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Lego®-based therapy in a Secondary School context: Exploring Practitioner Perspectives

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Abstract

Despite recorded successes of using Lego®-based Therapy (LBT) to support autistic children and young people (CYP) and those with SEMH needs, there is a dearth of research examining the perspectives of secondary school practitioners. Addressing this gap, this paper explores the perspectives of staff (teachers and paraprofessionals) in a secondary setting to elicit their voice and further understand the benefits and challenges of using LBT with adolescents. Informed by the capability approach (Nussbaum, 2011), participants indicated that Lego® -based Therapy (LBT) is a beneficial approach for autistic CYP and those with SEMH needs, yet is constrained by outcomes-driven education policy, mandatory testing regimes, and budgetary constraints. Furthermore, results suggest that LBT can be a valuable approach for schools to implement as part of inclusive practice, it can facilitate sociality and a more connective environment for a range of CYP. However, caution should be exercised when interpreting these results, as the study was limited by its small sample size, and systematised review.

Keywords: Capability approach; wellbeing; neurodiversity; Lego®-based Therapy; Nussbaum

Introduction

Lego®-based Therapy (hereafter, LBT) emerged following LeGoff's (2004) observation of two autistic clients bonding over Lego®. Despite their previous disinterest in one another, LeGoff (2004, p. 558) noted that the two boys were able to communicate and play together using Lego®. This pattern was also observed in other autistic children in his clinic, who, although disinterested in activities such as plasticine or sand tray play, demonstrated notable curiosity toward Lego® (LeGoff, 2024). These observations led to the development of LBT, a child-centred, play-based therapeutic activity designed to enhance social communication skills in autistic children and young people (hereafter, CYP) through collaborative Lego® play (LeGoff, 2024).

Typically, LBT involves participants assuming three roles: the engineer, the builder, and the supplier (LeGoff, 2004). The builder is responsible for assembling Lego® bricks sourced by the supplier and has to 'verbally describe' what pieces are needed to the supplier, e.g., 'please can I have a black two by two brick' (LeGoff, 2014, p.46). Meanwhile, the engineer oversees the supply and construction process (LeGoff, 2004). These roles were initially outlined in a manual created to support a doctoral student, Gina Owens, in the early 2000s (LeGoff, 2024). However, LeGoff (2024, p. 18, 105) cautioned that the manual was published with reluctance and should not be viewed as a prescriptive guide,

emphasising that 'there is not a single, preferred, and ideal method for doing LBT'. Instead, LBT is designed to be flexible, allowing practitioners to tailor the approach in accord with the specific needs of the student. It can involve building from Lego® manuals or engaging in free play. The goal of LBT is not to teach children how to play with Lego®, but to encourage social interaction and collaboration through play (LeGoff, 2024, p. 105).

Since its inception, LBT has been emerging in various UK school settings, including secondary, and is now being used to support autistic and non-autistic CYP; yet the views of secondary school stakeholders in relation to LBT remain marginalised in the research. Using data-driven thematic analysis (Braun and Clarke, 2006), this paper offers a valuable insight into the way secondary school practitioners perceive and enact LBT; and assesses the contributions that LBT makes as an approach in terms of creating a flourishing, connected, inclusive environment that offers benefits to autistic CYP and those with SEMH needs.

While the term 'intervention' is often used in reference to LBT, the author, who is autistic, understands that this term may imply a deficit-based conceptualisation of autism (Broderick & Ne'eman, 2008). This perspective contrasts with LeGoff's (2024, p. 8) therapeutic approach, which focuses on creating an environment where 'like-minded children' can come together and engage in activities they enjoy. As such, the term 'approach' is used throughout this study, yet the term 'intervention' is used in the results and discussion sections when directly quoting participants.

Research Aims & Objectives

To further explore and assess the value of LBT, the paper draws upon Nussbaum's Creating Capabilities: The Human Development Approach (2011), where she outlines a 'capabilities' approach, which focuses on the actual or lived capabilities of people, in conjunction with their ability to practically achieve the type of life that they value. As a theoretical framework, the capabilities approach is concerned with social justice and equality of opportunities (Hedge & McKenzie, 2012) and provides support for rights-based education (UNESCO, 2014), along with the recognition that all CYP should be able to achieve educational outcomes and flourish, with appropriate support (Hedge & McKenzie, 2012). For a person to flourish, they must have a set of capabilities (opportunities) which help them to achieve functionings; or in other words are able to realise outcomes (Nussbaum, 2011; Hedge and McKenzie, 2012; Pellicano et al., 2022). A functioning is generally regarded as an end goal (Hedge & McKenzie, 2012), or an 'active realisation of capabilities' (Nussbaum, 2011, pp. 24-25).

Functionings are deeply rooted in agency and freedom, and need not be active (Hedge & McKenzie, 2012). For instance, a person may have the capability of playing an instrument but chooses not to play; another person may have their driving license but choose not to drive. In both of these examples, while functionings are latent, the individuals have the capability to play an instrument, and drive a car, but exercise their agentic freedom in deciding not to actualise their capability into a functioning. If, however, these persons were never equipped with the capability to drive or play an instrument, they would not be able to choose whether – or not – to actualise their capabilities. Conceptualising the dichotomy between capabilities and functionings in an educational setting, Hedge and Mackenzie (2012) propose that while a teacher may provide CYP with the capability to read, it is ultimately up to the students to actualise that capability into a functioning. Indeed, if teachers do not equip students with the capabilities needed to produce functionings, students will not be able to exercise their agency to deciding whether – or not – to actualise their capabilities (Mihut et al., 2021).

Nussbaum (2011) maintains that individual flourishing depends on the development of 10 central capabilities. While these central capabilities hold intrinsic value (Nussbaum, 2011), some serve as 'fertile functionings' (Wolff & De-Shalit, 2013), meaning they become a mode for the development of other capabilities. Although play is a central capability in its own right, research has indicated that peer interaction through play leads to an 'emergent sense of competence' in the areas of social,

emotional, and intellectual development (Jarvis et al., 2014, p.56). Play promotes affiliation by facilitating opportunities for CYP to engage with their peers, make friends, and develop their social competencies (Parry, 2017), which, in turn, can enhance overall happiness (Greco et al., 2018). Supplementary to the social and emotional benefits afforded by play, play equips CYP with transferrable skills and supports their intellectual development through imagination and creativity. During play, CYP can work together to creatively solve problems (Russ & Kaugars, 2010) and develop their language through an 'engagement in a range of organic, authentic and social interactions' (Jarvis et al., 2014, p.56). To capture and articulate the central capabilities of affiliation, emotions, and imagination, in conjunction with the wider and essential aspects of social, emotional, and intellectual competencies, the term educational flourishing is used in this paper (see fig.1 – *above*).

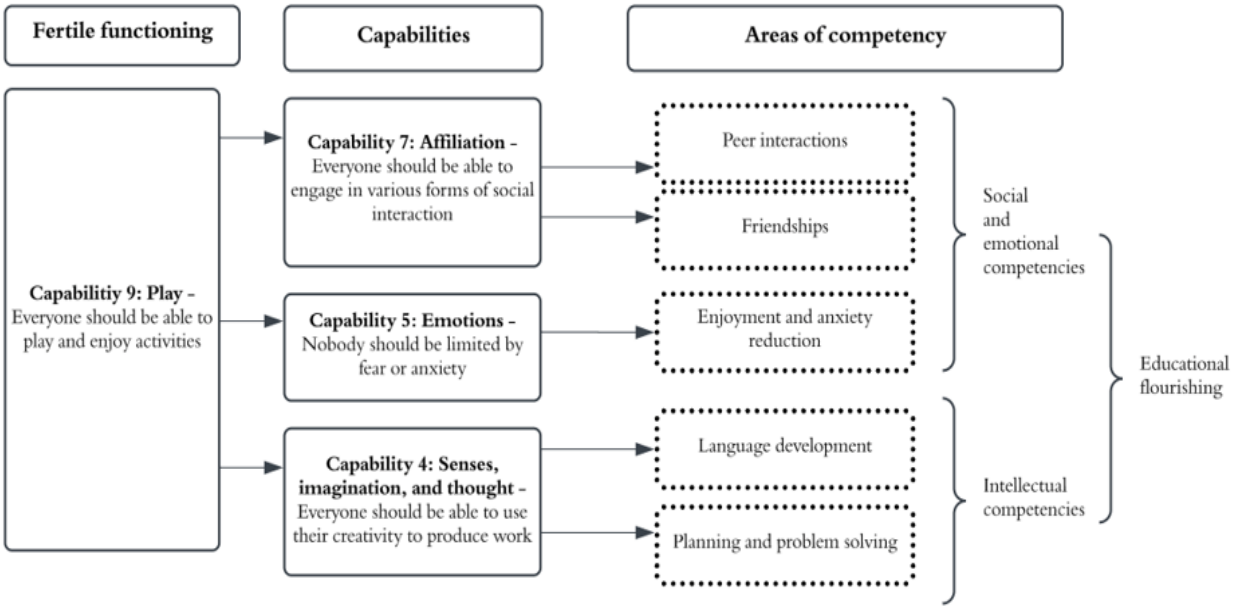

Figure 1. Using the definitions given by Nussbaum (2011), my diagram illustrates how play can contribute to capability formation, areas of competency, and in turn, educational flourishing.

It is germane now to unpack what is meant by the term educational flourishing: a definition which stems from engagement with Nussbaum's (2011) capabilities approach, and the author's professional experience as an educational practitioner in England. In 2022, the author, like many teachers before her, left the teaching profession. One of the reasons for this was that she felt the government was prioritising data and outcomes over the needs and education of CYP. Though leadership praised her when students excelled academically, their holistic flourishing received little recognition. Educational flourishing, therefore, is a conceptual adaptation of Nussbaum's capabilities approach which encapsulates the critical role education plays in fostering social, emotional, and intellectual competencies. It involves a recognition that education must go beyond an outcomes-driven agenda, and instead, fortify CYP with the capabilities and competencies needed to flourish in school, and beyond.

Though the concept of educational flourishing is relevant to all CYP, this paper specifically focuses on its relevance to autistic CYP and those with SEMH needs. While the following section briefly discusses the potential benefits LBT offers to all students, it is recognised that its broader implementation is hindered by the practical realities of the classroom. Drawing upon existing literature, this paper maintains that the approach may be best suited to autistic CYP and those with SEMH needs. Furthermore, by incorporating LBT as a play-based approach capable of facilitating aspects of educational flourishing, it is argued that LBT should be more widely accessible and practiced.

Exploring the relationship between Educational Flourishing & LBT

Derived from the Danish word, *le godt*, meaning, to play well (Andras, 2012), Lego® has been shown to influence intellectual creativity (Moreau et al., 2018), support social-emotional development for autistic CYP (Levy and Dunsmuir, 2020) and those with SEMH needs (Barrie, 2022). While there is promising connection between LBT and educational flourishing, the demands of a punitive testing regime (Maisura, 2014) have led to some educational practitioners perceiving LBT as an award and abandoning the approach for formal learning opportunities (Evans & Bond, 2021).

While an attempt to increase non-formal learning in schools was made in 2008, where The Department for Children, Schools and Families invested £225 million on safe play spaces, play is often overlooked, or seen as supplementary to formal learning processes, and educators are constrained by the demands of policy makers. Indeed, the policy framework in English education primarily focuses on end-point learning (and memorisation), and the economic value of learning. Though the Education for all global monitoring report (UNESCO, 2014) notes that every child has the right to an education adapted to their individual needs; play, particularly in secondary schools, is often marginalised. LBT, with its focus on the individual, offers an alternative approach to education, overcomes some of the ramifications associated with the instrumentalist classroom, and has been shown to support social and emotional development. While practitioners may be cautious about implementing a play-based approach, a shift toward non-formal learning experiences is justified. This is because educators have a responsibility to ensure that CYP do not simply achieve performative outputs, but intellectually, socially and emotionally flourish.

While LBT could benefit all CYP, the practical realities of the classroom must be considered. To involve all CYP in LBT, schools would need to allocate significant funding toward purchasing Lego® sets and professional development, which could become a costly endeavour. Furthermore, teachers are required to meet the diverse needs of multiple students while ensuring that all achieve success in standardised assessments (Maisuria, 2014), meaning that the time available for LBT within the general classroom may be limited. Given these constraints, it may be more practical for schools to reserve LBT for specific CYP.

In particular, LBT has been shown to be beneficial for autistic CYP and those with SEMH needs, who often require engagement with non-formal learning approaches, such as play, to support their social and emotional development. By engaging autistic CYP in construction play, extant literature has shown that participation in LBT can lead to social communication gains (Andras, 2012; Barr et al., 2021; Owens, 2008), group affinity (Andras, 2012; Barr et al., 2021; Fox, 2022; Vegni et al., 2023) and enhanced wellbeing (Boyne, 2016; Brett, 2013; Fox, 2013; LeGoff, 2004). Similar outcomes have been reported for CYP with SEMH needs (Barrie, 2022), though the literature on this is scarce.

To ensure that LBT can support autistic CYP and those with SEMH needs, it is important for teachers to consider a child's needs, feelings and wishes (Every Child Matters, 2003). This idea is reinforced through the SEND Code of Practice (2014), which clearly states that educators must consider what is important to the child. To illustrate, it may be important for an autistic child to play with their peers on the playground, or to contribute to group activities with confidence. To support students, Sze (2009) posits that teachers need to adapt lessons to suit the individual, so that students can take a self-directed approach to their lifelong education. LBT has the benefit of being autonomy supportive, by diverting from the traditional teacher-led classroom, and favouring an environment where students are in control of their own learning (Reeve & Tseng, 2011). By facilitating spaces for autistic CYP and those with SEMH needs to engage in preference-based learning, LBT has been shown to impact self-direction and engagement in group activities (Barrie, 2022; Evans & Bond).

Contrasting to the traditional teacher-led classroom, LBT takes a heutagogical approach to teaching and learning (Blaskshe, 2012), by facilitating opportunities for collaborative learning. Derived from the Greek word for self (Blaskshe, 2012), heutagogical approaches aim to develop self-reflective and self-

determined CYP (Jones et al., 2019), who can take ownership over their own learning (Canning & Callan, 2010), ultimately developing CYP competency and capabilities which will support life-long learning (Blakshe, 2012). While autistic CYP often experience difficulties with collaborative learning (Barr et al., 2022), studies have shown that LBT resulted in increased group confidence, both in the LBT setting and the wider school (Barr et al., 2021; Fox, 2022).

Moreover, labour division, granted by the three roles (engineer, builder, and supplier) in LBT, emphasised the important role each individual plays in group problem-solving (Fox, 2022), and supported autistic CYP to become more socially responsive and adaptable (MacCormack et al., 2015). Autistic CYP were able to translate the skills honed through LBT to other group settings such as during playtime (Andras, 2012; Owens, 2008) and in the classroom (Andras, 2012), suggesting both the versatility and practicality of LBT. Such versatility extended to language development, with a 50% increase in expressive vocabulary recorded for an autistic student (Pang, 2010); this led to one student remarking that LBT helped him in English lessons. In another study (Fox, 2023), practitioners and parents reported that language development was largely due to language modelling during LBT, which provided autistic CYP with a language 'toolkit' that translated to other settings. An autistic student in one study (Vegni et al., 2023) also reported that modelling helped him to become a better communicator, meaning that he was able to voice his ideas more confidently to facilitators and peers (Vegni et al., 2023).

While the synergy between LBT and lesson confidence is promising, the capabilities-based and educational flourishing benefits afforded by LBT are not limited to intellectual gains. Extant literature indicates that autistic CYP rate LBT highly (Owens, 2008), look forward to it (Barr et al, 2021), and wish they could do it every day (Boylan, 2016). Similar enjoyment has been noted for CYP with SEMH needs (Barrie, 2022). LBT has also been shown to facilitate friendships for autistic CYP and those with SEMH needs (Evans & Bond; Barrie, 2022). Friendship, which provides companionship and trust (Chen, 2017), is often difficult for autistic CYP (National Research Council, 2001), leading to increased feelings of loneliness and isolation (Bauminger & Kasari, 2000). Similar feelings are often experienced by CYP with SEMH needs, where stigma can affect their confidence and self-esteem, leading to them avoiding friendships in the hope of avoiding misunderstandings (Prizeman et al., 2023).

Meeting the emotional needs of autistic CYP and those with SEMH needs is essential to educational flourishing (Wolfberg et al., 2024) and can be partially met through school-based approaches that offer emotional support and care (Bailen et al., 2019). This relationship between a nurturing environment and emotional development was highlighted by Dimitrellou and Hurry (2019), who posited that care, particularly for CYP with SEMH needs, is crucial to inclusive practice. Similar correlations were drawn by Li and colleagues (2016), who found play to have a moderate impact on anxiety reduction. Likewise, parents and facilitators in two studies (Barr et al., 2022; MacCormack et al., 2015) reported that LBT had led to increased calmness for autistic CYP; these findings suggest that LBT may be beneficial to CYP who struggle with the demands of an intensive curriculum.

As outlined earlier, research on the perspectives of teaching practitioners, particularly at the secondary level, is limited. Primary school facilitators have reported a positive correlation between participation in LBT and increased social confidence in autistic CYP, both within the LBT setting and across the wider school environment (Barr et al., 2022; Fox, 2022). However, some secondary school facilitators have argued that LBT may be more suitable for primary-aged students, suggesting that more complex Lego® sets, or freestyle building activities are necessary for secondary settings (Barr et al., 2022). Despite these reservations, secondary facilitators have noted that LBT offers 'light relief' for autistic CYP when compared to formal curriculum activities (Barr et al., 2022). However, little is known about LBT's use with secondary-aged autistic CYP and those with SEMH needs.

Method

As there is a paucity of research within the LBT field focusing on the perceptions of secondary school practitioners, a project was developed and undertaken in 2024 in order to further investigate perceptions regarding LBT. Eliciting practitioner voice can help school leaders to make informed decisions before introducing LBT as part of inclusive practice, and future research trajectories can be identified. The project was underpinned by the Constructivist / Interpretivist (C/I) paradigm, as the aim of the study was to make sense of the 'subjective world of human experience' (Guba & Lincoln. 1989, p. 33). One of the key tenets of the C/I paradigm is that 'reality is socially constructed' (Kivunja & Kuyini, 2017, p. 25), meaning that truth is relative. Qualitative data from teaching practitioners and paraprofessionals was collected and triangulated with the extant literature (Bryman, 2003). Triangulation allowed for an appreciation of 'perspectives […] that may not have otherwise been considered' (Thorne, 2012, p. 56), thereby adding to the current literature base of LBT.

The participants in this study were drawn from a local mainstream secondary school, which advertised its use of LBT for autistic CYP and those with SEMH needs on their website. The school serves students aged 11 to 18 years and offers both embedded and discrete SEND provisions. While SEND support is generally integrated within the main classroom, LBT is delivered in separate classrooms, which participants referred to as hubs.

Once interview questions had been carefully crafted, the gatekeeper was emailed an information and consent form and subsequently gave their approval for staff to participate. After invitations to participate in semi-structured interviews were sent out to staff, purposive sampling was used to ensure that research was underpinned by different claims to knowledge. While purposive sampling may be seen as biased, 'bias', in the context of purposive sampling becomes a 'strength' by allowing researchers to focus on 'information-rich cases' (Patton, 2002). Therefore, the present study prioritised participants who could 'illuminate the research questions' (Patton, 2002).

Table 1. Codes and themes generated from transcript analysis

Codes	Themes
Wellbeing Anxiety Happy Support	LBT has a positive impact on student wellbeing.
Autism SEMH Anxiety Behaviour	LBT benefits a range of CYP with additional needs.
Communication Social confidence	LBT increases peer confidence in social interactions with others.
Behaviour Time Budget Exams	LBT is hindered by school budget, time restraints, and the demands of a formal education.
Enjoyment Entertaining Motivation	LBT is an enjoyable and engaging intervention which serves to motivate CYP.

Note. Themes were developed iteratively from initial coding and engagement with the data set.

As such, participants had to meet an inclusion criterion: (I) teaching practitioner of paraprofessional; (II) knowledge of the National Curriculum Requirements; (III) experience working with autistic and SEMH learners; (IV) experience using LBT in practice. Due to time constraints within the MA programme, eligible participants from each department who were available before March were selected. While this approach incorporated elements of convenience sampling, it was primarily purposive, as participants were chosen based on pre-identified inclusion criteria. Though participants had not completed formal LBT training, all had received training in-situ. However, regular in-situ training opportunities were limited due to time constraints or resource limitations. Each were also given a pseudonym.

Institutional ethical approval was obtained from Leeds Beckett University, and the BERA code (2024) of ethics was adhered to. As Kivunja and Kuyini (2017) delineate, ethical considerations in qualitative research can be challenging. This is especially true for research involving human participants, where 'in-depth interview and observation can be widely intrusive' (Kivunja & Kuyini, 2017, p. 107). All participants were assured that the school, and their names, would be anonymised to prevent identification.

Interviews permitted a 'local groundedness' (Miles et al., 2014), allowing for the perspectives of those directly involved in LBT to be sought. In the context of this study, data was collected in a naturalistic setting, with interviews being conducted on Teams during school time. It was felt that the choice of setting would allow participants to feel at ease answering the research questions, thereby permitting a more authentic introspection regarding their thoughts and experiences (Miles et al., 2014). Interviewees were asked about their attitudes toward LBT, before being asked about the changes to school practices and learner needs. The conditional phrase "if any" was prefixed to the question about changes, which indicated to the participants that no particular answers were expected (Flick, 2015).

The research took place over a one-month period, with each interview lasting between 30 and 45 minutes. Questions were carefully designed to garner responses relative to the research questions. Prior to the questions being asked, ground rules were set to ensure participants felt comfortable sharing ideas, and could 'speak openly' (Hancock, 2009, p.18). While Flick (2015), recommends 90 minutes as the optimum interview time, this time was not possible in line with the demands of the school. To ensure that rich data could be gathered within the time allocated, keen attention was paid to the variables, and the researcher remained aware of the dangers of digressing. Careful attention and planning of the interview questions meant that, despite the time constraints, the interviews proved insightful, and sufficient data was garnered to allow for a robust analysis. Furthermore, the decision to record and transcribe the interviews verbatim (Whiting, 2006) was made, so that data could be presented as accurately as possible to render a true picture of participant views. Though time-consuming (Whiting, 2006), verbatim transcription allowed for findings to be analysed and synthesised without misrepresenting participant views.

Braun and Clarke (2006) also make a distinction between a semantic and analytic approach. While the semantic approach serves to describe the data, an analytic approach serves to explain the data by considering its 'broader meanings and implications' (Braun & Clarke, 2006, p. 13). The purpose of this study was not to merely describe a data set, rather to construct meaning from the different voices included in the research. As such, an analytic approach was endorsed to allow for thick descriptions and followed 5 phases.

Phase 1: To make sense of the four interview transcripts, initial findings were jotted down in a notebook.

Phase 2: Codes, which directly corresponded to the four research questions guiding the study, were identified

Phase 3: Initial codes were used to develop 'potential themes' (Braun and Clarke, 2006, p. 87).

Phase 4: A 'thematic map' (Braun and Clarke, 2006, p. 87) was created.

Phase 5: Themes were then refined and named (see table.1 – *above*) to support a robust analysis of the data set.

Results & Discussion

Enhanced emotional competencies

Consistent with the current literature base (Andras, 2012; LeGoff, 2004), there was a consensus among all participants that LBT supports students' wellbeing and happiness, alongside improving social confidence. Inductive thematic analysis indicated that staff understood the value of using LBT within their school and spoke fondly of LBT. When interviewed, participants spoke of the sense of enjoyment brought by LBT when used with autistic CYP and commented that students displayed enthusiasm and motivation for LBT. Participants spoke of the challenges that they

experienced when engaging with some of the students; nevertheless, they still found that Lego® served as a motivator.

Within the interviews, participants commented on the popularity of LBT, with LBT being described as a 'massive hit' with autistic CYP. Such views align with Evans and Bond (2022), who found LBT to be an engaging approach for autistic CYP. The correlation between LBT and happiness was also noted by participants, who commented on the enjoyment afforded by LBT.

Similarly, participants predicated the therapeutic benefits of LBT, stating that the approach facilitated a happy environment which students found enjoyable and engaging. As canvassed by Andras (2012, p. 23), the alternate learning opportunities afforded by LBT serves to 'motivate pupils' through 'activities that they find enjoyable'. This may make LBT a useful approach for SEMH CYP who may feel elevated anxiety surrounding school (Barry, 2022).

Such observations aid in establishing the connection between enjoyable learning opportunities and play-based education and were in accord with Li and colleagues (2016), who revered play as a tool for easing anxiety and stress reduction. Indeed, participants indicated that LBT appeared to support emotional regulation and wellbeing for autistic CYP and those with SEMH needs. Participants outlined the ways that it is used within different hubs in the school to support learning beyond the classroom. During interview, it was suggested that LBT, owing to its relaxational benefits, can be used as an approach to support autistic CYP and those with SEMH needs to thrive within and beyond the classroom walls. As such, all participant comments aligned with the recommendations from the Global Education Monitoring Report (2014), which states that children are entitled to an education which meets their needs.

Enhanced social & intellectual competencies

In addition to its benefits for emotional regulation and well-being, LBT was considered to be a valuable way of improving social confidence, through functional play (Adley, 2006). When asked about the ways in which LBT is used across the school, participants noted that it was used in social skills sessions. The perceived benefits of LBT in supporting social confidence is also in line with LeGoff and Sherman's work (2006, p. 318), who found that LBT allows for the development of social skills such as sharing and turn-taking.

Essentially, all Participants understood that LBT can support social confidence in autistic CYP by providing an approach which is enjoyable and interesting. This is in line with Dimitrellou and Hurry (2019), who argue that care and participatory support should be integral to inclusive practice. By recognising that adverse experiences (Bailen et al., 2019) may impact social confidence, comments suggested that LBT may serve as an entertaining and an edifying experience for students. As referred to in the previous section, this would make LBT a valuable approach for SEMH CYP, who may struggle with the demands of an intensive curriculum (Barr et al., 2022). The perceived relationship between LBT and social confidence was also expressed by participants. Though one participant mentioned that LBT was mainly used for autistic students within the school, comments were made about its impact on CYP with SEMH needs. When asked about the type of students LBT works for, participants responded that LBT can be used to support any learners with additional needs.

The overarching benefits of LBT support findings of Marshall and colleagues, (2015) who considered play to be a means of improving social confidence and resilience. Participants were able to provide examples for how LBT has supported CYP. Notably, one participant alluded to the way LBT can facilitate social flourishing, by providing opportunities for affiliation. Such affiliation, which is a central capability, concerns being able to communicate confidently with others, and feel connected to them (Nussbaum, 2011). In line with this capabilities-informed conceptualisation of flourishing, one participant illustrated how LBT provided opportunity for an autistic student to feel a sense of affinity with others and commented that it increased his confidence in building friendships.

Additionally, participants asserted that the student felt safe during LBT; the perceived safety felt by students would make this an appropriate approach for SEMH and autistic students who may need a more nurturing approach (Hager & Haliday, 2007) to their

education. The sentiment also mirrors the study conducted by Barrie (2022), who described how LBT supported student confidence beyond the classroom for CYP with SEMH needs. Perceived improvements to social confidence were supported by comments from other participants.

Challenges and recommendations

While LBT was generally viewed as valuable, it was not without criticism. During the interviews, all participant responses alluded to the dichotomy of non-formal and formal education requirements. Two participants spoke fondly of the informal learning opportunities brought by LBT, commenting on the benefits play brings to autistic CYP and those with SEMH need. Interestingly, participants saw LBT engagement as valuable yet often overlooked in secondary schools. Elaborating on this, the participants spoke of the challenges of students being taken away from lesson time.

When asked how LBT practice could be improved, one participant suggested having LBT timetabled like other lessons, believing that this would highlight the importance of the approach. Participants also believed that further awareness of LBT was needed and felt that this would help to convey its value to staff who were not involved, particularly for older students where there was limited time available. This is indicative of the marketised emphasis on competition within school, and the intense pressure to constantly maintain or improve their examination metrics and teach 'to the test'. Favouring GCSEs above lifelong learning gives education an economic value and denounces CYP to mere 'cognitive stock' (Olaniyan & Okemakinde, 2008, p. 480). It is also cogent with Robeyns' (2006, p. 72) claim that the current curricular models in schools consider 'skills and knowledge, acquired through education, [to be] an important part of a person's income-generating abilities'. Indeed, the focus on formal education requirements is clearly limiting the benefits of LBT for KS4 autistic CYP and those with SEMH needs.

Such views were further supported by participants, who commented on time constraints sidelining LBT. Yet, potential solutions to this issue were provided: one participant suggested that wider use and awareness of Lego Therapy could increase its acceptance, similar to how reading and numeracy interventions are now commonly recognised and implemented.

Though participants were keen to comment on the benefits afforded by LBT, they also indicated that the approach is being stunted by English Educational requirements, with value and time being awarded to other curriculum activities. Likely, the value associated with LBTs 'income-generating abilities' (Robeyns, 2006, p. 72) is minimal compared with English and Maths making it hard for staff to convey the value of LBT. This myopic educational approach afforded by data-driven decision-making limits student potential, and 'the good life' (Nussbaum, 2009) – a life in which students are flourishing, becomes a Sisyphean struggle.

While interviews suggested a strong correlation between being actively involved in LBT and considering the approach valuable, it was clear that its unfamiliarity resulted in a lower allocated budget. This is unfortunate, as LBT has been heralded within literature as a low-cost approach (LeGoff and Sherman, 2006, p. 328), where benefits 'far outweighed any negative implications on resources' (Barr et al., 2022, p. 1245). Nonetheless, there was a consensus among participants that LBT is a valuable, albeit underfunded approach. Among participant comments, concerns regarding the quality of model sets were raised, with two responses indicating that Lego® sets were missing pieces and depleting. When asked how well LBT was being used in the school, participants demonstrated a clear wish to increase awareness and availability and spoke favourably of LBT's benefits, commenting that staff were implementing LBT the best they could with limited resources.

Alongside concerns regarding budget, participants also mentioned that extra training was needed to support competent delivery of LBT across the school. When asked about the challenges associated with LBT, Participants commented that it was often difficult to understand how to conduct sessions due to a lack of training. Participants identified this as an area for improvement, and that training additional practitioners in LBT would help to demonstrate its value. However, the realities of school resources were

also acknowledged, with participants noting that this would ultimately depend on staffing and budget.

Conclusion

In accordance with the literature review, the findings from this study suggest that LBT can support autistic CYP and those with SEMH needs to flourish socially, emotionally, and intellectually. For both groups of learners, LBT was reported to be helpful in fostering friendships, building confidence in group work, and providing enjoyment. Conversations with educational practitioners revealed that secondary-aged students valued LBT, with many appreciating the freedom and agency afforded by its play-centric approach. However, the challenges of LBT were also acknowledged, with responses indicating that its implementation is hindered by budget constraints and the pressures of a tenacious testing system. For schools seeking to adopt LBT as part of their inclusive practices, four main recommendations have been identified:

1. Ensure practitioners receive adequate, and regular, training on LBT.

2. Increase funding for LBT in schools.

3. Ensure time is allocated to LBT for autistic CYP and those with SEMH needs. This may involve adding LBT to student timetables.

4. School leaders should establish a shared language around LBT aligned with the neurodiversity model. LeGoff and colleagues (2014) suggest that 'Lego® Club' is preferable.

While participants revered LBT as an approach which can support autistic CYP and those with SEMH needs, the study has limitations. Indeed, caution should be exercised when interpreting these results, as the study was limited by its small sample size. Given this, future research examining the perspectives of secondary-level practitioners toward LBT should be embraced. Additionally, while participants spoke favourably of LBT, no comparison was made with other therapeutic approaches, such as plasticine or sandbox therapy. Though Lego® offers a structured medium that aligns with the systemizing tendencies of autistic students (Baron-Cohen, 2006) and may be calming for learners with SEMH needs, future studies should compare LBT with other therapeutic practices in secondary schools. Finally, since LBT implementation is constrained by formal curriculum requirements, research into how the approach can be adapted to preserve its value while also meeting curriculum goals would be valuable. Though wider systemic changes are needed, this adaptation may help bridge the gap between current educational realities and the benefits afforded by LBT.

This study has shown that when autistic CYP and those with SEMH needs are (a) no longer forced to comply with the performative demands of formal learning, and (b) no longer treated as a means to economic prosperity, they flourish. Yet, sadly, mandatory testing regimes in the UK masquerade as life-long learning, and informal learning opportunities remain largely overlooked. Though there is much work to be done before LBT becomes more common in UK secondary classrooms, it is hoped that this paper, alongside subsequent research, will motivate a paradigm shift for educators and policy makers, and in time, we have the knowledge and means to facilitate flourishing for all (Nussbaum, 2011).

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