Threats to creative learning in the primary-school: Energies diverted into performative orientations

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Abstract

This article tracks the life-histories of 23 British school-children from ages 7-12, who were designated as 'lower-attaining' at age seven. Drawing on Self Determination Theory's mini-theory of Causality Orientations, we explored whether/how children with a Controlled or Impersonal Orientation approached creative learning differently from those with an Autonomy Orientation. Six detailed life-histories presented illuminate that children with a Controlled or Impersonal Orientation often channelled their energies into conformity; and avoidance of subordination and punishment; diverting them away from creative learning. Relationships with peers also influenced their orientations significantly. Using Chris Watkins' concepts of Learning Orientation and Performance Orientation, based on Carol Dweck's Growth and Fixed Mindset theories, we conclude that our life-histories highlight a focus in schooling on both prior attainment and the end product - 'performances' – rather than children's motivated engagement with learning. This threatens the chance that they achieve positive-experience and wellness outcomes through creative learning.

Introduction

When we asked nine-year-old school-children who was 'smart' in their class, they tended to identify the 'well-behaved' children as the 'smartest' – those who did what the teacher instructed them and were rarely told off. This finding from our study (described below) highlights an important and worrying possibility for our schooling systems: that these systems reward conformity or avoidance rather than creative learning. We question whether this finding has particular relevance for those children who find formal maths and English difficult, in a policy climate where these two subjects are given an exclusionary priority. Some authors argue that this is what state-funded schools are for: to control and suppress the population until they are ready to serve the economy as adults (Harbour, 2015; Lefstein, 2002). Others consider the purpose of schooling to be the related one of developing 'little neo-liberals' (Bradbury, 2021): that is, encouraging children to take responsibility for carving out their own economically-successful futures, success which is gained by working hard and proving their worth. Yet others argue that the most valuable

role for schooling is to teach children how to learn flexibly, including how to make and act on personally and socially appropriate decisions (Fielding and Moss, 2010; Chris Watkins, 2010). This article explores how 23 British school-children who had been designated as ‘lower-attaining’ at age seven – tracked in our research from age seven to 12 - experienced schooling primarily in terms of being either oriented to conforming; or to avoiding punishment. We explore in rich detail how their orientation seemed to inter-relate with their creative learning. By ‘creative learning’, we mean learning which involves their personal goals and intrinsic motivation, embracing ‘the dual qualities of enjoyment or interest in performing an activity … and the disposition or intention to participate in the activity’ (Guthrie & Wigfield, 2000, p. 345). This relates directly to Ryan and Deci’s (2019) definition of autonomy - one driver of creative learning - as ‘a wholehearted willingness to act’ (p. 132). Helwig (2006) also explained that constraints to agency can lead to a dampening of the child’s curiosity, creativity and overall well-being.

Growth Mindset and Fixed Mindset

Carol Dweck’s conceptualisation of the difference between a Growth Mindset and a Fixed Mindset (2017) has affected primary-schools over the past two decades, with many trying to encourage a Growth Mindset (Savvides and Bond, 2021). Having a Growth Mindset entails persevering with a challenging task, rather than giving up too soon, by exploring all possible ways of approaching and mastering it. Possible ways of approaching and mastering an academic issue might involve receiving help from a range of people, having access to different resources, taking a break or simply keeping trying. A Growth Mindset encourages children to focus on what they can do if they try hard, rather than what they believe they cannot do because they are of fixed ‘ability’. However, as noted by Carol Dweck herself and described in our earlier paper (2021), this approach has been distorted by various *mis*conceptions within the schooling system, including the following two:

1) MISCONCEPTION 1: Growth Mindset is about children’s effort, especially praising effort, without necessarily linking effort to its outcomes. However, Carol Dweck insists that effort must be linked to specific outcomes in both the teacher’s and the child’s mind. When a child does not meet her/his goal, teachers and the child together need to think creatively why effort has not been effective, and choose new strategies, resources or other people’s support to improve learning.

2) MISCONCEPTION 2: Growth Mindset means believing that everyone can achieve any goals, without making reference to what kind of goals they achieve and the conditions in which these are supported. Carol Dweck insists that much depends on goals and conditions for learning.

Critics suggest that these misconceptions of Carol Dweck’s Growth Mindset provide the destructive possibility that schooling emphasises children’s perseverance, rather than the child’s and the school’s openness to trying a range of approaches to help learning to progress. When combined with neo-liberal discourses of self-responsibilisation, the Growth Mindset theory may suggest a false sense of empowerment that in fact misleads the child, who is actually practising compliance or avoidance, rather than embracing a potentially fulfilling challenge. Meanwhile, as the child perseveres individually, even fearing to ask for support to avoid punishment (see Fisher, 2011), this could isolate them from those with whom they could otherwise develop empathy as well as creative, critical dialogue.

Specific to the schooling context, Chris Watkins (2010) has equated a *Learning Orientation* with Carol Dweck's Growth Mindset, which Chris Watkins contrasts with a *Performance Orientation*, which relates more to a Fixed Mindset. With a *Learning Orientation* or Growth Mindset, one hopes ultimately to *improve* one's performance; while with a *Performance Orientation* or Fixed Mindset, one seeks to *prove* it. That is, in the latter, performance rather than learning is targeted. Chris Watkins proposes that children with the former, learning-targeted orientation believe that by working hard and in a range of ways, they can succeed; while those with a performance orientation believe that an internal trait called 'ability' accounts for success; those with a *Learning Orientation*/Growth Mindset believe that they can improve and learn and overcome difficulties while those with a *Performance Orientation/*Fixed Mindset focus on proving to others that they are 'smart'; those in the first group prefer challenging tasks whose outcome reflects their personal motivations and goals while those with the latter approach seek satisfaction from doing better than others and emphasise competition and public evaluation.

It is historically interesting to note that Carol Dweck was initially aiming to erode the belief that people were born either 'smart' or not 'smart' ie a fixed conception of 'ability'. While some teachers might still categorise children in these terms (even if only in their own heads), our data (described below) strongly suggest that our sample children held almost unanimously that 'smartness' could be achieved by good behaviour, concentration and hard work and they rejected the idea that some children were born 'smart'. This new focus on self-responsibilisation and sheer hard work links with neo-liberal globalised financialised capitalism (Ball, 2021; Fraser, 2008) whereby the individual can no longer expect to be supported by a Welfare State but must carve out their own – economically viable - success. As we show below, this limited conceptualisation of Growth Mindset may lead to some more destructive orientations towards creative learning.

Causality Orientation mini-Theory [COT]

Ryan and Deci's (2000; 2019) Self Determination Theory (SDT) builds further on these concepts using a new set of 'orientations' which denote a person's motivation: in their case, the Controlled, Autonomous or Impersonal Orientations. These comprise Ryan and Deci's (2019) mini-concept of Causality Orientation Theory (COT), which we use (below) to explore children's own perceptions of how schooling directs their learning, in relation to their own competence, autonomy and relatedness at school. This mini-theory of COT proposes that people's *motivation for participation* in social processes (such as learning activities at school) is affected by *where* they attribute their successful actions to originate from. According to COT, in a particular situation, some people are more likely than others to act according to self-initiated rules and act autonomously (holding an Autonomy Orientation). On the other hand:

> Some people readily orient to *controls*, reward contingencies, and powerful others; … and still others seem to focus on *fears* of failure or perceived needs for safety (p.126; our emphases).

Those who sustain an Autonomy Orientation perceive that they have the agency to make a difference to their own and others' life-histories, which connects closely to Chris Watkins' *Learning Orientation* and Carol Dweck's Growth Mindset (2010, above). Others perceive that actually they have no control over their trajectories, which are controlled by others in authority within the schooling system (Controlled Orientation). A third group perceive even

less causal connection between what happens to them and their own intentions: with an Impersonal Orientation, events seem to happen randomly, thereby provoking fear of unknown ills. This can lead to a tendency to avoid situations that seem unpredictable and anxiety-provoking. The schooling context directs which orientation children take.

Our Children's Life-histories In Primary-schools (CLIPS) research project used Ryan and Deci's (2000) Self Determination Theory as one overarching theory. This suggests that satisfaction of a person's needs for competence (attainment; confidence), autonomy (self-direction; capacity to critique) and relatedness (feeling affectively bonded to others) allows them to achieve creative learning and 'positive-experience and wellness outcomes' (Ibid., 2019, p.219), ultimately supporting their capacity for self-determination. Perceived satisfaction of each of the three needs contributes in a particular way to positive-experience and wellness outcomes, including creative learning; whereas frustration of any of the three contributes to specific negative experiences whereby creative learning is inhibited when the individual takes a Controlled or Impersonal Orientation instead of an Autonomous one.

Sense of competence

Yu et al. (2018) describe a sense of competence as the belief that one 'attains valued outcomes' within one's environment (p.1864). 'Competency' is the execution of attaining those outcomes. In our immediate context of primary-schooling, a sense of competence results when a school-child believes they have mastered a school task successfully. The task may be an academic task such as a mathematics test; a non-academic task such as artwork; or a social task such as making friends. In the last case, 'sense of competence' refers more generally to an overall sense of confidence, based on self-worth (Bandura, 1997).

Our research is concerned with the child's sense of competence in terms of attainment in maths and English particularly, because of a relatively recent policy emphasis in the English schooling system on a child's attainment scores in mathematics and English *above all else* (Fielding and Moss, 2010). The children in our sample had all been designated as 'lower-attaining' at age seven, in maths and/or English. Our concern is how well the child's perceived competence withstands the high value put on these attainment scores in school-life; and whether a perceived *lack* of competence in them interferes with creative learning and/or leads to a child diverting their energies into acting on a Controlled or Impersonal Orientation which limits creative learning.

In particular, we investigate Ryan and Deci's (2019) claim that a child's sense of competence is one important – *and yet insufficient* - basis for sustaining the intrinsic motivation to learn creatively: that a sense of autonomy and relatedness *must also* be perceived. This would mean that, even when support for all kinds of competence is available, unless it is accompanied by supports for autonomy and relatedness, it may reinforce external (rather than internally meaningful) goals and ultimately steer the child's energies away from opportunities for creative learning and positive-experience outcomes and towards less fruitful ends.

Sense of autonomy

In our context, having a sense of autonomy means a school-child recognising that they are acting in ways that reflect their agency; that they are not only controlled by others such as teachers, parents or policymakers; nor are their acts random. When a child feels controlled rather than autonomous, this can dampen their curiosity and creativity (Helwig, 2006) and

limit their sense of freedom to critique their situation. As Anderson (2011) suggests, one is autonomous if one acts in accordance with reasons perceived to be sound: rather than by simply following externally prescribed rules; or transitory desires. However, as Devine and Irwin (2013) emphasised:

> One acts or judges in accordance with a law (nomos) which she prescribes to herself (autos). It is her own self, identified with her reason, which constitutes the source of the action (p.321).

The most autonomous children are those who can stand outside their situation and see its tensions, while still participating within it, remaining able to make a decision about whether to 'integrate, hierarchize or reflect upon the rules imposed from outside the self' (Devine & Irwin, 2005, p.322). This reflective thinking can occur when they perceive that 'there is thinking space to accept, modify, alienate or find alternatives to the prevailing paradigm', drawing on an even 'deeper, broader plateau of thinking than "rational choice"' that includes the capacity to reflect on rational choice itself (Ibid., p.328).

Sense of relatedness

Sense of relatedness to other children and, separately, to teachers, plays the third essential role in developing positive-experience and wellness outcomes, including creative learning. Sense of relatedness refers to a perception of having qualitatively and quantitatively adequate social bonds, feeling cared for, valued and belonging within the community (Riley, 2019). Studies indicate that feeling socially excluded leads to distress and negative affect (Alivernini et al., 2019).

Methodology and research design

Funded by the Leverhulme Trust [no.413], the Children's Life-histories In Primary/Secondary-schools project (CLIPS) aimed to explore children's sense of competence in relation to current policies which foreground attainment in tests of mathematics/English *above* other goals for schooling. The project drew on interpretivism (Schwarz-Shea, 2020) in its attempts to understand and portray how individual children reacted socially and affectively to their school-attainment situation across ages 7-12 years-of-age. Our research involved construction of school life-histories to capture the 'concrete joys and suffering' (Plummer, 1983, p. 4) of unheard individuals (Goodson and Sykes, 2001). In this article, we present a selection of life-histories to illustrate the three orientations of COT, using the life-history format to emphasise the wholeness of each child and the integration of their perceptions of competence, autonomy and relatedness.

In summer 2018, we gained access to four primary-schools, two inner-city, one suburban and one rural, in S.E. England. Three of the schools had pupil intakes comprising above-average numbers of children eligible for free school meals indicating economic disadvantage. All four schools had been assessed as good/outstanding by national inspections at the start of the project. Year 3 teachers selected children for the project who had been categorised, at the end of Year 3 (aged 7-8), as 'below age-expectations' for attainment in mathematics and/or English (not including children who had Education and Health Care Plans indicating impairment). Of our final sample of 23 children, nine had Pupil Premium status (indicating further social disadvantage). Over half were from ethnic minority groups. By the end of the fourth year in summer 2022, the children were attending 13 different secondary-schools.

When first meeting each child, they chose a 'secret' name, which became their permanent pseudonym, used below. Across the project, we used the following data collection instruments:

- 12 (or 11) audio-recorded and transcribed activity-interviews of 40–90 minutes each with every child each term for 13 terms (missing one, or in rare cases two, under Covid-19); in a few cases using dyads/triads. TOTAL n=230.
- Observations of each child in their primary class every term, where possible.

During interviews, we substituted straight questions and answers with activities, games, role-plays, drawing, and photography activities. The life-histories presented below are accumulated from all the CLIPS interviews for each child selected, in response to a range of activities on which we do not have space here to elaborate. Over the 13 terms, we had built up close bonds with the children which supported them to speak freely. Our data were based on the children's own ways of making sense of schooling with little reference to parents' or teachers' perspectives. We analysed data inductively, letting themes emerge from the data (Jeong and Othman, 2016). We fed all data into NVivo11/12 and constructed new codes inductively, which we negotiated collaboratively as a research team of three researchers. The life-histories attempt to relay some of the children's own narratives about schooling experiences in relation to the following themes: *a) Perceived sense of relatedness b) Perceived sense of competence and autonomy c) Motivational orientation (Controlled, Impersonal, Autonomous) and d) Influences of these on creative learning.* We selected two children from our sample who represented most clearly each COT orientation:

Controlled Orientation

Joe	British, Moroccan-heritage	Rural school in Surrey
Bella	White British	Rural school in Surrey

Impersonal Orientation

Jerry	White British	Suburban school in Greater London
Jeff	White British	Rural school in Surrey

Autonomy Orientation

Saffa	British, Somali-heritage	Inner-city school, London
Mohammed	British, Turkish heritage	Inner-city school, London

Reference is made (below) to the Term in which a quote was gathered from a child from Term 1 (aged seven/eight) to Term 13 (aged 11/12) e.g. [11] means we collected the quote during Term 11. In order to identify which Orientation a child subscribed to, we summarised these using language suitable for children. We asked them to identify which of the following three was most like them. They had to choose between:

1. *I like/dislike doing what I am told. I respect/dislike the teachers. I work hard to get rewards/don't care about rewards.* **(Controlled Orientation – selected by 7/23 children)**
2. *I try to make sure I don't do badly at school. I don't want to have low grades and have people laugh at me. I take care to do my best and not get into trouble or get a detention.* **(Impersonal Orientation – selected by 12/23 children)**

3. *I'm interested in exploring different and unusual things. I am also interested in thinking about how things could be changed at school.* **(Autonomy Orientation – selected by 4/23 children).**

The children in all cases chose the orientation that we as researchers would also have identified for them. We were able to notice some general patterns among the children who had chosen each orientation, although these were not measured or assessed using any statistical methods. That is, when we looked at the life-histories of those who chose the Controlled or Impersonal Orientation, we found that many of these children had the lowest perceived sense of their own competence (primarily attainment in maths/English) and less strong relationships with peers than the other groups. Those who had the Autonomy Orientation tended to have a higher perception of their school competence and generally high relatedness. Children with a Controlled or Impersonal Orientation also appeared to focus more on how they themselves and their school-work *appeared* to others. Those with the Autonomy Orientation, in contrast, were better able to focus on content and fulfilment of the learning process itself, perhaps because their energies were not being consumed by efforts to appear 'smart' and avoid humiliation.

Ethical procedures

Ethics were particularly sensitive for a project in which we worked so closely with such young children. We bore in mind to 'do no harm' at any time; indeed, we aimed to make the whole research experience as enjoyable as possible. We were relieved to find that not one research interview was missed (except during Covid) by any child. We had full ethics approval from the UCL Research Ethics Committee (REC 1389), including using special protocols for data collection during Covid-19. CLIPS adhered strictly to the British Sociological Association ethical code (2017). Consent was regularly re-confirmed by both children and their parents.

Children's Life-histories

Controlled Orientation

Joe

Joe delighted in telling us during his first year at secondary-school: 'I made loads of good friends' [12], while previously he had been 'unconfident at like making friends and stuff' [11]. He described himself as 'smart' and 'funny' but he confessed: 'I'm always going to be silly because that's just the way I am' [10].

Joe came to believe that he learned things in a different way from others: 'I'm just like really slow, and I tend to ask people a lot and the others don't' [11]. Joe mentioned not being able to remember things: 'You forget [things; but] some teachers don't like [this] – they say like "I'm not going to tell you twice"' [12]. He expressed a desire for 'much more assistance' during classes because 'the work is hard' [11]. Without the controller-teacher to help him, he described in primary-school class: 'I just stand like and wait until the teacher comes' [5]. He seemed to feel overwhelmed without the teacher's direction, leading to further disengagement: 'When I look at the board it just looks really hard … I just look somewhere else' [1]. This led, he said, to feeling 'stressed and frustrated' [1].

On the other hand, reflecting back at the end of the final term, Term 13, he told us that the most destructive aspect of primary-school had been: 'The teachers were always like

breathing over my neck' [13]. Joe came to resent external control, which he regarded as residing mainly in teachers: 'They're annoying and I don't get my way… They tell me what to do, and they're not in control of me – I am' [10]. Standard sanctions did not have the desired effect on restraining Joe's behaviour, leading to teachers reprimanding him often. He reflected: 'I like being praised. [But often being reprimanded …] made me feel like I wasn't good at anything and like I wouldn't do well in life' [13].

Joe recognised that his ADHD diagnosis explained his difficulty with concentration and the frustrations this led to. He believed that teachers thought he was just being 'naughty' when, in fact, his condition made it hard for him to sit still. When being reprimanded publicly, he said: 'I was worried about people just laughing saying "He's an idiot"' [5]. Joe himself suggested that if children did not follow school rules, teachers should 'give them extra support' [12] rather than punishments. He therefore noted his first few detentions at secondary-school as big negative moments in his whole life-history which made him even more angry.

Joe therefore seemed to spend considerable energy on resisting and fighting control, energy which – as he himself saw – could have been better spent on being helped to understand things. The negative implications for his future motivation for learning seem clear, an issue that was not resolved by entering secondary school.

Bella

Bella was a well-behaved pupil in primary-school who initially made huge efforts to be positive about school-life. Her friendships were fairly fluid but important to her; she was anxious to be popular and told us that 'my friends support me' [4] and this helped her learn. However, unfortunately she became alienated from her primary-school friends during her first year in secondary-school which caused her some anxiety.

Bella told us that in her Year 4 special maths group she had felt subordinated: 'I was obviously in Year 4! and I was [placed] in the Year 3 maths class with a load of Year 3s!' In addition, the system stipulated that she only take out 'kid books' from the library (for 'infants') because she was not as competent in reading as others. She explained: 'I would love to read better… But I guess I can't, so I've got to accept that'. As well as feeling singled out, she also felt that she did not get enough help and she suggested that she struggled 'a bit more' [5] than others.

In the first few years of the project, Bella made a huge effort not to criticise school nor to express discontent about school-life. She told us that she liked all subjects and was never bored. She denied feeling stressed about getting things wrong. She told us: 'I like hard work, because I like challenging things' [3]. In other words, she seemed to try to turn potentially negative experiences into good opportunities. It was at age 9-10 that she started to have frequent panic attacks in class when she could not work out her maths: 'Sometimes like bad voices come in my head and my head starts spinning … when I can't do my work' [10]. Perhaps these precipitated her gradually deteriorating approach to schooling.

As she neared secondary-school, she began to express anger towards teachers. At the end of Term 10, in a role-play, she indicated herself running away from school, explaining: 'I do not like school'. In a different role-play, she showed herself angry with the teacher for keeping her in for further maths practice at break [10]. By the start of secondary-school,

she could say, 'I hate most of my lessons, they're very boring' [11]. Reflecting this shift, Bella acknowledged that she had changed a lot since the project began when she was seven. It seems that Bella's Controlled Orientation swung from initially restricting her behaviour and limiting her expression of autonomy; to subsequently driving her to become outright rebellious. In Term 12, she told us about storming out of lessons without permission ('I wasn't going to be in the lesson if the teacher gives me [punishments] for no reason!'); and of putting her maths teacher in his place, exclaiming in class 'I'm not a dog!' when he asked her to 'Sit!' [12]. She commented that secondary-school teachers just wanted her to be a 'goody-two-shoes', which had ironically been her own model in primary-school. At those times, she seemed to use a great deal of diverted energy in her attempt to overcome painful feelings and experiences.

Impersonal Orientation

Jeff

Jeff's 'wonderful friends' [8] were especially important to him and he punctuated his school-life-history according to each special friend he had made along the journey. Indeed, by the end of Term 13, he could call himself: 'Kind of popular in school' [13]. He had earlier described the hardest aspect of primary-schooling as: 'When someone - like - says I can't play' [3].

During primary-school writing lessons, Jeff explained: 'Normally I don't know what to write or how to explain it … It's kind of stressful for me' [9]. In maths he recollected: 'Although [teacher] was saying like "You have to do this and that" I kind of got confused and didn't know what I was doing (*starts crying*) … There was too much stuff in my head at once and I couldn't work things out' [10]. Regarding Religious Education, he said: 'It's too complicated for me… you have to do a lot of writing' [6]. During class discussions on the classroom carpet, the teacher rarely asked him questions: 'Because I don't know the answers' [5]. By the end of primary-school, Jeff was 'frightened' [10] about getting bullied at secondary-school and worried that he would get too much 'super-hard' homework' [9]. What Jeff said he would have liked was more help in class, a teacher who would 'shorten it up so we understand … what she's saying' [6]. Indeed he sought avoidance of hard work and indeed, work in general: in a world that he experienced as so confusing and overpowering, it was easy to understand why Jeff sought to avoid further difficult situations in school.

Jeff made efforts to avoid becoming upset or angry. We asked him if frustrating aspects of school made him feel angry afterwards and he replied: 'Yeah definitely … I mostly just play Fortnite [later, at home]. I mostly just take my anger out on people online … then I'm just sort of killing people' [12]. He had been told that he had 'anger issues' [11] and had been taught to take deep breaths to address these; but even these he did not do 'out loud' [11]. He told us: 'I normally just scream into my arm and just forget about it' [9], pushing his bad feelings down and trying to avoid unpleasantness associated with them.

Jeff seemed to stop concerning himself about his attainment grades by time he reached secondary-school. In Term 13, he rated high grades as less important than friends, family, health, fame and riches, because he said: 'For me I'm bad at mostly everything' [11]. He seemed to focus most on avoiding punishments and humiliation than on learning

creatively. In his mind, hard work led to success; but perhaps for Jeff, conformity in the classroom was itself hard work. He therefore put great efforts into being obedient and polite. However, we were struck by his frequent mentioning of 'getting used to' negative emotion: 'I actually just keep it down, like super-down inside me' [9]. We hypothesise that the effort he used to keep his frustrations down might have been diverted from further engagement in his many interests such as stories, science, music, drawing and computers.

Jerry

Jerry told us several times over the 13 Terms that he would have liked a bigger playground, shorter lesson times and longer breaktimes at school, in which to enjoy playing sports with his friends – mainly boys. His generous sociability was also reflected by his obvious delight in making other people happy: to the point that, if he won a million pounds, he would give half to charity.

Jerry told us, indicating how little direction he felt over his learning: 'Some days I'm like smart and some days I'm not … [Some days] my brain has flash-banged … It like crumbles up and once I'm trying to figure out a question it just goes blank' [11]. He perceived: 'It's harder for me because … I'm not a practice person' [8]. He also confided that tests were 'not really my thing' [1] and caused him a lot of stress. Jerry related being teased about his attainment in final year at primary-school: '[I] got laughed at, like "Ha ha, he's an idiot"' [13]. It also seemed to bother Jerry that somehow he never managed to get his name in the Achievement Book despite admitting: 'I'm trying like extra hard now' [8]. He also seemed upset when his work was not perceived as good enough: 'Handwriting - they [the teachers] think it's messy - and after you just do all that work they just rip it up for nothing' [8].

Jerry described himself at school as often bored by lessons, which led him to feel: 'I don't want to ever go back to that school again' [5]. He told us, in one instance: 'I actually said, "Can I go and explore because this is too boring!" and [as punishment] I was made to stay in for lunch and breaktime' [1]. He told us he would sometimes sleep during lessons or distract himself by writing on his hand or fiddling under his desk. He portrayed three causes for his boredom. Firstly: 'I don't understand and no one helps me… When there's an easy question people just keep on confusing me… talking so loud I can't think so then I get it wrong' [2]. Secondly, when feeling negative: 'It's hard for me to - like - work… I just stop doing my work' [6]. A third reason for boredom seemed to be curriculum content he could not relate to and therefore sought to avoid: 'They just give me loads of stuff I don't like … like comprehension sheets' [12]. These factors caused stress: 'My head gets hot' [4] 'and you sometimes blow your fuse' [2]. At times, especially in secondary-school, he welcomed being punished by being sent out of class, saying 'Thank God! because I'm out of the classroom' [2].

Jerry's choice of Impersonal Orientation was in keeping with his apparent impression that the best he could do was avoid trouble. His pleasure at being sent out of class tallied with this orientation, as did his frequent physical absences from school. He did not seem to take pleasure in addressing difficult challenges in terms of school-work. When asked how he would feel if he knew he would be in top sets for all subjects in two years' time, he replied: 'Not really delightful … because that means it's much harder questions' [13].

Jerry seemed to believe, perhaps without having critically questioned it, that good grades at primary-school led to good grades in secondary which led to a good future job.

Encouraged by his school's emphasis on perseverance, he believed that the route to good grades was through concentration: 'If you persevere you will be better and you will probably be the top person in the class' [6]. This was in sharp conflict with his perception that sometimes he simply found it too difficult to concentrate. In summary, he spent a lot of time convincing us and perhaps himself that constant hard work was the answer to his problems, while in reality he found that constant hard work with insufficient help made him too stressed to learn.

Autonomous Orientation

Saffa

Saffa was confident socially and saw transitioning to secondary-school as follows: 'The chance to make lots of new friends who you can talk about loads of topics with' [10]. She exercised her autonomy in seeking out positive relationships both with peers and teachers (the latter whom she perceived as 'nice, good, responsible' [11]).

The exception to Saffa's smooth school-life-history, boosted by her high sense of relatedness, was her academic self-concept which was low for mathematics. However, this irritated her rather than defeating her: 'I get angry as I don't want to fail at anything' [6]. Despite Saffa's frustrations, she seemed authentically interested in learning for its own sake and genuinely did not give up her interest. She explained: 'It's bad thinking that you're … lower than another person … [so I] put my head down and try to work as hard as I can. And sometimes I will just talk to other people about the work, so I can understand it as well' [12]. This linked to her strong sense of power that she believed knowledge bestowed: 'You know that saying, "knowledge is power"? – because you have knowledge you can do literally anything, and anything in the future' [10].

However, she found secondary-school to be very strict, for example, limiting how often and how long one could leave class to go to the toilet. But she played the role of 'the autonomous person' described by Devine and Irwin (2005, p.322) as she seemed in control of her choices. She explained: 'I mean the school isn't us, so we can choose what we like and what we don't like!' [12] Saffa thereby managed to sustain positive-experience outcomes by seeking and using her agency, including to initiate friendships, giving her a sense of relatedness which supported her sense of social competence, despite her continuing struggles with school attainment in mathematics.

Mohammed

Mohammed particularly enjoyed the social side of school and said, following Covid-19 school closures: 'It feels good (*to be back*) because I missed my friends' [9]. On reaching secondary-school, he spoke of liking many of his teachers and quickly making friends, despite missing those from primary-school.

Mohammed struggled in his English classes in primary-school and so was part of an intervention group for 'people that need help' [3] in English. Although the work could be repetitive and too easy at times, overall, he said: 'The group's fun' [3]. It was notable that he displayed no signs of embarrassment. Perhaps lack of humiliation was due to these intervention groups being taught by Mohammed's class teachers – not Teaching Assistants - and being changed each term according to need. Another reason for his not feeling embarrassed may have been because Mohammed had a strong sense of competence due to achievements in Maths and sport which compensated for lacks in

English. The outcome was that by the end of primary-school, Mohammed's English had improved to the level 'expected' for his age, which he attributed both to the specific help he received at school; and because, as he put it: 'I've done a lot of reading in the holidays … reading instead of playing Fortnite' [6]. However, at the end of his first year at secondary-school, his results showed that although his English was now at the 'expected' level for his age, his maths had fallen below that level, presumably because he had been excluded from many lessons by way of punishment.

Mohammed often spoke of loving to learn new subjects, and said during maths, 'I wish I could do [attempt] harder work' [6]. During primary-school he exhibited an intrinsic thirst for learning and achieving and could say: 'I'm looking forward to succeed [at secondary-school]' [6]. Nonetheless this Autonomy Orientation was threatened in secondary-school due to his difficulty in adhering to the school's much stricter rules. He was given numerous detentions and excluded from school several times. By our final interview in Term 13, he spoke of now needing to concentrate on conforming to the numerous school rules despite not agreeing with them. He resolved that he would 'probably need to listen to the teachers' and try to change 'my attitude and stuff' [13].

What was so noticeable about Mohammed, however, was his undeterred sense of striving and enjoying, despite the troubles he faced. He was still positive about schooling generally and even perceived that having many detentions could be prestigious among peers. He only decided to change his attitude consciously once he saw that other aspects of a successful life – such as joining after-school clubs - might also be threatened if he kept being excluded, which he said: 'I feel very sad about' [12].

Discussion: energies diverted from creative learning

Our findings illustrate the complexity of factors associated with children's (dis)engagement in creative school-learning. Our life-histories illustrate how perceived low competence in highly-valued subjects such as maths/English can interfere with an autonomy-rich approach to school-learning. They indicate that feelings of low competence can lead to children's investments in alternative orientations towards their school-lives, however often they are (mis)informed that their futures depend on hard work and attainment. However, our life-histories also demonstrate how an increased sense of autonomy or of relatedness can influence that outlook in positive directions. All the children portrayed above had been designated as 'below age-expectations' in maths and/or English. Where this designation had led the child to feel subordinated, their overall sense of competence may well have been affected as with Bella's and Jerry's examples. Where there was no apparent stigma attached, as in the cases of Mohammed, perceived competence seemed to remain adequate. Where competence was high in another area, such as in maths for Mohammed, reduced perceived competence in English seemed to be compensated.

Apart from feeling embarrassed or subordinated, for some children perceived competence was so frequently eroded by their experience of intense boredom, confusion or difficulty, that a sense of their own autonomy was made extremely unlikely as they struggled not to panic or lose their temper, as described by Joe, Bella, Jerry and Jeff. Much energy must have been put into their attempts to cope - when it sometimes seemed impossible. Their cries for help and for clarification were sometimes silenced by school rules and controls or by the child's fear of being reprimanded or feeling

subordinated. Joe recommended a preferable route for these children: 'Give them extra support!' [12] rather than punishments. On the other hand, neither Saffa nor Mohammed lost their desire for learning or sense of autonomy, despite being subjected to many school rules or sanctions that they perceived as unjustified. Meanwhile, the life-histories indicate how important friendships can be for helping children who perceive their competence as low, to never-the-less thrive at school. Saffa was one such child who accepted her limitations but was happy with her friendships anyway. Joe and Jeff found school-life barely tolerable, but on discovering a greater range of friends in secondary-school, both managed to keep going albeit not always in a learning-engaged way; while Bella had the opposite experience.

We noted at the start of this article how Carol Dweck had helped erode the myth of 'fixed ability' – the myth that people are born either 'smart' or not 'smart'. She proposed that such as shift may come about when teachers and children together think creatively about why and when sheer hard work has not been effective, and choose new, innovative strategies, resources or other people's support to give the child hope that they themselves can improve their learning. Carol Dweck cautioned against schooling fixating on prescribed goals – such as normative standards that all children 'should' reach in prescribed subjects - without making reference to what kind of goals these are, the conditions in which these are supported and the particular interests demonstrated by each child.

The life-histories suggest that another myth seems to inhibit children's creative school-learning today: the myth that everyone is born able to concentrate, engage and learn in the style of classrooms found in today's schooling systems. Just like those of Sumeria in 3000BC (Watkins, 2005), some classrooms today still demand staticness and silence and are strictly controlled by the teacher (who in turn is controlled by central government). While breaktimes continue to shrink (Baines & Blatchford, 2021); focus on the arts and sports to wither (Boyle and Bragg, 2006; Daly Smith et al., 2021) and funding for supporting children's mental health to disappear (https://www.bacp.co.uk); those children who find these conditions difficult or even intolerable, are likely to divert their energies into pursuits less productive than creative learning and exercise their autonomy outside schooling. Apart from possible effects on future employment, learning to be controlled or to avoid difficulties, rather than exercise agency in creative learning, may diminish a child's future experiences as a socially interactive adult with full 'parity-of-participation' (Fraser, 2008). As Carol Dweck wrote in 2017: 'Somewhere along the line, [the child's] intelligence became disconnected from [their] schooling' (p.59). In other words, what children learn at school may not be fit for the greater purposes children hope to fulfil in their lives.

Concluding comments

Our life-histories have considerable educational implications. Individual teachers and schools will draw their own conclusions in moving children's positive-experience and wellness outcomes forward (Ryan and Deci, 2019). Our life-histories, we hope, remind all educators of the prime importance of perceived *relatedness* in schooling experiences; the need to expand the conception of perceived *competence* beyond test results in limited subject domains; and, most important of all, the essential role of perceived *autonomy* in motivating children to engage in any tasks beyond the minimum. Our findings will, we

hope, illuminate the experiences of those children for whom the current schooling obstructs, rather than encourages, creative learning.

At the policy-level, it may be useful to emphasise Chris Watkins' (2010) distinction between a *Learning Orientation* and a *Performance Orientation,* for its particular pertinence to schooling. Where performance is the dominant goal of the schooling system, children's *attainment* in performing will be constantly highlighted, eroding the *confidence* and the *autonomy* of children whose prior maths and English attainments may not be high. Where measured performance dominates, convergent answers to test questions are sought, rather than children's divergent curiosity and creativity with the curriculum (Torrance and Pryor, 1989). Children's engagement is further undermined by the narrow format that learning-for-performing takes, in its focus on static, quiet concentration and hard work rather than exposing children to a multi-coloured range of approaches to learning in every subject area.

The motivational orientations of COT (Ryan and Deci, 2019) are helpful in identifying two different responses to a system that promotes a *Performance Orientation* (rather than a *Learning Orientation*). It can lead towards the situation whereby controls become a key focus of schooling for both children and teachers; or whereby children try to get by without engaging deeply and without being punished. The COT orientations also helped us, with our sample, to identify how sparsely distributed the Autonomy Orientation was among our 23 'low-attaining' children (n=4/23). We interpreted this finding as suggesting that the concept of Growth Mindset is not always achieving its original purpose (Dweck, 2017): to support such children to find new, various and perhaps enjoyable ways of approaching learning, regardless of prior attainment. The mindset promoted by the system tends to be Fixed - not only on the idea of innate 'ability' as in Carol Dweck's analysis – but also Fixed towards performance rather than learning, thereby potentially fixing children who find current schooling environments uncomfortably stressful, in a downward spiral. Our life-histories suggest that a schooling system that focuses on both prior attainment and the end product - the 'performances,' rather than the processes children encounter as they journey towards chosen future goals - threatens the possibility that children will embrace 'a wholehearted willingness to act' during their school-life-histories (Ryan and Deci, 2019, p. 132) and threatens the chance that they will achieve positive-experience and wellness outcomes as creative learning.

9981 words

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Threats to creative learning