The linguistic construal of extreme behaviour: Hyperactivity-impulsivity in family and teaching communities

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Teaching and family communities usually have an active role in Attention Deficit Hyperactivity-Impulsivity Disorder diagnosis in childhood. Examining the construal of hyperactivity-impulsivity in teaching guidelines and online parental exchanges can elucidate common lay understandings of the trait. The study considers TRANSITIVITY, with a focus on Relational and Behavioural clauses, lexical metaphors and appraisals. The linguistic descriptions have a potential to assist medical specialists in interpreting evidence presented by teaching and family communities in the complex task of diagnosing ADHD, facilitating communication and explaining the strategies used to avoid potentially stigmatising descriptions. The analysis supports the suitability of distinguishing Behavioural processes in TRANSITIVITY and traces a parallelism between the metaphorical descriptions of extreme behaviour and those traditionally reported for strong emotions.

Keywords: ADHD, hyperactivity-impulsivity, TRANSITIVITY, Behavioural processes, Relational processes, lexical metaphor, appraisal

1. Introduction

This paper examines how family and teaching communities understand extreme behaviour, in particular the hyperactive-impulsive behaviour characteristic of Attention Deficit Hyperactivity-Impulsivity Disorder (ADHD), through an analysis of professional literature (guidelines for teachers) and informal online exchanges of parents and carers of children with ADHD. The study provides a TRANSITIVITY [1] analysis from systemic functional grammar complemented with an examination of lexical metaphors and the evaluations of behaviour afforded by the metaphorical depictions and TRANSITIVITY choices (in this study, "evaluation" is used to refer to APPRAISAL) (Martin and White 2005). Combining the three analyses makes it possible to study how grammar, lexical metaphor and evaluation, linguistic features often studied separately, weave together in meaning-making.

The TRANSITIVITY analysis explores the construal of behaviour in grammar and shows the suitability of distinguishing Behavioural processes from Verbal and Mental types. While Behavioural processes may be employed to portray somewhat similar verbal and cognitive activities as the other two types, they nonetheless present grammatical differences with representational implications – in the texts considered, they can connote a lack of focus and control of the persons over their actions. This grammatical encoding of behaviour is emphasised with the ideational affordances of the lexical metaphors, which construe hyperactive-impulsive behaviour as aimless and excessive, and those with ADHD in need of external help to self-regulate. The appraisal analysis shows how process types, particularly Relational processes, and lexical metaphors contribute to ascribing, both explicitly and indirectly, specific attitudes towards the hyperactive behaviour and the children who display it, echoing established social values about conduct. Juxtaposing evaluations of behavioural inappropriateness with evaluations of behavioural inability

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[1] References to SFL systems are presented in small capitals.

contributes to attenuate otherwise potentially stigmatising descriptions. The contrasting appraisals, however, also reflect the complexity experienced by the lay community in making sense of disruptive pathological behaviour. Results of analysis further illustrate a parallelism between the understanding of extreme behaviour as manifested in hyperactivity-impulsivity, and the "folk conceptualisations" of emotions reported in metaphor studies based on Conceptual Metaphor Theory (CMT) (Kövecses 2004), with lack of control, intensity and absence of agentive will as major commonalities.

2. ADHD and hyperactivity-impulsivity

ADHD is characterised by inattention, the inability to focus on relevant stimuli or to focus for an extended time span, and hyperactivity-impulsivity, identified with excessive verbal and kinetic activity and social intrusiveness (APA 2013: 32).

Back in 1902, George F. Still assessed, for the first time, behavioural traits currently associated with hyperactivity-impulsivity as clinically significant (Barkley 2006: 4; 1997: 65). Children unusually aggressive and defiant, resistant to discipline and overtly passioned, were attributed an "abnormal defect in moral control" independent of their intellectual abilities (Still 2006: 126). "Moral control" was understood as behavioural self-control "in conformity with the idea of the good of all" (ibid. 126-127), and the condition was judged clinically significant only in the most extreme cases (ibid. 129). It would be the first association of deviant behaviour in childhood with a psychological pathology not related to cognitive deficiency.

Russell Barkley's studies on ADHD, one of the most recent accounts of the condition, identify poor behaviour inhibition as the primary explanatory factor (2006:

297; 1997: 66). Behavioural inhibition is attributed to four cognitive functions: the non-verbal working memory (internalising one's motor activity), the verbal working memory (internalising one's speech), self-regulation of affect, motivation and arousal (regulation of emotion), and reconstitution (planning and generativity) (Barkley 2006: 300-305). These functions enable a person to delay action and to decouple from the present situation; projecting potential future consequences allows us to modify the otherwise most probable response to an event. In Barkley's account, the ability to self-direct actions is essential for projecting the future, which is understood as a necessary requirement for preferring long-term outcomes over short-term ones (2006: 304).

3. Systemic functional linguistics, metaphors and control

3.1 The linguistic construal of experience and a note on Behavioural processes

Following systemic functional grammar, TRANSITIVITY constitutes "the grammatical system by which" we impose "linguistic order in our experience" as observed in the clause (Halliday and Matthiessen 2014: 213). Examining TRANSITIVITY allows us to account for the different ways in which a domain of experience (hyperactive-impulsive behaviour) is modelled in language. Halliday's (1998) work on the grammatical construal of pain provides an illustrative example of how lexicogrammatical resources offer complementary models of phenomena – categorised as entity (which can be possessed, have temporal and spatial dimension and vary in type or intensity), as quality (of body parts, the afflicted person or the whole setting) or as process, these different representations of pain reflecting the complexity of experience. Besides providing alternative arrangements of reality, grammatical representations can contribute to evoking

different appraisals of the person or phenomenon described – consider, for instance, the contrast between describing someone as "always *doing* what one cannot do", where the person is negatively evaluated in terms of their actions, or as "*being* very naughty", where the negative evaluation is ascribed as a character attribute.

In English, the main process types comprise those that construe our outer and inner experience (Material and Mental), and those which allow us to make generalisations and classifications (Relational) (Halliday and Matthiessen 2014: 214-215). Given the characterisation of hyperactivity-impulsivity as behavioural (kinetic and verbal) disinhibition, Material processes (representing a doing or happening) and Verbal processes (involving some information transfer or "symbolic exchange of meaning") would be expected in texts depicting children displaying the trait (ibid. 303). Material clauses construe the participant who brings about the change as Actor and, in those cases where the change is not confined to the Actor (transitive clauses), the change extends to the Goal (ibid. 225-226). In Verbal clauses, the participant that communicates the information is the Sayer (ibid. 304), and the information transferred can either take the form of a projected quote or report, or be summarised as "a class of thing" by means of a nominal group (Verbiage) (ibid. 305-306, see also Bartlett 2014: 66).

Process types are distinguished on the basis of their systematically distinctive grammatical properties (Halliday and Matthiessen 2014: 213-220). However, the semiotic domains modelled by process types "shade into one another" and should not be regarded as clear-cut, but as "fuzzy categories" (ibid. 216 and 218, Footnote 3). Behavioural processes are a paradigmatic example of borderline cases, an in-between Material, Mental and Verbal which allow for the representation of sensing and saying as activities (Fontaine 2013: 90). Contrary to Verbal and Mental processes, which can project a clause or take a Phenomenon or a Verbiage respectively, Behavioural processes

are (generally) intransitive, consisting of a Behaver, the participant that performs the behaviour, and process only (Bartlett 2014: 250; Halliday and Matthiessen 2014: 301) – consider, for example, "Don't disturb me, *I'm thinking* now!" [Behavioural:near-mental] vis-à-vis "*I'm thinking* that this is a complex case" [Mental:cognitive]. Unlike Mental processes, the unmarked present tense for Behavioural processes is the present continuous or present in present, like Verbal and Material processes.[2] Following Halliday and Matthiessen (2014: 302), we can distinguish Behavioural:near-verbal (focused on the activity on its own instead of the information transfer, e.g. "he lies/embellishes, non-stop"), Behavioural:near-mental[3] (focused on the processes of consciousness, without referring to the thoughts of the behaver, e.g. "she was able to follow along", "He looked for a few minutes…"), Behavioural:near-material (bodily postures and pastimes, like "stand", "lie down", e.g. "she… laid in the grass…"), and Behavioural:physiological (processes showing the manifestation of states of consciousness, like "smiling", "laughing", and other processes like "coughing", "breathing", e.g. "you are not sure if the child is breathing properly…").

Behavioural processes are recognised as the less clear-cut type (Halliday with Matthiessen 2004: 248; Bartlett 2014: 72), occasionally referred to as a "grey area" or "the bottom of the barrel" (Bloor and Bloor 2004: 126). As liminal or in-between cases, Behavioural processes cover a number of different phenomena (involuntary actions, nonprojecting communication, voluntary perception), which has led some linguists to argue for avoiding the distinction of Behavioural processes in full – see discussion provided in Banks' (2016) on the matter. Behavioural processes are omitted in Banks'

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[2] Behavioural processes may also use the present simple, but these uses have been described as outdated or formal, e.g. "she breathes!", "I stand here today…" (examples from Bartlett 2014: 72; also Halliday and Matthiessen 2004: 250).

[3] Following the distinction of Mental processes, Bartlett (2014: 71) further differentiates Behavioural:thinking (near Mental:cognition) from Behavioural:perceiving (near Mental:perception).
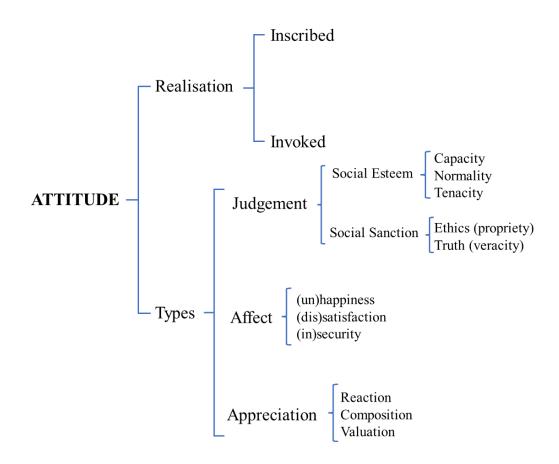
introduction to SFG (Banks 2019, Chapter 3 on TRANSITIVITY), and Lavid and colleagues also prefer not to distinguish Behavioural processes as a different group on its own in presenting a systemic functional grammar of Spanish (Lavid et al. 2010: 151). However, in the English language, Behavioural processes show distinct grammatical proprieties from the other groups, with some verbs being used in both behavioural and non-behavioural constructions (Bartlett 2014: 251; Halliday and Matthiessen 2014: 301). The analysis presented in Section 6.3 shows the linguistic interest in keeping the Behavioural processes, both from a grammatical and a discourse analysis perspective.

3.2 SFL, metaphor and interpersonal meaning

Recognizing the importance of lexical choices in promoting portrayals and appraisals of phenomena, the TRANSITIVITY analysis is complemented by an examination of lexical metaphors and the evaluations triggered by the latter in conjunction with the process types.

Contrary to other linguistic approaches, SFL recognises "metaphoricity" as both lexical and grammatical. "Metaphoricity" involves a "many-to-one" relationship between meaning and expression (one form may present multiple meanings) (Taverniers 2019: 65). Besides allowing for an expansion of semantic resources, grammatical and lexical metaphors share three main characteristics: they reconstrue one domain in terms of another (e.g. "he consumes too much alcohol, this is his problem" vis-à-vis "alcohol consumption is his problem", with the process construed as a Thing); they tend to cluster together, i.e. it is common to have metaphors in textual proximity, also known as "metaphor priming" (Charteris-Black 2012: 210); and they involve a concretisation or move towards thingness (e.g. an action is represented as a thing) (Halliday and Matthiessen 1999: 232-233). However, while grammatical metaphors have received

extensive attention in SFL research, studies on lexical metaphor, or on lexical representations more generally, are rarer (Fontaine 2017: 116-117). The traditional infrequent attention to lexis can be attributed to two main factors: SFL was primarily conceived as a "sentence grammar approach" to language (O'Grady 2019: 474), and understanding language as social semiotics conventionally overlooked the cognitive aspects of lexis (Fontaine 2017: 116). The SFL perspective can, nonetheless, enrich lexical metaphor studies, allowing for an understanding of metaphor as a multifunctional phenomenon: ideational, providing new representations of reality, and interpersonal, generating evaluations (Simon-Vandenbergen 2003: 230).

The examination of evaluation draws on SFL APPRAISAL framework (Martin and White 2005). The APPRAISAL framework distinguishes three main dimensions in the expression of evaluation: ATTITUDE, the explicit (inscribed) or indirect (invoked) expression of feelings and opinions; ENGAGEMENT, the expression of the text producers' stance towards what is being reported and the values of the addressees; and GRADUATION, the modulation of ATTITUDE. This study considers how lexical metaphors and particular TRANSITIVITY choices allow writers to present their opinions towards the children described and focuses on ATTITUDE. ATTITUDE is divided into three general types: Affect, the expression of feelings, Appreciation, the evaluation of things, natural phenomena or human performances, and Judgement, the evaluation of human behaviours according to their adherence to social expectations on appropriateness and veracity, capability, resoluteness or normality (Martin and White 2005: 45-58; see Figure 1).

Figure 1. Overview of the system of ATTITUDE (based on Martin and White 2005)

Including an examination of ATTITUDE in the metaphor analysis makes it possible to account for the interpersonal dimension of metaphor and show the complementarity between its interpersonal and ideational affordances, the latter being the aspect traditionally prioritised in cognitive-based studies.

3.3 A note on ADHD and control-related lexical metaphors

Lexical metaphors are commonly described as talking, and potentially thinking, about one thing in terms of another on the basis of some perceived similarity (Semino 2008: 1). Studies of ADHD professional literature aimed at teachers, parents and health professionals have reported metaphorical identifications of the brain with a "cybernetic control system" and portrayals of people with ADHD as being with a broken control system, captured by a force and unable to escape from it without external help (Danforth

and Kim 2008). These metaphors involve a mapping between the brain or the ADHD-related behaviour (in CMT terms, the "target domain"), and the control system or the force (the "source domain"). Other metaphors include portrayals of children with ADHD acting as if driven by a "non-human agent" (Rafalovich 2001: 375-376), which identifies the ADHD-related behaviour ("target domain") with a "non-human agent" (the "source") to highlight the lack of self-regulation.

The absence of control foregrounded by ADHD-related metaphors is one of the main characteristics identified in CMT studies about metaphorical representations of emotion (Kövecses 2004), together with *intensity* (emotions tend to be highly intense states), *passivity* (the experiencer is conceptualised as an ineffectual subject), or *evaluation* (emotions are attributed positive or negative values), among other features (Kövecses 2004: 41-46). The lexical metaphors identified in the texts considered here show that part of Kövecses' model of emotions, especially the aspects of *control*, *intensity* and *passivity*, also account for portrayals of extreme behaviour such as hyperactive-impulsive traits.

4. Data and methodology

Responding to the active role of the teaching and family communities in ADHD diagnosis, this study examined two datasets: professional texts (educational guidelines) about ADHD aimed at teachers, and online informal communication between parents and carers of children with the diagnosis. The educational guidelines comprise five documents (7,298 words) produced by recognised ADHD authorities: *ADD Attitude*, a US-based website that provides resources for families, professionals and adults with ADHD, the *ADHD Foundation* (United Kingdom), and *Living with ADHD*, a website supported by Janssen Pharmaceuticals (see Appendix). The parental communication was retrieved

from *addforums.com*, the biggest forum worldwide on ADHD at the time of data collection (January 2018), which brought together parents, carers and family members of people with ADHD, and diagnosed adults and teenagers. The data was from the threads "You know your child is ADHD when…" and "Proud moments".[4] Both threads were pinned for the attention of the users and invited them to share ADHD-related challenges and positive experiences, and hence were deemed of analytical interest for providing descriptions of the diagnosis, the children and daily experiences. On the date of data collection, the threads comprised a total of 376 and 69 comments respectively. The researcher did not register to gain access to the comments and, besides anonymisation, the comments were not edited in any way.[5]

For the TRANSITIVITY and evaluation analyses, the educational guidelines were manually annotated in full. The forum threads added up to 63,419 words approximately, and a sub-dataset of 3,435 words was created from the two threads to be manually annotated in full. The sub-dataset comprised posts from 19 participants for each thread, and was intentionally built following a random selection, purposefully excluding posts that (i) showed an active reliance on previous posts (e.g. through quotation), which would require a reader to consider both the original post and the response, (ii) exclusively thanked other users, or (iii) were particularly lengthy, since too long or too short posts would have skewed representativeness.

All linguistic features were annotated in Excel spread sheets, one per text analysed, which allowed for easy filtering according to linguistic feature and for checking any

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[4] See "You know your child is ADHD when…":
https://web.archive.org/web/20180525061818/http://www.addforums.com/forums/showthread.php?t=49258; "Proud moments":
https://web.archive.org/web/20180525061800/http://www.addforums.com/forums/showthread.php?t=67582

[5] Consent was given by the University of East Anglia's General Research Committee to obtain, use and reproduce these data for research purposes.

correspondences between them. The TRANSITIVITY analysis prioritised a grammatical annotation criterion[6], and process types annotation was based on grammatical probes, which consist on rephrasing the original sentences with agnates (clauses with different formulations but similar meanings to the original ones) (Bartlett 2014: 49). The probes followed in this paper are based on Halliday with Matthiessen (2004, chapter 5); Halliday and Matthiessen (2014, chapter 5) and Bartlett (2014, chapter 3).

The metaphor analysis adopts a discourse-oriented approach (Semino 2008) and accounts for metaphors' cognitive dimension and their function in discourse (e.g. evoking humour or evaluation). The analysis focused on the metaphors employed to represent the hyperactive-impulsive behaviour and the individuals with ADHD, maintaining a thematic focus according to the research interests (Kimmel 2012: 5). Since the datasets considered are relatively small, metaphor identification was completed manually. The educational guidelines were examined in full; for the forum threads, metaphors were manually retrieved from the sub-dataset, which enabled the researcher to identify two groups of metaphors for the representation of hyperactivity-impulsivity: "weather" and "machine" metaphors. Specific lexemes were defined according to the metaphor lexicalisations in the sub-dataset: "hurricane", "wind" and "tornado" were identified for the "weather" domain, and "motor", "machine", "fly" and "radio" for the "machine" domain. The manual annotation of the sub-dataset was followed by a search of the lexemes in the whole dataset of the forum threads.

Metaphor identification followed the Metaphor Identification Procedure (MIP) (Pragglejaz Group 2007), which distinguishes the following stages for establishing an expression as metaphorical: reading the whole text; establishing the lexical units; interpreting the meaning of the lexical units in context and determining whether such

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[6] SFL researchers may prioritise a grammatical or a notional (semantic) criteria in the transitive analysis (O'Donnell, 2019: 212).

units have some more basic contemporary meaning; and interpreting the basic meaning in comparison to the contextual one (2007: 3). Metaphor identification was supported by dictionary searches where necessary. Metaphorical similes were also included in the analysis, for they entail a comparison between two meanings (vis-à-vis literal comparisons) (Semino 2008: 16).

Abstracting "conceptual metaphors" from the lexical metaphors constitutes a complex step which frequently relies on the researcher's intuition (Deignan 1999: 180; 2017), and it becomes particularly problematic when the corpus only presents a single or a small number of lexical metaphors for a source domain (Deignan 2017: 107), as is the case in this study. As such, this study does not aim to reveal any stable conceptual metaphors for hyperactive-impulsive behaviour, since this would require examination of a much larger corpus; instead, it presents the metaphorical portrayals specific to the contexts and communities examined.

6. Construal of extreme behaviour

6.1 Overview

Mixture of process types constitutes "part of the 'flavour' of a particular text and also of the register it belongs to" (Halliday and Matthiessen 2014: 219). Examining the distribution of process types can thus illuminate register characteristics of the teaching guidelines and forum exchanges considered, and their linguistic selections made in construing ADHD-related behaviour.

Analyses of registerially mixed corpora have reported Material and Relational as the most frequent process types in English transitivity, followed by the Mental and Verbal

types, and Behavioural and Existential as minor types (Halliday and Matthiessen 2014: 215, Figure 5.2; Matthiessen 1999: 14-16). To an extent, the process type distribution in the texts examined adheres to previous studies. Table 1 summarises the frequency of process types identified for descriptions of ADHD, ADHD traits (inattention and hyperactivity-impulsivity related), and the children with the diagnosis. Clauses describing the actions recommended to the teachers in the guidelines are not included; these comprise 63 Material clauses, 12 Verbal clauses and 7 Relational attributive clauses across the guidelines. As expected, Material and Relational clauses are those most highly ranked, weighting 34.55% and 28.86% respectively (Table 1). However, while Material clauses representing the children prevail in the forum threads (41.9%), in the educational guidelines Material clauses are primarily associated with the teachers and Relational clauses predominate in descriptions of the children and ADHD traits (42.18%). Material processes are recurrent in instructional registers (Halliday and Matthiessen 2014: 219), and their predominance in representing the actions recommended to the teachers is thus to be expected. In contrast to previous studies, Behavioural clauses feature as the third most frequent type in both the forum threads (17%) and teaching guidelines (15.17%), weighting a 16.14% overall and surpassing the Mental (13.41%) and Verbal (6.14%) types.

The following sections consider how the lack of behavioural control and the associated lack of forethought over the actions associated with hyperactivity-impulsivity are construed through transitivity and lexical choices, and the explicit and evoked evaluations these allow for. The analysis focuses on the function of Relational processes, identified as an important grammatical resource in conveying evaluation (Halliday and Matthiessen 2014: 274), and Behavioural processes, which present a higher use in the datasets studied than what would usually be expected.

Table 1 Summary of frequencies of process types

Clauses about ADHD and children with ADHD			*Educational guidelines*				*Forum*			*Overall*	
			ADD Attitude	*ADHD Fundation*	*ADHD Guide UK*	*Total %*	*Proud moments*	*You know*	*Total %*	*Total*	*Total %*
Relational	**Attributive**	*Intensive*	22	1	28	42.18	11	8	16.6	**70**	**28.86**
		Possessive	6	6	15		4	4		**35**	
		Circumstantial	-	-	-		1	1		**2**	
	Identifying	*Intensive*	2	-	5		1	8		**16**	
		Possessive	-	-	-		-	-		**0**	
		Circumstantial	-	1	3		-	-		**4**	
Existential			-	-	4	1.90	-	-	0	**4**	**0.91**
Material			35	-	21	26.54	35	61	41.9	**152**	**34.55**
Verbal			3	-	-	1.42	11	13	10.5	**27**	**6.14**
Mental		*Cognitive*	13	2	3	12.80	6	9	14	**33**	**13.41**
		Perceptive	4	-	-		2	2		**8**	
		Desiderative	-	-	1		2	6		**9**	
		Emotive	-	2	2		3	2		**9**	
Behavioural		*Speaking*	-	2	4	15.17	6	10	17	**22**	**16.14**
		Thinking	13	1	2		5	1		**22**	
		Perceiving	2	-	-		2	3		**7**	
		Physiological	-	2	-		-	8		**10**	
		Body posture	4	1	1		2	2		**10**	
	Total		104	18	89	100	91	138	100	**440**	**100**
	Total			211			**Total**	229			

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6.2 Relational clauses

Educational guidelines and forum threads present three main uses of relational clauses: definitions of ADHD and symptomatic traits; indications of common characterisations of the children by third parties; and descriptions of the children by construing regular behaviours as qualities of being or possessions.

6.2.1 Defining hyperactive-impulsive behaviour

Relational clauses offering explicit descriptions of ADHD and hyperactive-impulsive traits were only identified in the educational guidelines which, besides offering recommendations, also provide information about the condition for the teaching community. Examples 1-2 consider hyperactive-impulsive behaviour and its impact on classroom management, and example 3 allows for the identification of hyperactivity-impulsivity with "unacceptable behaviour".[7]

(1) This [inability to self-regulate] **is** perhaps the hardest symptom of ADHD to modify **[Relational:identifying:intensive; (-ve)Judgement:capacity'I]**, and though it can **be** frustrating to manage **[Relational:attributive:intensive]**

(2) Hyperactive behavior isn't a choice **[Relational:attributive:intensive; (-ve)Judgement:capacity'I],** but it can **be** a big distraction for other students **[Relational:attributive:intensive; (-ve)Judgement:propriety'I]**— and [it can **be**] a nuisance to a teacher **[Relational:attributive:intensive; (-ve)Judgement:propriety'I]**

(3) ADHD **is** the reason for unacceptable behaviour

[Relational:identifying:intensive; (-ve)Judgement:propriety'I; (-

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[7] The "-ve" sign stands for negative evaluation, and the "I" for invoked. Invoked evaluations of the children may be inferred from the attribution of hyperactive-impulsive behaviour to the child, as in examples 1-3, or from the identifications and comparisons allowed by the Relational processes and metaphors, such as examples 4-5.

ve)Judgement:capacity'I], but [**is**] <u>not an excuse</u> for it.

[Relational:attributive:intensive]

Explicit (example 2) and indirect (example 3) characterisations of hyperactive-impulsive behaviour as inappropriate in the school setting evoke negative judgements of propriety of those who manifest the trait. Negative appraisals of conduct are nonetheless attenuated by characterising hyperactivity-impulsivity outside of the individuals' control ("the hardest symptom…to modify", "…isn't a choice", "ADHD is the reason…"). These examples (particularly example 2) echo the notion of free will, which would characterise behavioural control as a "choice" of the behaver. Portraying hyperactivity-impulsivity as being outside the individual's will and power of action evokes a negative evaluation of children's control abilities (negative judgements of capacity). The examples (particularly example 3) further reflect the complexity in appraising the moral dimension of symptomatic behavioural traits: behaviour unacceptability (negative judgement of propriety) is explicitly identified (via the Relational process) with the condition (ADHD), which on its turn is denied the characterisation of "excuse", hence placing the onus back on the behaver.

6.2.2 Reporting typical characterisations

Both the forum users (examples 4-7) and the educational guidelines (example 8) employ Relational clauses to refer to characterisations of the children by third parties. Children displaying hyperactive-impulsive behaviour are commonly characterised as (or identified with) extreme wind (examples 4-6) and machines (example 7). Common depictions of the children as aggressive and uncontrollable, as those promoted by the extreme wind metaphors, are explicitly challenged in the guidelines (example 8).

(4) most of the family **refers** <u>him to some type of weather like a tornedo</u> (*sic.*)<u>, a</u>

<u>huricaine</u> (*sic.*) ... **[Relational:attributive:intensive; (-**

ve)Judgement:propriety'I; (-ve)Judgement:normality'I]

(5) He **<u>is</u>** also **<u>known</u>** <u>as "the human tornado"</u>. **[Relational:identifying:intensive;**

(-ve)Judgement:propriety'I; (-ve)Judgement:normality'I]

(6) I guess I'm proud that eventhough (*sic.*) the last month **<u>was</u>** <u>like a tornado</u>

[Relational:attributive:intensive; (-ve)Judgement:propriety'I; (-

ve)Judgement:normality'I] and he had messed up some of his grades …

(7) In an evaluation for neuro-psych. testing the teacher **<u>described</u>** <u>my son as a</u>

<u>"spinning top"</u> **[Relational:attributive:intensive; (-**

ve)Judgement:normality'I]

(8) ADHD's inherent impulsivity means these kids **<u>get labeled</u>** <u>as unruly or</u>

<u>aggressive</u> **[Relational:attributive:intensive agentive; (-**

ve)Judgement:propriety], even though many **<u>are</u>** <u>caring, sensitive, and truly</u>

<u>trying</u> **[Relational:attributive:intensive; (+ve)Judgement:propriety]**.

Weather and natural forces metaphors are usual in depictions of emotions and personalities (Deignan 1995: 144; Kövecses 2004: 37 and 71). Metaphors referring to extreme wind are often identified with negative emotions and regarded as emphasisers of their violent character or strong intensity (Deignan 1995: 153). Conversely, machine-related metaphors representing behaviour are frequently associated with control and being emotionless (Deignan 1995: 71). In the examples, extreme weather metaphors foreground the intensity, uncontrollability and negative consequences of the hyperactive-impulsive behaviour as distinctive characteristics of the children; the hyperbolic depiction of behavioural intensity and its negative effects invokes an assessment of hyperactive-impulsive behaviour as extreme and inappropriate (negative judgements of normality and

propriety). In the datasets, machine-related metaphors are not used to portray behaviour as automatic, but to highlight the abnormally intense kinetic or verbal activity as salient characteristics of the children. Contrary to extreme weather metaphors, which invoke both disproportionate and uncontrollable motion and emphasise negative outcomes, machine metaphors only stress the intensity of activity and the child's uncommon tireless character (judgement of normality).

Relational clauses allow for overt identifications and comparisons of the child with the weather (or machines), making explicit both the source domain (e.g. weather, lexicalised as "hurricane", "tornado") and the target domain (children with ADHD). These explicit metaphorical representations contrast with those ones where only the source domain is mentioned and the identification with the target is inferred, e.g. "He *flies* out of bed at 6am in overdrive and *flies* at 100mph all day long [Material:transformative]", which identifies the child with a machine through the semantics of the Material process and the Circumstances ("in overdrive", "at 100mph"). Ideationally, overt and inferred metaphorical identifications allow for similar semantic mappings; from an interpersonal perspective, however, Relational clauses contribute to stress the expression of evaluation by making the metaphorical identification explicit.

Common characterisations of the children as "unruly or aggressive" (attributes also evoked by the extreme weather metaphors) are explicitly rejected in the educational guidelines – in example 8, through the semantics of the process ("get labeled") and the explicit ascription of contrasting positive attributes ("caring", "sensitive"), which inscribe a positive judgement of moral appropriateness. Example 8 echoes the Western metaphorical understanding of a "person" as being constituted by an "inner/true self" that stands in opposition to an "outer/false self" (Lakoff 1992: 17). Representing hyperactivity-impulsivity as an "outward appearance" in contrast with the "true

character/nature" of the children contributes to invalidate the negative appraisals associated with the symptomatic trait.

6.2.3 Regular behaviours as character attributes and possessions

Hyperactive-impulsive behaviour is recurrently construed as a characteristic of being (or quality) of the children with ADHD through intensive attributive relational clauses (examples 9-12) or, alternatively, as an entity possessed by those with the diagnosis through possessive attributive relational clauses (examples 13-15).

Both forum users and educational guidelines construe regular behavioural traits associated with hyperactivity-impulsivity as qualities for class-membership attribution – e.g. speaking loudly and behaving badly and in a rude manner (examples 11-12, forum users), or being "always on the go" (example 10, educational guidelines) are depicted as qualities of the children's character (i.e. being "loud", being "very hateful and rude"). Occasionally, the symptomatic trait is construed as a quality of being on its own (example 9, educational guidelines). The tendency to understand habitual behaviours as defining inherent qualities of the individuals who show them has been acknowledged in the literature on conceptual metaphor ("regular behaviours are properties" metaphor, Turner and Lakoff 1989: 66 and 202). In the examples, regularity is lexicalised with frequency adverbs ("always", "usually"), or connoted by the present simple tense.

(9) Not all children with ADHD **are** hyperactive.

    [Relational:attributive:intensive]

(10) [**is**] always on the go **[Relational:attributive:intensive; (-**

    ve)Judgement:propriety]

(11) she **is** loud … **[Relational:attributive:intensive; (-**

    ve)Judgement:propriety]

(12) he **is** usually very hateful and rude to his friends at some point during their playdate. **[Relational:attributive:intensive; (-ve)Judgement:propriety]**

Explicit attribute adscription through attributive intensive clauses allows for inscribed appraisals about the Carriers in those cases where the quality attributes are value laden, such as the negative judgements of propriety of examples 10-12. While the attribute "[being] always on the go" (example 10) does not necessarily express a negative evaluation on its own, it acquires the negative value by contextual proximity with other descriptors of reprehensible behaviours. The overt inscription of attitude in class-membership specification by reference to salient (negative) qualities of the children (e.g. "X is loud") contrasts with the indirect evaluation evoked through metaphorical mapping in examples 6-7, where membership is specified by identifying the children as entities of the class (children displaying hyperactivity) through (metaphorical) entity attributes (e.g. "X is a tornado"). In both cases, however, identity construction and attitude adscription are based on the inference of character attributes from behavioural regularities.

Attributive possessive clauses tend to construe hyperactive-impulsive behaviour as difficulties the children experience (examples 13-15, all from the guidelines). Following Halliday and Matthiessen (2014: 295), possession is understood in a "broader, more generalised sense" than a literal relationship of ownership. Thus, while attributive intensive clauses construe the hyperactive-impulsive behaviour as inherent qualities, the attributive possessive clauses involve a concretisation, construing the symptomatic behaviour as an "extension" or a part of the individuals who manifest it. When children do not show the expected behaviour or behavioural skills, this is conceptualised in terms of absence, highlighting the role of the teaching community to provide support for the abilities they lack (example 15: children "*need* predictability…" as an agnate of "they *don't have* forecasting capacity…").

(13) …some (actually very few) only **have** <u>problems with hyperactivity and</u> <u>impulsiveness</u> **[Relational:attributive:possessive; (-ve)Judgement:capacity]**

(14) Children with hyperactive-type ADHD usually **<u>have</u>** <u>energy to spare</u> – <u>making it difficult for them</u> to sit still for long periods of time **[Relational:attributive:possessive; (-ve)Judgement:propriety; (-ve)Judgement:capacity'I]**

(15) they **need** predictability, structure … **[Relational:attributive:possessive; (-ve)Judgement:capacity]**

Although not construed as an inherent identity quality, attributive possessive clauses also present behavioural regularity as a constitutive attribute of the behaver, allowing for inscribed negative evaluations (judgements of capacity) in those cases where the possessed attribute is negatively value-laden (example 13 "have problems…"), and when the missing attribute would have been expected (example 15, "need…"). As for examples 2-3, also from the educational guidelines, examples 13-15 present inappropriate behaviour associated with hyperactivity-impulsivity as a product of lack of capacity instead of will (judgement capacity vis-à-vis propriety), contributing to mitigate negative portrayals of the children as misbehaved. Example 14 further identifies "hav[ing] energy to spare" as the ultimate cause of the excessive motor activity. The causal character is inferred from the construal of "hav[ing] energy to spare" as the Attributor of "difficulty" ("…have energy to spare [Attributor] –<u>making</u> [Relational:attributive:intensive] it <u>difficult</u> [Attribute] <u>for them to sit still</u> [Carrier]). Referring to symptomatic behaviour (inability to "sit still" [Behavioural][8]) by its cause ("hav[ing] energy to spare") avoids

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[8] "Sit" was coded as a Behavioural process because it refers to the bodily posture of the children, in contraposition to an action, which would be analysed as a Material process (e.g., "she sits whenever the teacher tells her to do so") (Halliday and Matthiessen 2004: 251, Table 5(24); Bartlett 2014: 50).

explicit portrayals of the hyperactive-impulsive behaviour as not adhering to social rules, and of the children as actors of disruptive behaviour.

Portrayals of the intense behaviour as out of the children's control are supported by repeated teaching advice to consider children's need for physical activity in lesson planning – examples 16-17; the imperative mood and deontic modality reinforce the directive character of the guidelines.

(16) allow "time out" if required to move/de-stress…

(17) Teachers should provide physical outlets to <u>help these kids release their pent-up energy</u> **[(-ve)Judgement:capacity'I]**

Examples 14 and 17 metaphorically portray hyperactivity-impulsivity as "excess of energy" that needs to be released ("have energy to spare", "release their pent-up energy"), hence implicitly depicted in a state of confinement ("container" metaphor). The semantics of the adjective "pent-up", a conventionalised figurative expression to represent something as being held under pressure or unable to be released from its confinement, further characterises the "energy" as being forcefully enclosed in the child's body.[9] Interpersonally, the "pressurised container" metaphor contributes to evoke a negative evaluation of the children's capacity of behavioural control, and emphasises the active role of the teachers as those who have to mitigate hyperactive-impulsive behaviour by providing opportunities for the energy release.

6.3 Behavioural clauses: absence of self-direction and excessive activity

Behavioural clauses depict the children's behaviour exclusively, both in the educational guidelines and the forum threads, and connote absence of behavioural control in their majority. In representing hyperactive-impulsive behaviour, Behavioural clauses

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[9] See, for example, the definition provided in *Merriam Webster* (Available at https://www.merriam-webster.com/dictionary/pent-up)

emphasise the lack of self-direction and the excess of verbal and kinetic activity, reinforcing the representations and evaluations provided through the Relational clauses and metaphorical portrayals.

6.3.1 Erratic and excessive behaviour

Behavioural clauses contribute to construe hyperactive-impulsive behaviour as erratic and excessive. In contraposition to the inclusion of the participants towards which the material or verbal action is directed, what is said, or what is thought, felt, wanted or perceived, as allowed by Material, Verbal and Mental processes, the absence of Goal, Receiver, Verbiage and Phenomenon allows Behavioural processes to foreground the action on its own, which in the contexts of the texts considered promotes the construal of behaviour as aimless. The "excessiveness" of action is connoted by graduation resources, such as adverbial phrases that function as Circumstances of manner or quality.

Examples 18 and 19 are from the teaching guidelines, and examples 20-24 are from the forum threads. Expressions denoting intensity are underlined, evidencing it as a central characteristic of hyperactive-impulsive behaviour. While the guidelines explicitly portray the (verbal) behaviour as excessive ("excessively", "too much"), assuming some standards of verbosity which tend to be exceeded by the individuals with ADHD, forum users avoid qualifying adjectives (e.g. "extreme") that would invoke a tacit comparison and employ other linguistic resources to connote behavioural intensity, such as hyperbolic statements (examples 20-21), or the metaphorical portrayals (examples 4-7). These graduation expressions were annotated as evoking judgements of normality, for they contribute to establish explicit or implicit comparisons with assumed standards of conduct.

(18) Hyperactivity and impulsiveness (**fidgets [Behavioural:physiological]**, can't

sit still [Behavioural:near-material], [**is**]

[Relational:attributive:circumstantial] always on the go, **talks**

[Behavioural:near-verbal] <u>too much</u>, **interrupts [Behavioural: near-**

verbal], **can't wait** their turn **[Behavioural: near-verbal]** etc)

[Judgement:propriety'I; Judgement:normality'I]

(19) Some children with ADHD may **talk [Behavioural:near-verbal]**

<u>excessively</u> or **hum [Behavioural:near-verbal]** to themselves while trying to

sit still [Behavioural: near-material] **[(-ve)Judgement:propriety'I; (-**

ve)Judgement:normality'I]

(20) He **talks [Behavioural: near-verbal]** <u>incessantly all day</u> **[(-**

ve)Judgement:propriety'I; (-ve)Judgement:normality], and <u>literally</u> **asks**

[Verbal] you <u>roughly every minute all day</u> what time it is **[projection]**

(<u>sometimes every 30 seconds</u>... ugh) **[(-ve)Judgement:normality'I]**

(21) you go on <u>a 1.5 hour trip</u> to your mom's house, and you are not sure if the

child is **breathing [Behavioural:physiological]** properly because <u>he has not</u>

<u>stopped</u> **talking** … **[Behavioural: near-verbal] [(-**

ve)Judgement:normality'I]

(22) He **cusses [Behavioural: near-verbal]** <u>so much it would make a sailor blush</u>

… **[(-ve)Judgement:property'I]**

(23) he **speak** (*sic.*) **[Behavioural: near-verbal]** <u>so fast, no you don't get it, soooo</u>

<u>fast that</u> you feel a kind of buzz in your head … **[(-**

ve)Judgement:property'I; (-ve)Judgement:normality'I] […]

(24) …**seeing [Mental:cognitive]** what there is to see **[projection]**, **doing**

[Material] what there is to do, with little regard for the teachers' task

instructions. **[(-ve)Judgement:property'I]**

Example 18 defines hyperactivity-impulsivity in one of the guidelines and portrays the symptom as uncontrolled verbal and kinetic behaviour. As for examples 14 and 19, "sit" was analysed as a Behavioural process, understood as referring to the bodily posture of the children (vis-à-vis a material or verbal action). The symptom is depicted as uncontrolled verbal and kinetic behaviour, the lack of control is explicitly portrayed through negative ability ("can't"),[10] and it can be semantically inferred from the actions ("fidgets", "interrupts"). The explicit denial of ability rules out volition as the cause of behaviour. The examples 19-24 describe what hyperactivity-impulsivity may involve (example 19) or present specific cases experienced by the forum users, who show a particular focus on verbal behaviour. Although none of them explicitly mentions the lack of self-directedness, all the actions are characterised by an absence of motivation or apparent purpose.

In opposition to Verbal processes, which have the potentiality to project conceptual content, none of the Behavioural:near-verbal processes involves any transfer of information and may come across as mere aimless talk ("talk excessively", "talks incessantly…", "has not stopped talking", "cusses so much…", "speaks so fast…"). The modifiers further contribute to construe the actions as lacking any apparent rationale or deliberation by emphasising the unusual amount of verbosity. Comparing the Behavioural:near-verbal processes to the Verbal "asks you…what time" of example 20 makes the aimlessness attributed to the Behaviourals more noticeable. The Verbal process presents a projection (reported verbiage, "what time it is") and a Receiver ("you"), the

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[10] Following SFG, ability is accounted for as a question of potentiality, "on the fringe of the modality system" (Halliday with Matthiessen 2004: 621).

action is thus portrayed as directed to another individual and assumes some forethought from the Sayer. The Behavioural:near-verbal processes, in contrast, do not depict any semiotic exchange nor refer to any targeted audience, only focusing on the material action – moving the mouth and emitting sounds. Example 24 is not focused on verbal action, instead it portrays the child as behaving erratically overall. The mental activity is construed through a Mental:cognitive process, but the projection connotes aimless behaviour and represents the child as not paying attention ("seeing what there is to see"). The remainder of the clause emphasises the lack of attention to directions and behavioural inappropriateness ("with little regard…").

All the examples above have been analysed as evoking a negative judgement of propriety of those who display hyperactive-impulsive behaviour except for example 21, which hyperbolically describes the extreme verbosity of the child eliciting humour. Negative appraisals may be evoked through the semantics of the processes (e.g. "interrupts", "cusses", examples 18 and 22) or the Circumstances (e.g. "incessantly all day", example 20), which refer to actions socially reproved or represent the behaviour as inappropriate due to its extreme nature. In example 23, the characterisation of the verbal behaviour as producing a headache to interlocutors ("you feel a kind of buzz…") has been analysed as evoking a negative evaluation of the child, albeit mitigated by the humorous stance.

6.3.2 Lack of behavioural control

Despite the recurrent portrayals of hyperactive-impulsive behaviour as excessive, aimless and inappropriate, both the teaching guidelines and the forum threads include attenuations of the negative appraisals associated with the symptomatic traits. While forum users evoke humour through hyperboles and metaphors, the guidelines explicitly depict the

children as unable to control their behaviour. Examples 18 and 19 above include explicit and indirect references to lack of ability ("can't", "trying"). Besides connoting aimlessness, Behavioural processes are also used in contexts that portray the children as lacking behavioural control (examples 25-26, from the guidelines):

(25) appreciate and accept that the child **cannot help** her/himself

[Behavioural:near-material]; (-ve)Judgement:capacity]: her/his behaviour

is not prompted by naughtiness

(26) their bodies just act **[(-ve)Judgement:propriety'I]** before they have a chance

to stop and **think [Behavioural:near-thinking; (-ve)Judgement:capacity]**

Example 25 explicitly negates children's ability to behave differently ("cannot help");[11] as with example 2, it echoes the understanding of behavioural control as individual choice and characterises the hyperactive-impulsive behaviour as being outside the individual's power of action, inscribing a negative judgement of capacity. In example 26, the Behavioural process construes the mental activity, foregrounding the action of thinking over what is being thought. Example 26 further echoes the "divided self" metaphor, well-reported in the literature as a conventional conceptualisation of lack of control (Köveckses 2004: 43). The children's bodies are identified as the ones that realise the hyperactive-impulsive behaviour and are distinguished from the children ("they"). The metaphor echoes the traditional Cartesian distinction (Descartes 2005[1649]) of "body" and "self" as two different entities, where "body" is the physical entity that realises the perceptible actions, and the "self" is a disembodied thinking entity in control of the body ("their bodies…act before they…think"). Dissociating "body" and "self" entails that the body can act irrespective of the desires of the "self"; "behaviour control" is associated with an agentive self, and absence of control with the self being governed by the body.

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[11] The verb "cannot help" was analysed as Behavioural:near-material, understanding it as an ellipsis of the full process "cannot help behaving [naughtily]", retrieved from the explanatory clause that follows.

Interpersonally, the metaphor avoids ascribing explicit judgements of behavioural inappropriateness to the children: while the bodies are evaluated in moral terms for behaving inappropriately, the children are appraised as unable to act differently.

Besides explicit attributions of lack of control (example 25, "cannot help…"), the guidelines reinforce the absence of self-direction by positioning the teachers as those who have to provide some sense of control to the children (example 27, also example 15, "they need predictability…"):

(27) [[Knowing **[Mental:cognition]** [[what lesson or activity is coming next]]

[projection]]] … provides students with a sense of control [[that can improve behavior]]

Example 27 establishes acquiring predictability as a way to achieve behavioural control. Predictability is lexicalised as an embedded Fact ("Knowing…", with the phenomena to be predicted as projection), which functions as the Actor in providing a "sense of control". The forecasting capacity construed with the Mental process is indirectly depicted as the product of the actions of the teachers, not as a deliberate mental activity of the children: although example 27 is presented as factual information, within the register of the teaching guidelines it contextually functions as an implicit directive (vis-à-vis explicit directives formulated in imperative mood or employing modulation, such as example 17). Ideationally, descriptions of what should be achieved in the classroom setting, as example 27, reinforce the lack of predictability associated with hyperactivity-impulsivity, both indirectly connoted (e.g. through Behavioural processes, examples 19-24) or explicitly described (e.g. through Relational processes, example 15).

7. Concluding discussion

Examining the linguistic construal of hyperactive-impulsive behaviour in parental online communications and professional literature for teachers provides us with insights into lay understandings of the behavioural trait that may assist the medical specialist in communicating with those not versed in ADHD. Both parental and teaching communities foreground the incapacity to self-control as a central characteristic of hyperactive-impulsive behaviour and reflect our ordinary understanding of behavioural control as forecasting capacity and self-directed behaviour. These observations are consistent with previous studies on ADHD representation in other genres, which report the lack of self-regulation as the most recurrent depiction of the diagnosed children (Rafalovich 2001; Danforth and Kim 2008).

The construal of hyperactive-impulsive behaviour has been examined combining the study of different linguistic resources: the grammatical encoding of behaviour, with a particular focus on Relational and Behavioural clauses, lexical metaphors and appraisals of the children. Relational processes allow for a construal of regular behaviours as qualities of being (attributive:intensive) and as extensions of the behaver (attributive:possessive). The conceptualisation of behavioural conditions as extensions of those individuals that manifest them is consistent with the linguistic construal of physical ailments – see Halliday's (1998) study on the grammatical construal of pain, which also highlights the construal of pain as possession of the sufferers. Once (behavioural) regularity is conceptualised as a quality or extension of the person, it is possible to regard particular behaviours as instantiations of character attributes and trace causal relations (e.g. "Peter is talking / moving a lot [now] because he is a talkative / hyperactive person"). Class attribution, such as descriptions of children as "a tornado" (examples 4 and 6) or a "spinning top" (example 7), or common labellings as being "unruly or aggressive"

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(example 8) reflect this tendency of turning behaviour regularity into explanatory character attributes.

When the regular behaviour is appraised negatively, as it is often the case for hyperactive-impulsive traits, a consistent depiction of such behaviour as a quality of being has the potential to motivate (self-)limiting behaviours by conditioning both the teaching and family perceptions of the children, and the self-perception of the children themselves, as unable to do better, ultimately leading to an internalisation of stigma and a self-fulfilling prophecy of underachievement. These observations are supported by studies on stigma and ADHD, which have reported assumptions of underperformance by the teaching community (Mueller 2012: 106), an impact of predominant stereotypes in parental and teachers' interactions with diagnosed children (Wiener et al. 2012: 234), and academic underachievement and drop-out (Walker et al. 2008: 913).

Besides the explicit negative behavioural appraisals inscribed by the Relational clauses, Behavioural clauses also contribute to connote the erratic and aimless nature associated with hyperactive-impulsive behaviour. The impossibility to construe information as projected clauses foregrounds the materiality of the speaking or mental activity instead of what is being communicated or thought, thus facilitating connotations of aimless verbosity or limiting the degree to which concrete thoughts are attributed to the grammatical subject. This analysis shows the suitability of distinguishing Behavioural processes in TRANSITIVITY, both for grammatical and discourse studies purposes.

The analysis has also evidenced the active role of lexical metaphors in promoting lay representations and evaluations of extreme behaviour and those that manifest it. Metaphor studies have traditionally highlighted the potential of metaphors to facilitate the understanding and dissemination of scientific concepts (Black 1979: 28-29; Semino 2008: 132). Identifying metaphors commonly used in lay registers can contribute to

elucidate public (mis)conceptions and determine which metaphors may work best as explanatory tools for the medical community to facilitate public understanding of the condition.

Lexical metaphors differ across the registers considered and include "extreme weather" and "machines" metaphors for the forum threads, and "divided self" and "(pressurised) container" metaphors for the teaching guidelines. Explicit metaphorical identifications through Relational clauses, which specify both target and source domains (i.e. *A is B*) have been observed in forum posts exclusively; teaching guidelines lexicalise the source (e.g. "pent-up energy", example 17) while the target (hyperactive-impulsive behaviour) is inferred. These metaphors focus on different aspects of the hyperactive-impulsive behaviour – intensity of verbal or kinetic activity ("extreme weather" and "machine" metaphors), disruptive behavioural outcomes ("extreme weather" metaphors), uncontrollability or absence of behavioural control ("extreme weather", "divided self" and "pressurised container" metaphors). Interpersonally, metaphorical mappings allow for different evaluative inferences of the children: "extreme weather" metaphors evoke negative judgements of propriety and normality; "machine" metaphors evoke (negative) judgements of normality; the "pressurised container" metaphor depicts hyperactivity-impulsivity as excess of energy and evokes negative judgements of capacity; and the "divided self" metaphor evokes a negative judgement of propriety of the body/outer self (portrayed as the actor of the hyperactive-impulsive behaviour), and a negative judgement of capacity of the children's inner self (depicted as governed by the body).

"Pressurised container" and "divided self" metaphors make it possible for the teaching guidelines to attenuate, if not exonerate, the children from the blame the judgements of behavioural inappropriateness would engender by stressing children's inability to control their behaviour without the teachers' external help, thus contributing

to raising ADHD awareness among the teaching community and avoiding any prejudice against students with the diagnosis. Instead, forum users' primary goal is not promoting ADHD understanding but sharing personal experiences within the forum community. Lexical metaphors identified in the threads frequently constitute blatant exaggerations of the children's behaviour and allow for humorous recounts of ordinary incidents. The overt humorous stance also mitigates the negative appraisal of children's behaviour.

The juxtaposition of appraisals of behavioural inappropriateness with appraisals of the children's lack of behavioural control as incapacity, either explicitly through the Relational clauses or evoked through the "divided self" and "pressurised container" metaphors, reflects the difficulty of the teaching guidelines to provide an explanation for disruptive pathological behaviour. In describing the challenges that the teaching community faces to manage inappropriate behaviour and the disruptions that result from it, the guidelines avoid promoting potentially stigmatising descriptions of the children by emphasising their lack of choice to act differently (examples 2, 25 or 26). On the other hand, however, the guidelines also present the lack of behavioural control without completely negating the children's free will (examples 3 or 27), thus implicitly acknowledging their capability to acquire behavioural-management skills. The impasse is circumvented by positioning the teachers as the ones to manage children's behaviour and provide them with behavioural strategies. While many examples from the forum users evoke humour or connote a light stance, some represent the parental struggles with their children's hyperactive-impulsive behaviour without attenuation (examples 6, 12 and, arguably, 11). These observations stress the role of the medical specialists in promoting a better lay understanding of behavioural pathology to avoid potential stigma and limiting behaviours.

Finally, the analysis allows us to trace a parallelism between the metaphors identified in non-specialised health discourses about ADHD hyperactive-impulsive behavioural traits and the lay conceptualisation of emotions observed in CMT literature (Kövecses 2004), the main points in common being the intensity of the behaviour/emotions and their independence from the subject; a portrayal of the behavers as passive, without free will; and a lack of control over the behaviour/emotions. This parallelism supports Kövecses' (2004: 49) observation that the majority of source domains identified for emotion-related metaphors are not restricted to emotion, but allow us to understand other phenomena such as extreme behaviour. The understanding of strong emotions or extreme behaviour as a failure of the self to govern the body, particularly explicit in the "divided self" metaphor, ultimately echoes the Cartesian body-self division of the human being: the self ("soul") was identified with reason (*res cogitans*) and understood as *essentially* different from the body (*res extensa*) by which it is enclosed. Emotions ("passions") were produced by an external cause (body) and suffered by the self. While passions were acknowledged as part of the human condition, it was paramount for the self to control them (Descartes 2005[1649]). This study evinces how our current lay understanding of psychological phenomena and pathology, and the (negative) appraisals of the diagnosed individuals that some of those lay representations evoke, follow from a mainstream Western tradition of thought.

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Appendix 1

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