provided in Appendix 3: the case of Michael.

When there is an understanding of how the needs of the client can be categorised, the next step is to start building towards a better self-other differentiation, an understanding of underlying convictions and their frictions or both. Within these two themes are the other two aims of Brain Blocks: psychoeducation and improvement of communication. Each will be discussed below.

4. The aims of Brain Blocks: improving communication and reflection

The four aims of Brain Blocks will be discussed in this section. Firstly, it is discussed how the self-other differentiation can be improved through the analysis of interaction patterns and creating awareness of the thoughts, feelings and emotions of others. Secondly, it is explained how Brain Blocks can be used to work on underlying convictions, after which psychoeducation is discussed. Lastly, the continuous aim of improving communication and reflection will be elaborated on.

4.1 Working on the self-other differentiation

People are complex dynamic systems and are influenced by their past experiences, needs, feelings and environments. Their emotions influence their perceptions, experiences and behaviour, emotional development lies at the basis of their learning and social abilities. When people are aware of their emotions and sensitive to different perceptions, they can reflect on them and make alterations when necessary. The first step in this process is to differentiate between the Self and the other, after which self-reflection can be taught. This will allow people to form healthy relationships, to learn and develop and to adapt to difficult and challenging situation.

The ability to differentiate between the Self and the other is an essential skill that forms the basis of social, emotional and cognitive development. It is the ability to recognise what you want, feel and need and to understand that others also have emotions, thoughts and feelings and that they may experience same situations differently. At the same time, it entails awareness of how others respond to you and how they are affected by your actions. This understanding is an essential first step that is necessary to have, before other forms of therapy can be started, such as psychoeducation or working on underlying convictions.

When working on the self-other differentiation, the first step is to determine the interaction pattern of the client, which is done through communication with them. In an ideal situation, they are able to follow the other, add onto the communication and follow when the other is adding into the interaction. When this is problematic, clients tend to either focus on themselves, the other or on rules that structure interaction. The interaction patterns will be discussed below. When they are determined, the self-other differentiation can be improved by teaching the client a more fruitful interaction pattern (visualised as a lemniscate or infinity symbol in Figure 6) with the use of Brain Blocks. As the blocks represent thoughts and feelings, they can be used to show how one feels, but also to create an

understanding of how others feel. By slowly bringing more detail into the groupings of blocks that the client lies down, they can start to recognize their own and other's feelings and thoughts and learn to reflect on them. This process is visualized in Figure 10.

Awareness of emotions and boundaries of the self and other forms an essential start of further emotional development (Stern, 1985; Vonk & Hosmar, 2009). Moreover, as emotional skills are closely linked to social abilities, working on them does not only benefit the individual, but also how they interact with others in their environment (Labouvie-Vief, 2003; Vonk & Hosmar, 2009).

4.1.1 Interaction patterns

Even though daily interactions may seem trivial and common sense, research has shown that they play a vital role in how people perceive the world around them. Through interaction, meaning is given, constructed and altered to our actions, environments and others around us (Reynolds & Herman, 1994).

As was described in the first section of this paper, individuals need to be in sync with others in their environment. In interaction with two people, they need to be able to follow each other's rhythms, which involves listening to the rhythm of the other, following it, adding onto it and building new rhythms and styles together (Fogel & Garvey, 2007; Stern, 1985). In small-scale practice, this means that two people can have a conversation and bring forth new elements and innovation in this by listening to each other, following each other and adding onto what the other person has said. This ideal situation can be visualised as a lemniscate, or an infinity symbol, see Figure 6. Persons who have issues in their social-emotional development or who are out of sync with their environment, are often not able to follow the loops of the lemniscate. They may not be able to follow the other, or not able to add to the interaction themselves or are only able to follow interactions that are structured by a set of rules (Bosman, 2008; Rutten-Saris, 1990). Each interaction structure that results from these difficulties will be discussed below.



Figure 6: Lemniscate interaction pattern

When people are not able to follow the other, their interaction pattern can be visualised as a loop around themselves, see Figure 7. In this figure, the left loop represents the therapist and the right loop the client. People with this interaction pattern are not in sync with others around them, but will just continue to do their own thing. They will find their own games to play and will not allow others to add onto the game by, for example, coming up with new elements. They have a strong individual sense and can be unaware of others and their needs. As the therapist needs to become suited to the client, they will have to start by following the client and gradually invite them to follow the therapist, who in this case represents 'the other'.



Figure7: Loop around the Self interaction pattern

The third interaction pattern is of a person who is only following the other, without adding onto the interaction. This is a person who will be lost without someone else to follow and can be unaware of their own preferences and needs, they do not have much individuality. Their interaction pattern evolves around the other and is visualised in Figure 8. In this interaction pattern is the first step to allow the client to follow the therapist, after which the therapist can gradually invite them to show more individuality.

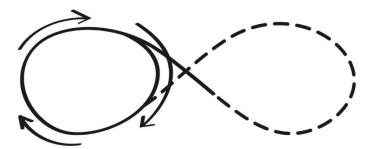


Figure 8: Loop around the other interaction pattern

The last option is a person who interacts through set rules and structures, but is lost without them. This is visualised in Figure 9 as an oval around the two persons, as there is feedback and interaction, but it does not allow for addition and innovation through communication. An example of this interaction pattern is someone who is always focused on the rulebook and will tell others off when they do not follow it. They cannot deal with others who try to add different elements to the interaction,

such as a new rule to a game. Often, there is another interaction pattern (Figure 7 or 8) below this structured oval that disrupts the creation of a lemniscate.

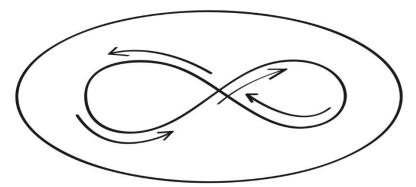


Figure 9: Rules and structures interaction pattern

In this last interaction pattern, it is key to guide the client towards bringing more spontaneity into interactions. At the same time, it is the therapist's role to check for underlying interaction patterns and work on those as well, as many cases will be mainly focused on either themselves or the other (Figures 7 or 8). Only when both the oval pattern and the underlying pattern are worked on, clients can develop a healthy interaction pattern shaped as a lemniscate.

4.1.2 Improving interaction patterns and self-other differentiation with Brain Blocks

As became apparent in the previous sections, the differentiation between the self and the other forms the basis of emotional development, social functioning, the ability to (self-) reflect and the formation of one's identity. When younger children are incapable of differentiating between the two, this will affect their social and emotional development, often resulting in delays or problematic behaviour. The aim of Brain Blocks is to teach people the differentiation between the self and the other by inviting them to explore and recognise emotions, feelings and their position in time and space, to get an understanding of cause and consequence and to create a sense of the self and other (Figure 11). When this understanding is developed, people are able to form the lemniscate in their interaction with others. In order to do so, the first step will be for the client to be able to create a grouping of blocks that represents an experience. Then, more nuances, a timeline and the focus on the self and others can be brought in. As seen in Figure 5, the order of working is not relevant, as all processes are interconnected and interdependent. The different elements are thus to be considered a checklist, rather than steps to follow. Moreover, the process of the laying down of blocks is just as important as the final end result, as it tells the therapist about the way in which the client thinks and organises their feelings.

Figure 11 shows how Brain Blocks is used to work on the self and other differentiation. The first step in using Brain Blocks is to form a grouping of blocks that represents their feelings linked to a specific situation. When clients have issues with this, they can start with simply putting down a green blocks for a joyful experience and red for something that they did not enjoy. This first step forces people to turn inwards and to consider how they feel about something, which does not only create an understanding of their own feelings, but it can also allow for the realisation that others may feel things as well. After managing to lay down a grouping of blocks, one of the three possible next steps is to bring nuances and variety in the use of Brain Blocks and language: is the client capable of showing more nuanced situations/feelings, context specific combinations of blocks, colours and emotions and are they able of verbalising this? The other option would be to investigate the ability to create and think in a timeline: are they capable of explaining their feelings related to certain situations and changes in the past? (i.e. how did you feel when you got up? What happened when you went to school?). At first, the focus will lie on the present: how do you feel at this moment? After which the focus will shift to the past and exploring how feelings change over time. This allows for an understanding on how feelings are dynamic, can change through time and space and how they can be affected by other elements or people.

The last option is to explore and improve the differentiation between the self and the other: does the client recognise and distinguish the two? Which do they prioritise? Some people are more focused on pleasing and following others, whilst others are too self-centred, Brain Blocks can be used to bring a balance between the two and to learn when to prioritise one focus or the other. This can be done by using two heads (see Figure 10): one that the client uses and the other for the therapist, to show the client how others may perceive and experience situations. Whilst working on these different elements outlined in Figure 11, the therapist should ensure that the client is committed to the process by linking it back to their interests and abilities. The next steps taken should be appropriate for the client. When they are too big, clients may block and lose trust.



Figure 10: Working with two heads

Over time, clients will start to recognise the thoughts and feelings that are discussed in the Brain Blocks sessions, as the blocks enable them to have a language through which they can discuss their needs and ideas. By creating this understanding, clients can develop a self-other differentiation, which will then allow them to come in sync with their environment and to further develop through interaction. This

performative aspect of Brain Blocks will discussed in the section 'Brain Blocks as a performative language, enabling self-awareness and new perspectives'.

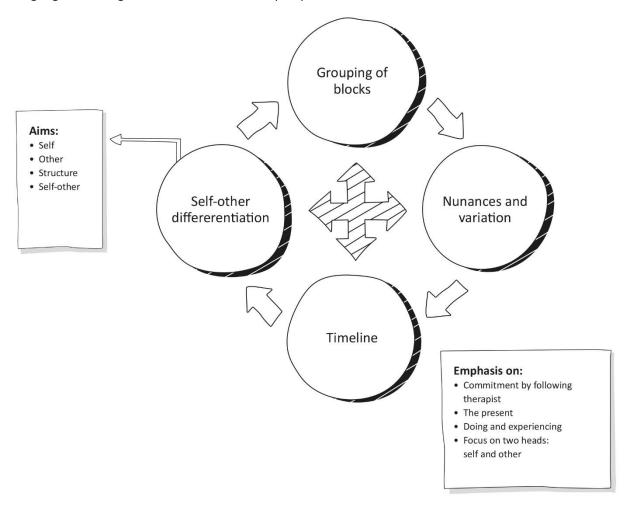


Figure 11: Working on the self-other differentiation with Brain Blocks

4.2 Working on underlying convictions and expectations

Older children, adolescences and adults with social and emotional developmental issues are more likely to benefit from exploring why they are not in sync with their environment and how they can reflect upon this and themselves. They can be out of sync when they have gaps in their social or emotional development or they can have beliefs or convictions about themselves and others that obstruct or limits their ability to self-reflect, adapt in complex social situations or how they interact with their environment (Stern, 1985; Von Wright, 1992; Young, Klosko, & Weishaar, 2016). Examples of this could be that they are 'scared to be alone', which may cause people to cling onto others or that they are 'afraid of failure' which may result in an unwillingness to try new things. These negative ideas about the self, others and environment are underlying convictions or expectations that hamper the way in which people function in social relationships and daily life, yet they are often unconscious

(Wearden et al., 2008; Young et al., 2003, 2016). They are part of one's identity, which can be seen as a self-constructed theory on how what the self is and how it compares to others. It forms a filter through which external information is taken in and thus shapes perspectives on the world around us (Berzonsky, 2004; Von Wright, 1992; Vonk & Hosmar, 2009; Young et al., 2016). Underlying convictions can thus be viewed as theories about the self, others and environment that forms a disruptive filter through which the world is viewed (Berzonsky, 2004; Gopnik & Wellman, 1992; Hirschfeld & Gelman, 1994). Appendices 2, 3 and 4 are examples of clients who are working on underlying convictions.

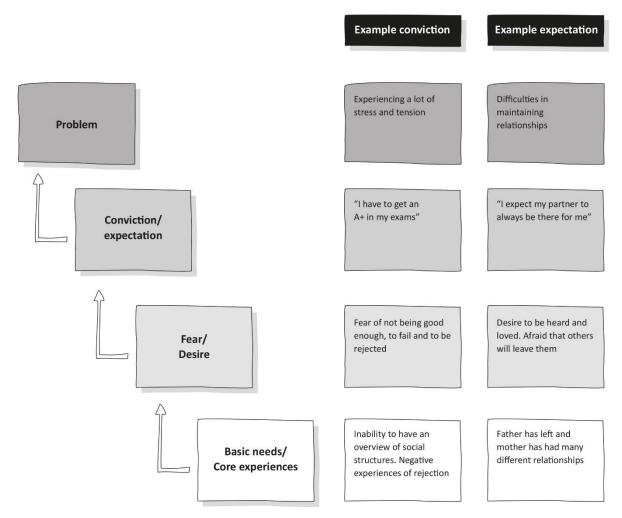


Figure 12: Layers of underlying convictions

When people have underlying convictions or expectations, there are different layers to the problem, which are outlined in Figure 12 (Reubsaet, 2018; Young et al., 2003). The first layer forms the issue that people will experience in their daily lives: difficulties with certain situations or stress. Underneath lies the conviction or expectation that is causing first layer to emerge in social situations. The third layer describes a more general fear or desire that people can have that leads to the convictions or expectations, for example a fear of being left alone. The final layer explores what has caused the

person to have these ideas, which are often past experiences or traumas, or issues in the cognitive, social or emotional development of the person.

To be able to work on this in a therapy setting, clients need to be committed to the problem and feel a need for change (Berry et al., 2008), and they need to be able to differentiate between the self and the other (Bartsch & Wellman, 1989), which should be tested through conversation and laying down blocks first. The aim is to find out what is causing the underlying conviction or expectation,





Figure 13: Two different perspectives on the same structure

to make the client aware of this and to teach them how to (self-) reflect on this, in order for them to make alterations in their daily lives and times when they experience stress or difficulties.

By using Brain Blocks in the process of exploring the different layers, the friction and fears can be discussed more easily. Contrary to the sessions on the self and other, the focus with underlying convictions and expectations lies on the past. When clients have a particular issue that they want to be helped with, they will be first asked to recall a situation in which they experienced the stress or fear that they want to discuss and change. They can then start laying down blocks to express and represent this, with the guidance of the therapist who will ask questions that allow for more depth, nuance, variation and movement in the grouping of the blocks, as shown in Figure 10. The aim is to come to the essence of the problem: the deeper layers. Thirdly, the therapist can provide psychoeducation on the deeper layers of the problem. For some, this is enough guidance to get a better understanding of their problems and to be able to get back in sync with their environment themselves, whilst others may need to go more in-depth. If more depth is needed, the fourth step is to come to core experiences or basic needs and explore the effect that they have had on the life and perspective of the client. Lastly, therapist and client can work on them. In this process, the therapist will guide the client in changing their perspective on the issue by both literally changing the position from which the collection of blocks are viewed (see Figure 13), as well as by recalling the situation from different perspectives (first and third person perspectives). Both help to externalise the narrative, which allows for a reframing (Kiesinger, 2002). People use narratives to construct a coherent and complete sense of Self that they can communicate not only to others around them, but also to construct their own identity (Kerr et al., 2013). Reframing of an experience or a narrative into a positive and empowering story, allows for a change of this constructed identity (Stevens, 2012). Examples of reframing in practice can be found in Appendices 3 and 4.

In the process of exploring underlying convictions and expectations, a checklist of four elements guides the therapist in deciding on the next step and what to focus on. Together, they move therapist and client towards deeper levels, education, identification of core experiences and next steps to be taken. The four elements (acknowledgement, recognition, adaptation and communication) are visualised in Figure 14, which shows how they are interrelated. Again, the order of working is not relevant, as all elements are interdependent.

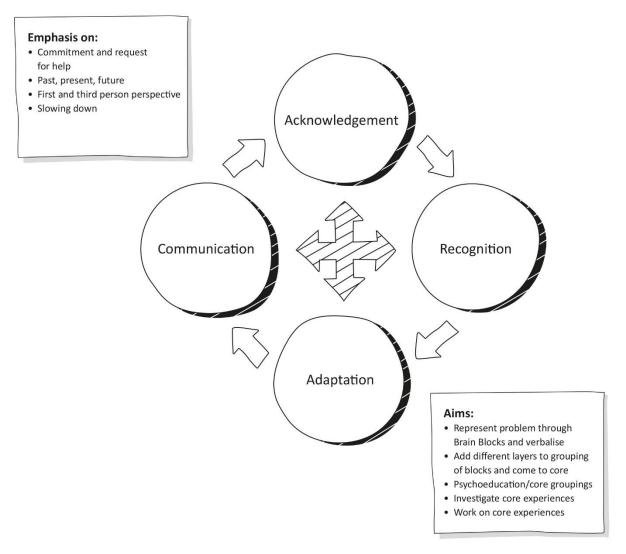


Figure 14: Brain Blocks and working on underlying convictions

Acknowledgement: this step is for both client and practitioner. Firstly, by singling out hindering convictions, the practitioner can show acknowledgement and sympathy for this, which allows the client to feel heard {Valentine, 2000 #488}. The next step is for the client to acknowledge that there is a hindering conviction and having a willingness to work on it. When the client does not want to acknowledge this or there is an unwillingness to work on it, the assumption

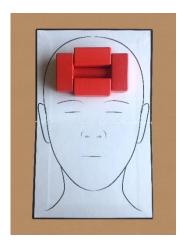
of the practitioner can be incorrect or the timing can be not right. When this happens, the therapist is required to reflect upon the situation and needs to come up with a more suitable invitation or strategy for the client.

- Recognition: the ability of the client to recognise the hindering conviction in daily life. This is
 likely to first happen retrospectively and, after a while, it can be recognised in the moment.
 This will open the door for change.
- Adaptation: the ability to make changes in behaviour and convictions and to come up with possible solutions. Again, this is likely to happen retrospectively at first and in the moment later on. In order to adapt, one must recognise the situations that may require change.
- Communication: the client can incorporate their social network in the process of development and communicate and discuss their needs, feelings and behaviour. This element is important, as people are influenced by their social relationships and vice versa. (Hartup, 1989; Hinde & Stevenson-Hinde, 1987; Ruch, 2005; Thelen, 2005).

Acknowledgement, recognition, adaptation and communication allow both client and therapist to dig deeper and peel away layers of the problem towards an understanding of core experiences or needs. Moreover, it offers the client a tool to manage and deal with future situations which cause stress or tension. It teaches the client to recognise tensions, to find out any possible underlying convictions and to communicate their needs with their environment. Examples of this movement is found in Appendix 3: the case of Michael and Appendix 4: the case of Freya.

When using Brain Blocks on underlying convictions, the aim is to explore the underlying layers of the problem that the client needs help with. The first grouping of blocks that the client forms, is likely to be a 'problem grouping', see Figure 15. This is an image that represents the first layer. For example, the client explains that he seems happy from the outside, but that he feels anger inside and that he thinks that is not allowed to be there. After multiple sessions in which the layers of the problem have been peeled away, the client lays down Figure 16. The grouping of the blocks in the second picture expresses the different layers of the underlying conviction and show a more comprehensive understanding and reflection on the Self of the client. He explains that the red cylinder on his chest stands for a part of him that has been hurt and has turned hard. For him, this is the part that can be hurt more in interaction with others, it represents his 'core experiences'. The yellow blocks around it stand for protection: his anger or ability to walk away from situations and other coping defence mechanisms. There are two blocks in his head: a green one that expresses his strength and a red block which represents a voice that punishes him and tells him he is worthless. The body is thus used to

explore and explain how emotions can also be felt in the body, enhancing more awareness. The core grouping of blocks does not have to be limited to the head.



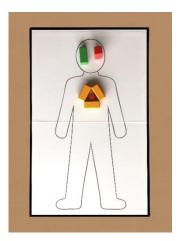


Figure 15: Problem grouping

Figure 16: Core experience

4.3 Psychoeducation within working on underlying convictions

Within the process of working on underlying convictions and expectations lies *psychoeducation*. Psychoeducation is a combination of multiple therapies, which have a different focus than the aforementioned applications of Brain Blocks. Psychoeducation focuses on creating an understanding of a diagnosis in a client and their immediate network. It is a form of therapy that is a process that, over time, allows the client or patient

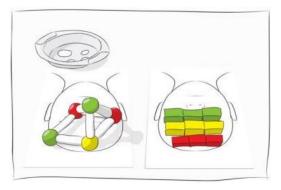


Figure 17: Psychoeducation with Brain Blocks

to explore how their disorder, their strengths and weaknesses, are related to different elements in their life, such as jobs, schools, relationships and health care. This understanding is thought to empower people by providing them with knowledge on their disorder, its history and treatment options (Bäuml et al., 2006), which allows for higher compliancy and ways of coping and living with the disease and managing crises (Ekhtiari et al., 2017; Lukens & McFarlane, 2004). The aim is, therefore, not to force a certain understanding of a disease upon a client, but to allow them to discover and understand what it means for them individually and their lives. When this is practiced in relation to close family members or social relationships, it improves social support, enables a better understanding and normalises experiences (Lukens & McFarlane, 2004). In Brain Blocks, psychoeducation is thus used in line with a relationship-based and developmental perspective, in

which clients are seen as complex and dynamic individuals who are shaped by their experiences and environment.

While the 'education' in the name may suggest a passive receiving role for the client, this is far from true in practice. As it is an exploration of different systems in one's life, psychoeducation requires the ability to think and reflect upon relationships, interactions, needs and experiences and is thus solely suitable for clients who have the ability to self-reflect (Furr, 2000; Rivera, Fernández, & Hendricks, 2004; Von Wright, 1992). When it is implemented cautiously, it can have a major positive influence on both client and family (Lukens & McFarlane, 2004).

Brain Blocks can be used in psychoeducation by taking two heads and, by placing blocks, verbalise differences in thinking and experiencing diseases, compared with average ways of thinking and experiencing in one's age-group and situation. The client is invited to make their own groupings of blocks, whilst the therapist uses the scheme in Figure 14 to lead them to explore the deeper levels of the problem or diagnosis. Besides working the with client alone, psychoeducation can also allow relatives to become aware of how the client is experiencing the world and allows the client to understand how other people think and act. As this intervention is aimed at looking at the individual in their (social) context, it is important to involve them in the treatment. When both are more aware of the ways in which situations are perceived by the other, understanding and reflection can be encouraged.

At the centre of psychoeducation with Brain Blocks, are the groupings of blocks that represent *core experiences*, as seen in Figure 16. Over the course of multiple sessions, these core experiences are explored more thoroughly and, when necessary, reframed into more positive experiences or views (Kiesinger, 2002; Young et al., 2016).

It is important to note that the aim is not to educate clients on how brains are supposed to work, but that the focus lies on discovering other ways of thinking and seeing the world. This is also the reason why it is embedded in working on underlying convictions, as people need to be able to differentiate between the self and other first before being able to understand different kinds of views. When the client is not ready yet to work and reflect on these deeper levels of experience, there is a danger of projecting the ideas of the therapist onto the experiences of the client which can damage the development of the client and stop them from exploring and learning how to reflect. It is, therefore, of vital importance that the therapist is sensitive and knows when to implement psychoeducation and how to guide the client to delve deeper into experiences, reflect upon them and reframe them.

When it is not the right time to start psychoeducation, the effects can be damaging. For example, a client is resisting their diagnosis and they are not capable of reflection yet. As a result, they turn to underlying convictions or, when in psychoeducation, aim to prove that – regardless of their diagnosis – they have the brain with the coloured balls and white cylinders (used to explain a brain without autism), instead of the brain with the blocks (used to explain how people with autism may think). The client may hold onto this one image, whilst they are not capable of bringing in nuances or variation (Figure 10). As they are not capable of expressing themselves, giving a nuanced narrative of their feelings or reflect upon this, they may take their diagnosis as a static description of themselves. Consequently, this stops the need for self-reflection and clients may urge others to make things easier for them and their diagnosis, instead of viewing oneself as a dynamic person who can grow and adapt.

This will have a negative impact on the communication with their family. Meanwhile, if the therapist only looks at the client through the lens of psychoeducation and the diagnosis, there is a danger of having a 'tunnel vision', which is defined as having a limited view or close-minded on a subject, possibly resulting in faulty conclusions and decisions (InfoNu, 2012). When the diagnosis is the sole focus of psychoeducation provided by the therapist, it becomes a behaviour/perspective that the client needs to learn, losing sight of common insecurities or fears that all people have (Crul, 2009).



4.4 Improving communication and reflection through blocks and symbols

Throughout the use of Brain Blocks and the individual aims it is used for, the overarching objective is to improve communication and the ability to (self-)reflect. In order to explain how this is done, it is important to dive deeper into how the blocks influence these skills. This section will discuss how the blocks allow client and therapist to form a new language of their own, which enables reflection, self-awareness and improves expression of thoughts, feelings and emotions.

When using Brain Blocks, clients express themselves with the use of blocks, which can symbolise experiences. Symbols are defined as: "A thing that represents or stands for something else, especially a material object representing something abstract" (Oxford Dictionaries, 2019c). The blocks are physical symbols as they can represent any meaning given by their user, as this is often an abstract notion such as a verbalisation of experience or emotion. Due to their physicality, they involve multiple senses: touch, vision, hearing and smell, which makes them more captivating, tangible and inviting than verbal or drawn symbols (Morrell, 2011; Pratt & Rafaeli, 2001). When they are laid out onto the

outline of the head, they form a 3D system of symbols through which the user is communicating. Clients and therapists can look at the structures from different angles and even take a bird-eye view that will allow for an overview and sense of distance. When talking about the groupings of blocks, this feature is used by therapist by asking the client to first think about the experience from their perspective: to verbalise their thought and feelings (*first-person perspective*), after which the therapist will ask the client to talk and think about the same situation in a more distant manner: a third-person perspective (see Figure 13). This enables the client to distance themselves from their emotions and experiences and to take a different perspective on the situation, making it easier for them to reflect upon their own actions and thoughts. It can be argued that the Brain Blocks forms a language in itself, as meaning is both socially constructed and social reality is created and enacted with the blocks (Morrell, 2011; Pratt & Rafaeli, 2001). This language emerges when a client uses Brain Blocks and will be unique to their interpretation of the blocks. This has six intertwined uses, which are divided into two categories. Both emerge in dialogue between client and practitioner and together they enable Self-reflection:

- 1. Brain Blocks as a descriptive language, enabling understanding
 - a. The creation of the shared language between client, practitioner and environment
 - b. A distanced approach to experiences
 - c. Understanding the structure of emotional organisation
- 2. Brain Blocks as a *performative* language, enabling self-awareness and new perspectives
 - a. Verbalising the embodied experience
 - b. Creating self-awareness
 - c. The (re)framing of social relationships

Before exploring the two categories, it is important to point out that they are intertwined, non-linear and emerge simultaneously. As the blocks come in a set of three colours with their own connotations and meanings (green, orange and red) and in different shapes, they provide a guiding structure on how to provide meaning to them, which facilitates the expression through the blocks.

4.4.1 Brain Blocks as a descriptive language, enabling understanding

When the blocks are seen as a language in themselves that emerges in each session, it forms a shared language that both client and practitioner learn to speak (Morrell, 2011). Having a shared language and a system of meaning can enable a bond of trust and improved health outcomes through having a

better understanding, improved confidence and better support (Seikkula & Trimble, 2005; Street, Makoul, Arora, & Epstein, 2009). Furthermore, when the client has created his own language with the blocks, they can not only have a better relationship with their therapist, but this can also be introduced to family members and carers. When the client can share a language through which they can express their feelings and needs with their social environment, this creates a better management of emotions, empowerment and strengthening of the social support system (Street et al., 2009). As having a shared language and understanding will improve communication between the client and their environment, they can exchange perceptions and viewpoints. This also allows for the therapy to be taken into everyday life, as clients can use the blocks to express themselves and share their newly learned perspectives and ideas with their family. In return, family members can use the blocks to express their experiences, which can allow for a better understanding on the side of the client. Involvement of the family or carers into therapy creates a stronger support network and adherence (Hutton & Caron, 2005; Mottaghipour & Bickerton, 2005; Robinson, Power, & Allan, 2011; Street et al., 2009).

Moreover, communicating with the use of tools, art or representations can be compared to using a second language, which allows for a distanced approach to experiences (Morrell, 2011). When people are capable of using multiple languages to express themselves, people tend to use a language that is not their mother tongue to express difficult and sensitive topics. A second language, such as Brain Blocks, can be distancing and enable reflection of situations with less emotional attachment, making it easier to discuss and think about. The last descriptive use of Brain Blocks is in its ability to visualise structures of relationships and organisations in emotions and feelings. As symbols stand for abstract notions, a system of symbols, such as a group of blocks laid out by a client, represents how the different elements stand in relation to each other (Pratt & Rafaeli, 2001). By visualising this in blocks, complex emotions and experiences can be categorised and verbalised, which can result in a greater understanding of why certain thoughts or behaviour emerge, by both client and practitioner. The distancing and reflective nature of both language and visualisation are enhanced by the way in which Brain Blocks is set up: the outline of the head allows for an overview of the groupings of the blocks and, therefore, of the experience and thoughts.

4.4.2 Brain Blocks as a performative language, enabling self-awareness and new perspectives

Just like all languages, Brain Blocks has a performative ability: by naming and categorising, language can create and enable the emergence of a social reality. Language frames entities, social relations and experiences by labelling them and placing them within known social categorisations (Butler, 2013; Pennycook, 2004; Pratt & Rafaeli, 2001). Performativity means that language is used to categorise, but

by using it, categorisations are made. Performativity thus forms a circular act: by naming something or someone, they are described, but at the same time they are acknowledged in a certain way that would not have existed or been able without the name itself (Butler, 2013; Pennycook, 2004). When clients use Brain Blocks to describe their experiences, they do so in their own language and from their personal perspective, but in dialogue with the practitioner, meaning can be given to this perspective and changes can be made (Seikkula & Trimble, 2005). This follows the markers of acknowledgement, recognition, adaptation and communication that were mentioned above. First, the client acknowledges and recognises a structure in their thinking, which follows from the descriptive ability of Brain Blocks. Research has shown that symbols of feeling and experiencing, such as medical tests, are performative; by symbolising certain measures, people can become more self-aware of their bodies and how they relate to the measurements (Mol & Law, 2004). In the article of Mol and Law (2004), this performativity is described in people with diabetes and their blood sugar measurements. By checking their blood sugar levels regularly, people became more aware of how their body felt when levels were low or high and when they became dangerous. For some, this enabled them to sense their blood sugar levels and act upon them, their self-awareness thus leading to fewer necessary measurements (Mol & Law, 2004). When this is translated to Brain Blocks, the blood sugar measurements can be taken as a metaphor to describe the level and structure of emotions and feelings, of which the user can become self-aware. An example of clients becoming more aware of their thoughts or experiences is found in Appendix 2: the case of Brain. One could even argue that the boundaries of the body shift and start incorporating the blocks: when they are out on the table and the user is content with how they are grouped, it becomes part of the person. If the therapist or

someone else tries to touch them, it evokes feelings of inappropriateness and invasion of personal space. Clients who use Brain Blocks regularly, often start using the language of the blocks in their daily lives, explaining to the people around them that certain situations can "cause a lot of red blocks (anger), when the orange blocks (uncertainty/questions) aren't dealt with first". They thus become aware of how different emotions follow upon situations and experiences. When clients are becoming self-aware of their experiences and perspectives, the practitioner can help them to restructure this into a more appropriate way of thinking and responding to situations.



Secondly, in discussing the grouping of blocks that clients have made, both client and practitioner are commenting on their observations and perspectives. The blocks are grouped according to a narrative that the user constructs, they are aimed at providing a representation of the experience of the user.

In the next step, this narrative is deconstructed: in discussing the final lay-out of the blocks, the therapist takes the role of presenting the user with narratives that juxtapose, contrast or align with the user's narrative, showing that there are multiple perspectives and ways of enacting possible, allowing for an understanding of the situatedness of the initial narrative. For example, when someone is upset because they have lost a game, the therapist will explain that there will be someone else who will enjoy winning. It is the friction of narratives that is then used to make the user reflective of not only their bodies, but also other bodies and the environment around them, whereas the blood sugar tests are aimed at representing a bodily state of an individual. The self-awareness and the reflection on the possibility of having other ways of managing similar situations, the friction between different ways of responding to a situation, enacting a diagnosis or experiencing the environment is thus actively used to work on behaviour and awareness. The performative nature of language is thus used here to restructure the story of the client and to reconceptualise their experiences into a new framework (Pennycook, 2004; Pratt & Rafaeli, 2001). This practice can not only reshape experiences and thoughts into less destructive ways of thinking, but also teaches the client how to self-reflect. By showing the possibility of having other perspectives, clients can become aware of their own way of thinking and, later on, start questioning why they have certain responses and thoughts and how they relate to perspectives of others. In time, self-reflection can lead to reflexive and adaptive behaviour and understanding (Von Wright, 1992).

5. Conclusion

Brain Blocks is a communication and reflection tool that allows people to get back in sync with their environment, which enables further growth in their social and emotional development. The tool can be used within other interventions and can be adapted to each individual. Overall, there are four aims that Brain Blocks can be used for: to improve Self-other differentiation, to work on underlying convictions, to provide psychoeducation and to improve communication between the client, therapist and environment.

With the use of Brain Blocks, practitioners can teach children to create a sense of Self and older children and adults to Self-reflect. The outline of the head and the blocks force the child to see themselves from the perspective of the third person and seeing what goes on in their head. For children who are on the first level of reflection, it will be a challenge to lay down the blocks and explain why they did so. When they start to understand this, their first steps towards Self-reflection are made. They are capable of recognising their experiences, which is the first step. Then, by using Brain Blocks as a tool to show subjective experiences and to translate this to others, a practitioner can guide children into thinking about *why* they did certain things, what kind of consequences this had and how it could have been done otherwise. Slowly, the child or adult will create the ability to interpret their actions, thoughts and intentions and understand that there are different ways of seeing this and alternative ways of acting and thinking.

6. Bibliography

- Bartsch, K., & Wellman, H. (1989). Young children's attribution of action to beliefs and desires. *Child Development*, 946-964.
- Bäuml, J., Froböse, T., Kraemer, S., Rentrop, M., & Pitschel-Walz, G. (2006). Psychoeducation: a basic psychotherapeutic intervention for patients with schizophrenia and their families. *Schizophrenia bulletin, 32 Suppl 1*(Suppl 1), S1-S9. doi:10.1093/schbul/sbl017
- Bee, H., & Boyd, D. (2013). *Developing Child, The: Pearson New International Edition*: Pearson Education Limited.
- Berry, L. L., Parish, J. T., Janakiraman, R., Ogburn-Russell, L., Couchman, G. R., Rayburn, W. L., & Grisel, J. (2008). Patients' commitment to their primary physician and why it matters. *The Annals of Family Medicine*, *6*(1), 6-13.
- Berzonsky, M. D. (2004). Identity processing style, self-construction, and personal epistemic assumptions: A social-cognitive perspective. *European Journal of Developmental Psychology*, 1(4), 303-315.
- Bosman, A. M. T. (2008). *Pedagogische wetenschap: koorddansen tussen kunst en kunde*. Hilversum: Inaugural address RU, 26 september 2008.
- Bronfenbrenner, U. (1994). Ecological models of human development. *International encyclopedia of education*, *3*(2), 37-43.
- BusinessDictionary. (2019). Iterative process. Retrieved from http://www.businessdictionary.com/definition/iterative-process.html
- Butler, J. (2013). Excitable speech: A politics of the performative: Routledge.
- Corcoran, J., & Walsh, J. (2010). *Clinical assessment and diagnosis in social work practice* (2 ed.). New York: Oxford Univ. Press.
- Crul, B. V. (2009). Tunnelvisie. Medisch Contact.
- Delfos, M. F. (2002). Autisme: het socioschema als verklaringsmodel. Wetenschappelijk Tijdschrift Autisme, 2.
- Delfos, M. F., & Groot, N. (2016). Autisme vanuit een ontwikkelingsperspectief: uitgeverij SWP.
- Ekhtiari, H., Rezapour, T., Aupperle, R. L., & Paulus, M. P. (2017). Chapter 10 Neuroscience-informed psychoeducation for addiction medicine: A neurocognitive perspective. In T. Calvey & W. M. U. Daniels (Eds.), *Progress in Brain Research* (Vol. 235, pp. 239-264): Elsevier.
- Fogel, A., & Garvey, A. (2007). Alive communication. *Infant Behavior and Development, 30*(2), 251-257. doi:https://doi.org/10.1016/j.infbeh.2007.02.007
- Furr, S. R. (2000). Structuring the group experience: A format for designing psychoeducational groups. *Journal for specialists in group work, 25*(1), 29-49.
- Gibbs, G. (1988). Learning by Doing: A Guide to Teaching and Learning Methods: FEU.
- Gopnik, A., & Wellman, H. M. (1992). Why the child's theory of mind really is a theory. *Mind & Language, 7*(1-2), 145-171.
- Grant, A. M., Franklin, J., & Langford, P. (2002). The self-reflection and insight scale: A new measure of private self-consciousness. *Social Behavior and Personality: an international journal, 30*(8), 821-835.
- Hartup, W. W. (1989). Social relationships and their developmental significance. *American Psychologist*, 44(2), 120.
- Hinde, R. A., & Stevenson-Hinde, J. (1987). Interpersonal relationships and child development. *Developmental Review, 7*(1), 1-21. doi:https://doi.org/10.1016/0273-2297(87)90002-5
- Hirschfeld, L. A., & Gelman, S. A. (1994). *Mapping the Mind: Domain Specificity in Cognition and Culture*: Cambridge University Press.
- Horvath, A. O. (2000). The therapeutic relationship: From transference to alliance. *Journal of clinical psychology*, *56*(2), 163-173.

- Hutton, A. M., & Caron, S. L. (2005). Experiences of Families With Children With Autism in Rural New England. *Focus on Autism and Other Developmental Disabilities*, 20(3), 180-189. doi:10.1177/10883576050200030601
- InfoNu. (2012). Ik heb altijd gelijk: tunnelvisie. Retrieved from https://mens-en-samenleving.infonu.nl/psychologie/102621-ik-heb-altijd-gelijk-tunnelvisie.html
- Kaplan, A., & Garner, J. (2017). A Complex Dynamic Systems Perspective on Identity and Its Development: The Dynamic Systems Model of Role Identity (Vol. 53).
- Kerr, D. J., Crowe, T. P., & Oades, L. G. (2013). The reconstruction of narrative identity during mental health recovery: A complex adaptive systems perspective. *Psychiatric rehabilitation journal,* 36(2), 108.
- Kiesinger, C. E. (2002). My father's shoes: The therapeutic value of narrative reframing. *Ethnographically speaking: Autoethnography, literature, and aesthetics*, 95-114.
- Kondrat, M. E. (1999). Who is the "self" in self-aware: Professional self-awareness from a critical theory perspective. *Social Service Review, 73*(4), 451-477.
- Labouvie-Vief, G. (2003). Dynamic integration: Affect, cognition, and the self in adulthood. *Current directions in psychological science*, 12(6), 201-206.
- Lewis, M., & Brooks, J. (1978). Self-knowledge and emotional development. In *The development of affect* (pp. 205-226): Springer.
- Lock, M., & Nguyen, V.-K. (2010). An Anthropology of Biomedicine: Wiley.
- Lukens, E. P., & McFarlane, W. R. (2004). Psychoeducation as evidence-based practice: Considerations for practice, research, and policy. *Brief treatment and crisis intervention*, *4*(3), 205.
- Maeyens, T. (2009). Het herstellen van de affectief-relationele ontwikkeling in kindertherapie aan de hand van de normale ontwikkeling (Co.D.A.E.)1. *Tijdschrift Cliëntgerichte Psychotherapie*, 47(3), 226-239.
- Maggi, S., Irwin, L. J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: An overview. *Journal of Paediatrics and Child Health, 46*(11), 627-635. doi:doi:10.1111/j.1440-1754.2010.01817.x
- Masten, A., & Cicchetti, D. (2010). Developmental cascades. *Development and psychopathology, 22*(3), 491-495.
- Masten, A., Long, J., Kuo, S., McCormick, C., & Desjardins, C. (2009). Developmental models of strategic intervention. *European Journal of Developmental Science*, *3*(3), 282-291.
- Matthews, G. M., A. (2018). The Philosophy of Childhood. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*. Stanford: Metaphysics Research Lab, Stanford University.
- Minton, K., Ogden, P., Pain, C., Siegel, D. J., & van der Kolk, B. (2006). *Trauma and the Body: A Sensorimotor Approach to Psychotherapy (Norton Series on Interpersonal Neurobiology)*: W. W. Norton.
- Mol, A., & Law, J. (2004). Embodied action, enacted bodies: The example of hypoglycaemia. *Body & Society, 10*(2-3), 43-62.
- Morrell, M. (2011). Signs and Symbols: Art and Language in Art Therapy. *Journal of Clinical Art Therapy,* 1(1), 25-32.
- Mottaghipour, Y., & Bickerton, A. (2005). The Pyramid of Family Care: A framework for family involvement with adult mental health services. *Australian e-Journal for the Advancement of Mental Health*, 4(3), 210-217. doi:10.5172/jamh.4.3.210
- Oatly, K. (1992). On changing one's mind: a possible function of consciousness. In A. J. B. Marcel, E. (Ed.), *Consciousness in Contemporary Science*. Oxford: Oxford Science Publications.
- Oppenheimer, L., Warnars-Kleverlaan, N., & Molenaar, P. C. (1990). Children's conceptions of selfhood and others: Self-other differentiation. In *The Self-Concept* (pp. 45-61): Springer.
- Oxford Dictionaries. (2019a). Other. Retrieved from https://en.oxforddictionaries.com/definition/other
- Oxford Dictionaries. (2019b). Self. Retrieved from https://en.oxforddictionaries.com/definition/self
 Oxford Dictionaries. (2019c). Symbol. Retrieved from https://en.oxforddictionaries.com/definition/symbol

- Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and Emotional Learning: A Framework for Promoting Mental Health and Reducing Risk Behavior in Children and Youth. *Journal of School Health, 70*(5), 179-185. doi:10.1111/j.1746-1561.2000.tb06468.x
- Pelzang, R. (2010). Time to learn: understanding patient-centred care. *British journal of nursing, 19*(14), 912-917.
- Pennycook, A. (2004). Performativity and language studies. *Critical inquiry in language studies: An international journal, 1*(1), 1-19.
- Piaget, J. (1964). Part I: Cognitive development in children: Piaget development and learning. *Journal of research in science teaching*, 2(3), 176-186.
- Pratt, M. G., & Rafaeli, A. (2001). 3. Symbols as a language of organizational relationships. *Research in organizational behavior*, 23, 93-132.
- Reubsaet, R. J. (2018). Achtergrond van het werken met fases. In *Schematherapie: werken met fases in de klinische praktijk* (pp. 1-28). Houten: Bohn Stafleu van Loghum.
- Reynolds, L. T., & Herman, N. J. (1994). *Symbolic interaction: An introduction to social psychology*: AltaMira Press.
- Rivera, E. T., Fernández, I. T., & Hendricks, W. A. (2004). Psychoeducational and counseling groups with Latinos. *Handbook of group counseling and psychotherapy*, 213-223.
- Robinson, E., Power, L., & Allan, D. (2011). What Works with Adolescents?: Family Connections and Involvement in Interventions for Adolescent Problem Behaviours. *Family Matters*(88), 57.
- Ruch, G. (2005). Relationship-based practice and reflective practice: holistic approaches to contemporary child care social work. *Child & Family Social Work, 10*(2), 111-123.
- Rutten-Saris, M. (1990). Basisboek lichaamstaal: Van Gorcum.
- Sameroff, A. (2010). A Unified Theory of Development: A Dialectic Integration of Nature and Nurture. *Child Development*, *81*(1), 6-22. doi:10.1111/j.1467-8624.2009.01378.x
- Seikkula, J., & Trimble, D. (2005). Healing elements of therapeutic conversation: Dialogue as an embodiment of love. *Family process*, *44*(4), 461-475.
- Shattell, M. M., Starr, S. S., & Thomas, S. P. (2007). 'Take my hand, help me out': Mental health service recipients' experience of the therapeutic relationship. *International journal of mental health nursing*, 16(4), 274-284.
- Siegel, D. (1999). *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are*: Guilford Publications.
- Smith, L. B., & Thelen, E. (2003). Development as a dynamic system. *Trends in Cognitive Sciences, 7*(8), 343-348. doi:https://doi.org/10.1016/S1364-6613(03)00156-6
- Stamoulos, C., Trepanier, L., Bourkas, S., Bradley, S., Stelmaszczyk, K., Schwartzman, D., & Drapeau, M. (2016). Psychologists' perceptions of the importance of common factors in psychotherapy for successful treatment outcomes. *Journal of Psychotherapy Integration*, 26(3), 300.
- Stern, D. N. (1985). The interpersonal world of the infant: A view from psychoanalysis and developmental psychology: Karnac Books.
- Stern, D. N. (2010). The Present Moment in Psychotherapy and Everyday Life (Norton Series on Interpersonal Neurobiology): W. W. Norton.
- Stevens, A. (2012). 'I am the person now I was always meant to be': Identity reconstruction and narrative reframing in therapeutic community prisons. *Criminology & Criminal Justice, 12*(5), 527-547.
- Stewart, M. (2001). Towards a global definition of patient centred care. *The patient should be the judge of patient centred care, 322*(7284), 444-445. doi:10.1136/bmj.322.7284.444
- Street, R. L., Makoul, G., Arora, N. K., & Epstein, R. M. (2009). How does communication heal? Pathways linking clinician—patient communication to health outcomes. *Patient Education and Counseling*, 74(3), 295-301. doi:https://doi.org/10.1016/j.pec.2008.11.015
- Thelen, E. (2005). Dynamic Systems Theory and the Complexity of Change. *Psychoanalytic Dialogues*, 15(2), 255-283. doi:10.1080/10481881509348831

- Van de Ven, P. H. M. (2009). Reflecteren: het belang van kennis. *Tijdschrift voor lerarenopleiders, 30*(1), 22-28.
- Vandereycken, W., & van Deth, R. (2009). Psychotherapie: Bohn Stafleu van Loghum.
- Von Wright, J. (1992). Reflections on reflection. *Learning and Instruction*, 2(1), 59-68. doi:https://doi.org/10.1016/0959-4752(92)90005-7
- Vonk, J., & Hosmar, A. (2009). Emotionele ontwikkeling bij mensen met een beperking: een denk- en handelingskader voor de praktijk: Acco.
- Wearden, A., Peters, I., Berry, K., Barrowclough, C., & Liversidge, T. (2008). Adult attachment, parenting experiences, and core beliefs about self and others. *Personality and Individual Differences*, 44(5), 1246-1257. doi:https://doi.org/10.1016/j.paid.2007.11.019
- Weck, F., Grikscheit, F., Jakob, M., Höfling, V., & Stangier, U. (2015). Treatment failure in cognitive-behavioural therapy: Therapeutic alliance as a precondition for an adherent and competent implementation of techniques. *British Journal of Clinical Psychology*, *54*(1), 91-108.
- White, S., Fook, J., & Gardner, F. (2006). *Critical Reflection In Health And Social Care*: McGraw-Hill Education.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*: Guilford Press.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2016). Schemagerichte therapie: Bohn Stafleu van Loghum.
- Young, J. E., & Pijnaker, H. (1999). *Cognitieve therapie voor persoonlijkheidsstoornissen*. Houten: Bohn Stafleu van Loghum.

Appendix 1: Concepts and definitions

Core experiences

A past experience, or set of experiences, that shaped later behaviour, personalities or perceptions.

Core images/grouping of blocks

A grouping of blocks that shows the different layers to the underlying conviction. Regardless of the situation in which this underlying conviction comes into play, this grouping of blocks represents the layered experience of it.

Developmental perspective

Differences in development and mental capability are not considered to be 'defects' in a developmental perspective, but rather as 'delays', which shifts the focus of therapy from managing defects to enabling growth (Delfos & Groot, 2016).

Interaction pattern

The rhythm or pattern in which two or more persons communicate.

Other

A person that is distinct from the Self (Oxford Dictionaries, 2019a).

Patient-centred care

In *patient-centered care*, patients or clients are treated as complex and unique individuals, whose perspectives and social contexts are explored and taken into account in the treatment. Practitioner and patient have a shared decision-making process on the course of the treatment and work together on establishing a therapeutic relationship (Pelzang, 2010; Stewart, 2001).

Persons as complex adaptive systems

People are constantly being influenced by their experiences, environment and people around them. This can be visualized as river: the river (person) is flowing, but small changes of components, such as rocks in the river bed, can alter the direction of the stream. This can be temporarily, but it can also alter the flow of the river significantly (Thelen, 2005). Small changes in environment or other can also have a major impact on people and can lead to reorganization or to large differences in behaviour (Smith & Thelen, 2003).

Psychoeducation

Psychoeducation is a form of therapy that is a process that, over time, allows the client or patient to explore how their diagnosis related to the other elements in their life, such as jobs, schools, relationships and health care. This understanding is thought to empower people by providing them with knowledge on their disease, its history and treatment options (Bäuml et al., 2006), which allows for higher compliancy and ways of coping and living with the disease and managing crises (Ekhtiari et al., 2017; Lukens & McFarlane, 2004). The aim is, therefore, not to force a certain understanding of a disease upon a client, but to allow them to discover and understand what it means for them individually and their lives.

Reflection

There is no consensus on what 'reflection' means, but in this case it is defined as the process of looking inward and describing, analysing and evaluating one's own actions and situations (Gibbs, 1988; Van de Ven, 2009).

Reflexive practitioner

A reflexive practitioner is a therapist who is not only capable of reflecting upon their actions and environment, but is also able to reflect upon their Self and how they affect other and situations. They are capable of reflexivity in the moment, meaning that they can reflect and act upon their reflection in action and solely when looking back at past situations (Kondrat, 1999; Ruch, 2005).

Relationship-based care

As social work and psychological help is often aimed at the interpersonal and social relationships, it could be said that all therapy is relationship-based. Yet, in this case, relationship-based also entails other elements. In this approach, the therapeutic relationship between client and therapist allows both parties to explore and intervene in the life-world of the client and its complexities. The client is seen as a complex and dynamic individual who is always in relationship with their environment (Ruch, 2005).

Self

The total and complete being of a person (Oxford Dictionaries, 2019b).

Self-Other differentiation

To be able to differentiate between the Self and the other is an essential skill that forms the basis of social, emotional and cognitive development. It is the ability to recognise what you want, feel and

need. At the same time, it entails awareness of how others respond to you and how they may have different experiences.

Self-Reflection

In Self-reflection, people make themselves 'the subject of reflections of their actions' (Von Wright, 1992). In order to be able to Self-reflect, a sense of *Self* is necessary to develop. One needs to recognise that the Self is a construction based on the ideas on themselves and the reaction of others on oneself. It is necessary to be aware of one's own beliefs and actions and direct or change them when they evoke unwanted responses (Oatly, 1992).

Therapeutic relationship

The relationship between a health professional, such as a practitioner or therapist and a client, or patient. The relationship is the way in which the two parties interact and aimed at improving the treatment of the client, it is, therefore, an essential element of a therapy or treatment (Shattell et al., 2007; Stamoulos et al., 2016; Vandereycken & van Deth, 2009; Weck et al., 2015).

Underlying convictions

Underlying convictions can be viewed as theories about the self, others and environment that forms a disruptive filter through which the world is viewed (Berzonsky, 2004; Gopnik & Wellman, 1992; Hirschfeld & Gelman, 1994). Examples of this could be that they are 'scared to be alone', which may cause people to cling onto others or that they are 'afraid of failure' which may result in an unwillingness to try new things (Wearden et al., 2008; Young et al., 2003, 2016).

Appendix 2: The case of Brienne

In the cases in the appendices, the case is written in black and the thoughts, comments and analyses of a Brain Blocks professional are added in red.

Brienne is 22 years old and she is in the fourth year of her vocational education. Her father is severely ill and her mother passed away unexpectedly a year ago. Brienne lives by herself. Lately, Brienne has been on edge and can get irritated in class. Her teachers are worried about her functioning as she does not recognise her emotions, which confuses and frustrates her. She exerts this towards others. Brienne's aim is to finish her studies. She does not take any notice of how she feels or why she feels a certain way, but she is aware that her feelings can overwhelm her. As she realises that this does not benefit her studies, she is willing to talk to her counsellor at school about this. This shows that Brienne has a willingness and commitment to become more aware of her emotions and to learn how to Self-reflect.

Her counsellor introduces Brain Blocks to Brienne and asks her to show him what her brain looks like now. First, Brienne carefully examines the materials in the box, she holds the contents in her hands and surveys them one by one. Meanwhile, she is asking questions and making comments aloud, without waiting for an answer or a reply: "What is this? What does it symbolize? I am overanalysing this of course. What do you want to achieve with this? This drawing of a head looks like a monk". *This shows her associative thinking and ability to self-reflect in the moment.* Her counsellor explains that she can do what she chooses and that there is no right or wrong answer, but that using the blocks may help her to explain how she is feeling. After having studied the blocks, Brienne quickly lays them down on the head and creates the following image (Figure 1 and 2):

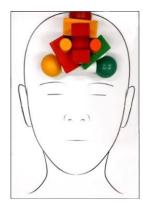




Figure 1

Figure 2

She explains that the colours stand for different elements: her actions, feelings and information. The construction stands for an accumulation of incoming information, conflicts between feelings and actions and a lack of response to the chaos. There is a connection between the elements (represented by the white cylinders in the lowest layer), but it is not connecting the right things with each other. Meanwhile, things keep accumulating. *Brienne's images are abstract and analytical. They emerge from a third person perspective on the situation, rather than a first-person's recollection of an experience.*

Brienne's counsellor asks her questions about the construction and summarizes her answers. By asking more questions and summarizing, Brienne will be able to clarify and express her feelings better, making the formation of the blocks more concrete as well. The questions and attitude of the counsellor (following Brienne's train of thought and slowing her down) are guiding her towards reflection and awareness. Then, the counsellor asks her what she would like her head to look like. Brienne lays down the image seen in figure 3 and 4.

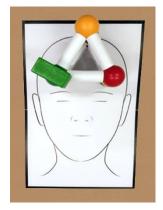




Figure 3

Figure 4

Everything is connected in her ideal brain. She is seeing patterns, similar colours and a structure. There are different layers, but they are ordered and clear: she can understand where they come from. Brienne displays a need for clarity, having an overview and perhaps a need for control, which shows a deeper layer. Brienne calls it a "framework in which she can trust herself". Another clue into her needs: having a trust in yourself, again displaying elements such as predictability, security and control. To illustrate this, she has placed a differently shaped green block on top of the structure and explains that, in this structure, there is room for this and she can manage this. When her head would look like this, she would know where this irregularity would come from and what is wrong. Again, Brienne shows a need for control, but she also shows flexibility and that she can regulate situations better when there is a stable basis. This allows her to replace it, instead of letting it escalate into chaos. Brienne uses words such as 'integration', 'space' and 'harmony'.

In a later session, Brienne tells her counsellor that she is not feeling well: she sometimes has trouble breathing and she does not know what is causing it, but that she does not trust her GP. Her counsellor invites her to lay down how she feels in blocks. Brienne creates the following image (Figure 5 and 6).

She calls it a stack of stones, a heap of worries. The different colours stand for the multiplicity of concerns and the structure is unstable, which is how she experiences it as well. "You'll only need to touch one block and the whole thing collapses" says Brienne. Brienne shows vulnerability. Her counsellor asks her which block relates to which worry or concern and her answers mainly relate to health issues: her father's, her own and her sister's, who is worried about Brienne. The counsellor has asked about a deeper layer and the central theme of Brienne's worries comes up again: her need for control, which is explained by her fear for diseases: they are unpredictable and are present in her environment. She explains that if something were to happen, the structure would collapse. This could be,

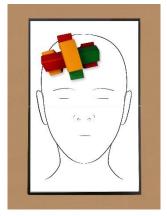


Figure 5

for example, her father passing away or if something were to happen to herself or her sister. This would create more uncertainty and confusion and she would lose trust in things ending well in the end. *She is afraid of losing someone/something go or having to let go. This would be a good entry point for a counsellor/therapist*. Brienne's counsellor asks her how the stack can become more stable, to which she replies that there would need to be an improvement in her own health. She says that she feels like she lacks something in her diet.

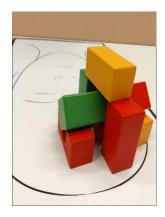


Figure 6

It turns out that Brienne often skips her dinner or only eats some yogurt or a slice of bread. She finds it hard to cook after a tiring day, as recipes are hard to follow and she has difficulties in buying food, due to the many different choices and high prices of products. In the process of discussing this, Brienne goes into detail and (over-)analyses everything before she can take action: lack of money for health care, lack of trust in the GP, wondering what counts as food or what salt does in food, and so on. There is thus an abundance of choices and factors to take into account for Brienne. Brienne struggles to get this organized. She is thinking too much about it and there are too many variables for her. Again, a good entry point for therapy. Her counsellor offers her practical advice and solutions, which gives her some space and relieve. The counsellor is looking for practical solutions, which

gives Brienne the space to reflect on her functioning. The counsellor focuses on both solution and reflection, which is great. Brienne takes one of the blocks away from the stack: one less worry.

In a later session she mentions her physical complaints again. She has not been to a GP yet, as she likes to think about what it could be first. Her counsellor brings in the Brain Blocks-body and asks Brienne whether she can show him her complaints using the body. The counsellor takes what Brienne mentions and finds the perfect timing to invite her to use the blocks and let her reflect on her experiences and feelings. She immediately lays down her cold hands as white cylinders. After that she states that this is a difficult task and takes her time to lay down other blocks. After a while, she pushes the box away as a sign that she is done.

The grouping of blocks (Figure 7) is discussed from bottom to top. The white blocks stand for cold feet, which she has the majority of the time. She wears warm socks in her shoes and slippers at home to manage this. She also has cold hands, mainly when she has just been outside, when she has been idle for a while, when she is bored or when she does not feel well and when she is worried. Her stomach area is uncomfortable and aches often. She represents this with two blocks, because they remind her of something, but she is unsure what that is exactly. On her chest there is one block, as there is an obvious problem of which she does not know the cause: it aches and contracts, which she feels when she stretches. Brienne has placed three blocks on the head that stand for her insecurities, worries, tiredness and headaches. She has used three different colours and shapes

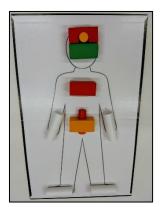


Figure 7

to represent the wide variety of elements. She states that there is always something wrong with her head, but that she does not know the cause and that it is changing continuously. *Brienne's counsellor listens to her and lets her talk without placing a judgement on her, which makes her feel heard. The*

built up is good and there is room for an invitation to take a next step. She says that she has always had issues with this, but that it seems harder to deal with now. When her counsellor asks her what she would like to change if she could, she immediately answers by wiping away the blocks placed on the head. A beautifully open and neutral question to ask, which allows Brienne to be in charge and does not project any ideas on her needs. Her counsellor suggests to take this grouping of blocks to her GP as a cheat sheet and asks her what she thinks her GP's response would be. Brienne answers: "psychologist". This is an invitation for Brienne to take a next step. She understands and accepts that her problems are more complicated than being solely physical or diet-based.

In consultation with Brienne, meetings with the GP and a neighbourhood care team are set up. Her counsellor keeps guiding her and uses the blocks to test how Brienne is doing. Later sessions show that there are more moments in which she has more peace and structure in her mind.

Brain Blocks helps to give structure to experiences and the therapy process. The attention goes to the blocks, the grouping they are in and their meaning. This enables a third-person perspective, which allows for reflection and reframing. Moreover, in the interaction between Brienne and her counsellor there is a mutual influence as they go through in the process of therapy.

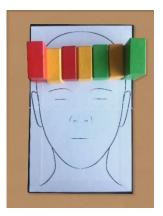
Appendix 3: The case of Michael

In the cases in the appendices, the case is written in black and the thoughts, comments and analyses of a Brain Blocks professional are added in red.

In this section, the case of Michael is discussed, who is working on underlying convictions in his therapy. He is afraid to be told off or to be rejected and struggles to deal with the tension that emerges from this. In the two sessions described below, the four elements of Figure 14 are followed (acknowledgement, recognition, adaptation and communication), with the aim of getting to the deeper layers of his problems, towards his core experiences (as seen in Figure 16). As Michael is capable of reflection already, his core experiences can be explored. This does not ring true for all clients, as not everyone is aware of their underlying convictions or fears or the degree to which they hold them back in daily life. When clients are solely focused on the issue that they have and how they want to get rid of it, more time might be needed to come to the lower layers (see Figure 12), to be able to discuss them, recognize them and to be able to create a grouping of blocks that represents them.

Session 1

The therapist invites Michael to lay down blocks that represent a difficult moment he experienced during the week. Michael chooses to talk about his class. He lays down a row of blocks and explains that they represent how his tension builds up over time (Figure 1), thus laying down a timeline (Figure 10). In the first few blocks, yellow and red are combined, after which he combines more yellow and green. He explains that the red can stand for three situations: when he is unsure what to, when he has to work together with others or when he needs help. Green comes in when he knows what to do and can continue working. When the therapist asks him about a deeper layer, Michael replies that he is afraid to make mistakes and to be told off. His coping strategy is to either freeze or surrender, Figure 1 which is captured in the structure of the blocks by laying down blocks that



represent this. The focus lies on working on a core grouping of blocks, in which acknowledgement is the main movement. The therapist asks about deeper layers and invites the client to lay down blocks that represent this. They form the main focus of the therapy.

The therapist asks Michael whether they can aim to empower him by enhancing his individuality, his Self. Michael agrees and corporates. The therapist tells him precisely what they are going to do and why. They come up with a code word for when it becomes too much for Michael, as there is no need to cross his boundaries. They start with an easy pushing exercise: pushing the air and pushing a mat. The aim of this exercise is to do and experience interaction. Michael is fine doing the first, but he struggles to push the mat, which shows his low self-power. His tension rises and hands start shaking. A recognition of tension and fear in the client. He soon says 'stop'. The exercise is stopped immediately.

After the tense exercise, they do a regulatory one: playing badminton. The tension in Michael's body decreases quickly. They go back to 'doing' to regulate tension and emotions. At the end of the session Michael and the therapist discuss how Michael feels now and do not go back to when he used the code word. They end the session by framing it as a success, as Michael expressed his boundaries and regulated his tension. As far as the therapist can tell, Michael leaves happily. It is important to communicate and verbalise the shared experience and to frame it positively.

Session 2

When the therapist asks Michael how he is doing, he says that everything is well, also in school. He says that he can manage and get used to it. The therapist asks him about stressful situations and he responds that busy moments with lots of people are difficult.

Michael is afraid to not be good enough, to do something wrong or to be told off. He makes a row of blocks that go from green, to yellow to red and explains that this is how the stress and tension build up (Figure 2). Small things, such as dropping a glass, can cause a large rise in stress. The therapist invites Michael to take some physical distance of the arrangement of the blocks and to look at it again. When he steps further away from the blocks, he reflects upon them and concludes that his brain experiences stress very quickly and that he is sensitive to tension, even in seemingly insignificant situations. The stress is not only seen in his head, but also in his hands, as they clench into fits. The therapist and Michael are working towards creating a core grouping of blocks.

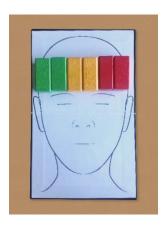


Figure 2

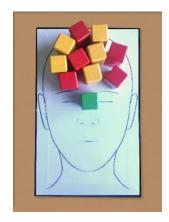


Figure 3

Michael puts a large amount of blocks on the head, all standing upwards. They stand for stressful thoughts that bother him. As his tension rises, his hands are clenched in fists. The therapist asks him what it would be like when there would be a strong green block in there that can bring peace and put things in perspective. Together, they put a green block on the head. Here Michael is given some education on his core grouping of blocks and a strong and healthy element is added. Michael says that having a green block would be good and the therapist explains to him that there are moments where he already has a green block, for example when they did the pushing exercise last week and he could show his boundaries. There is communication about what happened, with the aim of empowering him. The next step is to strengthen the green block in his

head. Going into deeper layers of his fears and stress is still too difficult. This can either originate from a sensitivity in his organization, possibly in combination with some negative experiences he has had.

They are going to strengthen the green block through more pushing exercises and by focusing on the importance of expressing your boundaries. *Again, the aim here is to 'do' and 'experience'*. This went well. After the pushing, they did a balancing exercise with a pillow. This was good as well: Michael has a strong base and a flexible upper body. They finish the session by playing some badminton again. During the game, Michael hit the wall and continued playing. *Michael's fear to be told off or to be rejected was triggered by this*. The therapist discussed this moment with Michael and he expressed that he felt some stress, but that he saw that the therapist just continued the game, which calmed him

down: the green block thus took over and regulated his tension! *Michael recognizes his stress and fear,* but is capable of managing it. They talked about it and the therapist gave him acknowledgement and affirmation.

The movement between acknowledgement, recognition, adaptation and communication can be recognized in Michael's case. They are working on acknowledging the problem, recognizing moments of insecurity, working with them and communicating this to others in the environment. This allows for movement towards the deeper layers of the problem and opens up moments to work on them.

The aim is to continue to work on Michael's underlying conviction. On one hand this means to prove them wrong by gaining positive experiences, whilst on the other hand it is about reframing past experiences. In the first element of the therapy, one has to come to understand their problems and the dynamic that they create. The focus lies on making clients more resilient and strengthening their healthy coping strategies. The second element, the reframing of experiences, builds on the idea that people narrate their experiences through a lens, which can be negative. One can recall a memory in which they are looking through a lens that tells them that they are powerless or incapable. Through reframing, one can learn to look back at memories through a different, more nuanced lens (for example: you are not to blame for everything). Experimental techniques such as 'imagination rescripting' or 'negotiating between different elements' play a key role in this.

The core groupings of blocks allow for other well-known therapies to be used, for example schema therapy, eye movement desensitization and reprocessing or cognitive behavioural therapy. Within the therapies, client and therapist and refer back to the core grouping, which can slowly be adapted as the therapy progresses.

Appendix 4: The case of Freya

In the cases in the appendices, the case is written in black and the thoughts, comments and analyses of a Brain Blocks professional are added in red.

Freya is an 15-year-old girl who lives in closed youth detention. She has been in and out of treatment and has lived in multiple foster care families and centres. Freya can be refined in her responses: in some moments she can reflect upon her behaviour, whilst in other occasions she can throw a tantrum. She has given up on therapies before and does not wish to have any therapy now. She says that talking is difficult for her and that she prefers 'doing'.

Her current therapy is mainly focused on regulating tension and stress and dealing with negative emotions. She is receiving psychomotor therapy in which Brain Blocks is used as an intervention. As she is sporty and moves easily, her therapy starts in a gym. Freya and her therapist can build on their therapeutic relationship through activities and games. It is of vital importance to establish a relationship between therapist and client. Without a therapeutic relationship, intervening could even be harmful. In moments of rest between the games, they discuss the past week and their experiences of the games just played. The therapist notes that Freya can seem friendly and relaxed, but that she states that she can be irritated and stressed at times. This opens up an opportunity to bring in Brain Blocks. Freya wants to be heard and this is an accessible first step. He invites her to lay down Brain Blocks to visualise her inner thoughts and feelings. He explains her that Brain Blocks assumes that adolescences know how they feel and that it is best if they explain that to their therapist and not the other way around. He shows her how to use Brain Blocks and tells her that using blocks to express yourself can be easier than using words. On one hand, this is supporting Freya to start laying down the blocks, on the other hand it could be lead to resistance in a client, when their coping strategies kick in to protect themselves. The therapist lays down blocks that represent their feelings first, displaying ease and a naturalness of using blocks to express oneself. This is inviting Freya to do the same, without triggering resistance. This is enough explanation for Freya to lay down the blocks herself. The blocks allow her to look at herself form a third-person perspective, in this way, she does not have to speak from her own perspective, but about herself. The distance between her and the blocks enhance this. It is easier to talk about difficulties from a distanced approach, which enables reflection.

Freya chose this example herself. It is important to work on examples that the client cares about, so that they are committed. Following the ideas and examples of the client is mainly important when working on underlying convictions as it creates energetic and dynamic images and conversations. When they start a game, she notices that a part of her does not think she is intelligent enough to play it. Even though she mentions this element of the thoughts and experiences, she does not represent it through blocks. It is important that the therapist not only focuses on the output in blocks, but also the language that clients use when laying them down. Freya mentions this in passing, but it triggers the therapist to see whether see can visualise

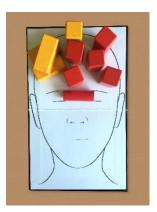


Figure 1

this as it represents a major part of her being. Her therapist invites her to add a block to represent this, which she does. She explains that this block "knows that everything will go wrong". When following

this interaction, it is possible to see the lemniscate movement: the therapist follows Freya, then points out an element in this and, in turn, Freya reflects and acts upon this comment. Yet, when she is angry or irritated, she is not capable of making this movement in interaction. Still, Freya participates in the game and the tension in her starts to build: she adds multiple yellow blocks. At some point, the stress becomes too much and things get out of hand. When we focus on this moment, Freya explains that she explodes more quickly when she is stressed from the start: when there is more yellow to begin with. Whenever a small irritation is added, she cannot deal with it and angry is just around the corner. Freya shows what her anger looks like by adding red blocks (Figure 1). The blocks and the images they form, are subtitles to her verbal narrative. They show how, when and how quickly emotions and feeling occur. The movement with which the client lays them down is also revealing and essential. Both therapist and Freya notice that there is another block in her head, which aims to warn and protect her against anger and stress, whilst there is also a part of her that will lead her to play the game. This last element is added to the grouping of blocks, after the therapist invited Freya to do so. Why she still wants to play the game remains unclear, but this will be explored another time. Besides a side of her that tries to protect her by not wanting to play the game, there is also another side to her that does want to do so. By naming this element and adding it into the construction of blocks, the opposition between the two sides becomes evident, even though they are both aiming to help and serve her. How and why this is the case remains unclear. Clients need to be ready to look deeper into these kind of difficulties, which means that both client and therapist need to be sensitive to timing. Yet, by laying down the blocks Freya will be more aware of her feelings, which is enough for now.



Figuur 2

Over the course of a few weeks, different situations are laid out in blocks, all of which show a similar pattern: a build-up in tension. By letting clients visualise situations more often, patterns become apparent. This is helped by giving them homework, for example to notice when tension rises or when a particular block comes into play. In Figure 10, this is allowing the movement from 'acknowledgement' to 'recognition'. "How can others see that your stress is building?" asks the therapist. Freya replies that others cannot tell. This question is testing her self-other differentiation: do you know how others look at you? As she is able to reflect upon this, the self-other differentiation does not need any extra attention. She is quiet and looks at the blocks she has laid out. Then, she starts making another grouping of blocks: she

connects a yellow block to a green one with an orange cylinder. "The green block is what others see, on the outside. I look and feel relaxed. The yellow block is more in the background, the higher the stacks of blocks, the more irritation and stress I feel. When something happens, even something small, it could flick the switch (points at the orange cylinder). Then all anger and irritation will come out" (Figure 2). The question about others leads Freya to self-reflect. She creates a grouping of blocks that seems to emerge on the spot, through reflection, after which she links words to it. Verbalising the meaning of blocks gives them meaning and self-awareness. For the therapist, this gives an insight into her organisation. By verbalising this experience, Freya becomes more aware of the mechanisms of her mind. At the same time, her therapist is able to understand her better as well. They both find out that Freya does not always recognise the tension that is building in the background.

Freya's assignment is to notice when her tension is building, to notice when a yellow block is added to the stack. This is a homework assignment, still focused on acknowledgement and recognition. Freya is

talking about solutions: she mentions good choices that she made and how she chooses for herself. The therapist does not focus on that for now, as he aims to explore the deeper underlying layers (basic needs or underlying convictions) first. Moving towards solutions will distract both from this. After a while, Freya and her therapist find out that this is the case when she experiences uncertainty, a lack of clarity, when she is forced to do something, when others do not follow her expectations and when she does not feel heard. These are the themes filtered out by the therapist, which shift focus from the situation to the underlying experience, convictions or fears.



Figure 3

In a later session, Freya states that she is having more irritations lately and that she struggles to verbalise them. The words aren't there yet, but this is a topic where there is energy and commitment. Inviting Freya to lay this down in blocks forms a first step that will enable reflection. The therapist asks her to make a grouping of blocks on this. When Freya is finished, the therapist asks her to add a block that represents what is stopping her from verbalising her irritations. The therapist asks this question as he sees in her nonverbal communication that something is stopping her. The invitation to add a block alters the image. Freya fills the head with yellow blocks and puts a large red cylinder between the yellow blocks and the mouth (Figure 3). The therapist suggests that the large red cylinder might be there to protect

her. The therapist suggests a frame of the meaning of the red cylinder, which acknowledges its existence and function, and lowering its impact at the same time. This approach is based on 'transactional analysis' of NLP and schema therapy. "If so, what needs protection?", asks the therapist. Freya shrugs her shoulders. An invitation that Freya cannot accept yet. The therapist continues: "When you look at the yellow blocks, is there anything that frightens you?" By shifting the attention to the yellow blocks, the therapist alters the question into one that Freya can answer. Freya then explains that she is afraid to be vulnerable when she shares her emotions or experiences and that she is scared that others will not take her seriously. Her underlying convictions that colour her view of the world around her and trigger coping strategies. Because of this, her tension keeps rising, risking explosive anger. The therapist and Freya are looking at the grouping of blocks together and the therapist asks her whether he can add something to the image, which she allows. Therapists need to be extremely careful with

adding onto or changing groupings of blocks laid down by clients, as this is personal. It can only be done when the other explicitly allows it. He lays a green block on the mouth and says: "this stands for the part in you that can verbalise experiences and emotions. It is present, because you are doing that here, in these sessions" (Figure 4). The therapist brings Freya's attention to the strong and healthy parts of her coping, ensuring that Freya feels safe in showing her vulnerability. If the therapist would dig deeper into her vulnerabilities, she may feel unsafe and the need to defend herself. The therapist needs to be sensitive to the boundaries of the client, as there is no need to surpass them. Freya replies: "that is right, but it can only do so afterwards". The therapist shifts the focus onto her healthy coping strategies, aiming to strengthen them by bringing attention to them.



Figure 4

The previous conversation has allowed for some space to talk about vulnerability. Freya gets irritated when she does not feel heard or when she feels like others are pressuring her into doing something.

She explains that she has found this difficult ever since she was young. She had to grow up fast and the pressure of others makes her feel small and vulnerable. This is a core experience that fuelled Freya's underlying convictions. It will need to be explored in therapy, but it is too early to work on it now, as Freya is capable of verbalising it, but she cannot be vulnerable enough to take a next step in this. She has mentioned it without showing emotion or feelings, which tells the therapist that her coping strategies are at play. Even though, space has been created to talk about these issues and insights have been gained, the problem has not been solved yet. Still, the therapy shows progress, slowly, Freya is becoming more aware of patterns in her behaviour and feelings and of the past experiences that are playing a role in this.

Appendix 5: The case of Kevin

In the cases in the appendices, the case is written in black and the thoughts, comments and analyses of a Brain Blocks professional are added in red.

Kevin is a ten-year-old boy who is working on his Self-other differentiation. He has been diagnosed with autism. In the session described below, Kevin and his therapist work on becoming self-aware through small exercises that explore the body, and by laying down blocks that reflect how the exercises made them feel. They work with two outlines of bodies: one for Kevin and one for the therapist. In sessions in which the client is working on creating a Self-other differentiation, the sessions focus on the present and how that is experienced. Kevin's commitment for his therapy does not need to come from his own request for help, but that of his parents, caretakers or school. He stays committed through motivation and interest in the sessions and his therapist.

Kevin and his therapist go into a room and the therapist explains what they are going to do today: they will do an exercise where they will do something and then they sit down, turn their backs towards each other and lay down how it made them feel with the use of Brain Blocks. Then, they turn around and show each other which blocks they have laid down and explain why. This exercise has multiple purposes: firstly, it tests how well-aware Kevin is of his body and how things affect how and what he feels. Secondly, by laying down bocks, he create both a descriptive and performative language about his feelings, he can learn to express himself and become more self-aware at the same time. Thirdly, by

turning around not showing each other what they are laying down, Kevin needs to come up with his own ideas and cannot simply follow his therapist. Fourthly, this exercise gives the therapist an opportunity to invite Kevin to bring in more nuances and variety in the groupings of blocks that he makes, by showing him more nuances and seeing whether he picks up on this. Lastly, it forms an opportunity to test Kevin on his interaction patterns and to see whether he is capable of forming the lemniscate in interaction when he is *invited to do so.* The first exercise is to stamp your feet. Kevin and the therapist get up, stand across each other and stamp their feet loudly. After they have had enough, they sit down, turn around and start laying down blocks on the outline of the body. Kevin is thus capable of making a grouping of blocks, the first step in Figure 10, the next test will be to see whether he can make more complicated groupings, such as a timeline or bring in nuances and variation. When they both confirm that they are done, they turn around and show each other their work. First, Kevin explains what he has felt and how he has expressed that through blocks. He has put a green block on each leg (Figure 1) and explains that he felt a trembling. Then, it is the therapist's turn. The therapist has a similar grouping of blocks, but has added a yellow block on each cheek (Figure 2), which represent a vibration that he felt there. While the therapist is explaining how he laid down his blocks and what he felt, Kevin is listening carefully. He copies the hand movements of his therapist and looks back and forth between his own grouping of blocks, that of the therapist and the eyes of the therapist. He then states that he recognises the vibration on



Figure 1: Kevin's first grouping of blocks



Figure 2: The therapist's first grouping of blocks

the cheeks as well, and adds two yellow blocks to his own outline of a body. Kevin is focussing on the conversation and does not only follow the therapist, but is also capable of reflecting upon his own situation after this new information comes in. He goes back to his own experience of stamping his feet and compares this with the experience of his therapist. He then realises that he recognises this and adds it to his own representation of the situation. After discussing the first exercise, they get up again to do the next one: clapping your hands. Kevin and his therapist are clapping their hands loudly and after some laughter, they sit down again and start laying down blocks with their backs turned towards each other. As this exercise is similar to the previous, it is an invitation to Kevin to become more self-aware of his experiences, now that his therapist has shown him that the exercise can also create feelings in other body parts, than the one that is doing the main motion. At the same time, it tests Kevin's ability to form the lemniscate in interaction: after following the other and reflecting upon this, can he add an element to the interaction by bringing in more nuance? This time, the therapist explains his experiences first: he has laid green blocks on his hands, expressing the sensation that he felt. Moreover, has put red blocks on his ears, to represent the loudness of the clapping and how it had hurt his ears (Figure 3). In explaining his experiences, the therapist points to the blocks and Kevin, seemingly unconsciously, follows the movement of his therapist not only with his eyes, but also points out the same elements on his outline of the body. When it is Kevin's turn to explain his grouping of blocks, it turns out that he has pointed out the same elements: green blocks on his hands and yellow blocks on his ears to represent the loudness (Figure 4). Here, Kevin has shown a wonderful movement: he has listened to his therapist and taken his example of sensing his body beyond the part that is actively doing the exercise. He is bringing in more awareness and nuance in his grouping of blocks and shows that he can form the lemniscate in interaction: he followed the other, reflected upon it, taken it into account and added another element to the interaction. They are going to do the exercise one more time and this time Kevin can decide on which body part to move, on the one condition that his therapist must be capable of doing it as well. This request seems simple, but it requires Kevin to reflect upon his own abilities and those of his therapist. After little thought, Kevin jumps up and explains his therapist that they are going to rub their hands together as fast as they can. Kevin and his therapist stand across each other, look each other in the eye with a grin on their face and both lean forward, rubbing their hands together as fast as they can. Then they sit back down and start laying down blocks again. They both reveal their bodies with blocks at the same time. Kevin and his therapist have both lain down red blocks on their hands, for the warmth that they started feeling. Kevin has added green blocks to his shoulders for the tension that he felt there (Figure 5), whilst his therapist had added a green block on his face, to

represent his grin (Figure 6).



Figure 3: The therapist's second grouping of blocks

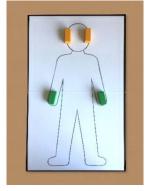


Figure 4: Kevin's second grouping of blocks



Figure 5: Kevin's third grouping of blocks



Figure 6: The therapist's third grouping of blocks

Even though this case represents only one session, it is possible to see the improvement in Kevin's ability to lay down blocks, to be self-aware and to have an interaction with someone else. In the interaction between therapist and Kevin, they are both listening and following each other and add new elements to the interaction. At the same time, the exercises invite Kevin to become more aware of the boundaries of his body and how others can experience their body differently. Lastly, Kevin is learning to verbalise his experiences and emotions and how he can communicate this with others, making it easier to explain to his parents how he feels about certain situations at home, without escalation of emotions or conflict.