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Redazione: Dipartimento di Psicologia, Università Cattolica del Sacro Cuore, Largo Gemelli 1, 20123 Milano – Tel. 02 7234 2284; *e-mail:* ricerchedipsicologia@unicatt.it.

Amministrazione

FrancoAngeli srl, viale Monza 106, 20127 Milano – Tel. 02 2837141

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I trimestre 2022

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Mentalization and attachment in educational relationships at primary school

Annalisa Valle*, Teresa Rinaldi*, Andrea Greco[°], Robert Pianta[^],
Iliaria Castelli[§], Antonella Marchetti*

* Theory of Mind Research Unit, Department of Psychology,
Università Cattolica del Sacro Cuore, Milano, Italy;
e-mail: annalisa.valle@unicatt.it; tel: 0272343646;
e-mail: teresa.rinaldi@unicatt.it; tel: 0272343646;
e-mail: antonella.marchetti@unicatt.it; tel: 0272344034;

[°] Department of Humanities and Social Sciences,
Università degli Studi di Bergamo, Bergamo, Italy;
e-mail: andrea.greco@unibg.it; tel: 0352052937;

[^] Center for Advanced Study of Teaching and Learning,
Curry School of Education and Human Development,
University of Virginia, Charlottesville, VA 22904-0426, USA;
e-mail: rep4p@virginia.edu; P.O. Box 8004026;

[§] Department of Humanities and Social Sciences,
Università degli Studi di Bergamo, Bergamo, Italy;
e-mail: ilaria.castelli@unibg.it; tel: 0352052934.

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Abstract

Mentalization is a key social ability that develops from infancy to adulthood, starting from early familiar attachment relationships. Children experience several contexts, in particular, educational ones such as school, where they build new attachment relationships with teachers. Although the amount of research on the links between mentalization and attachment has been increasing in recent years, there is still little evidence on the teacher-child relationship from a mentalization perspective. Moreover, only few studies focus on middle childhood, a crucial age for building positive school relationships. This study aims to investigate the possible effects of some measures of teachers' mentalization, namely,

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mind-mindedness and mentalised affectivity, and of pupils' representation of the educational attachment relationship on the mentalization abilities of children aged 8 to 10. The results show that a teacher's tendency to describe a pupil through physical comments and not mental comments, and her/his ability to use autobiographical memory to interpret the present emotional experience, impact children's mentalization abilities. This highlights the important role of the teacher in the construction of a class climate that supports pupils' mentalization.

Keywords: mentalization, attachment, teacher-child relationship, middle childhood, mentalised affectivity, mind-mindedness

Introduction

Mentalization is defined as 'the process by which we realise that having a mind mediates our experience of the world' (Fonagy et al., 2002, p. 3), and it constitutes the mental activity used to interpret human behaviour in terms of mental states. Mentalization refers to both the contents of the mind (emotions, desires, thoughts, beliefs, etc.) and the activity of thinking about one's own and others' minds. The cognitive and affective levels are not separate, because when people mentalise, they 'think feelings and feel thoughts' (Allen et al., 2008). In fact, to be aware of another's mind means to reflect on its contents and its functioning from a cognitive point of view, but also to be empathic, to consider the emotional states of the other, and to make them the object of one's own reflections.

The development of mentalization starts from infancy and has its foundations in the first attachment relationships. A parent's sensitivity in responding to the physical and emotional needs of their infant (Fonagy & Campbell, 2017), the tendency to consider the child's mental states (Meins, 2013), and the capacity to construct intersubjective emotional exchanges (Trevarthen & Aitken, 2001), typical of secure attachment, show the child that other people and herself/himself have a mind with emotional and cognitive contents that guide behaviour. Then, the acquisition of language improves mentalization abilities, enriching the parent-child relationships with explicit references to mental contents and actions, both of the emotional and the cognitive type (Antonietti et al., 2014). Conversations about mental states in a family are considered a

fundamental way to understand minds, and they are more likely to take place with secure attachment bonds rather than in insecure ones (Fonagy et al., 2016).

A useful construct that operationalises a parent's sensitivity is mind-mindedness, defined as the propensity of the mother to consider and treat infants and children as individuals endowed with a mind (Meins & Russell, 1997). Mind-mindedness is evaluated during mother-infant interactions (Giovanelli et al., 2020) by observing the mother's behaviour and language, or the comments the mother uses to describe her infant/child (Meins et al., 1998). These types of assessment reflect the complexity of the concept of maternal sensitivity, which comprises two abilities (Meins, 2013). The first one refers to the tendency to describe the child as able to recognise her/his internal world: it characterises the attachment security and it predicts the child's mentalization abilities throughout the preschool years. The second one refers to the attunement between verbal comments and behaviours during mother-child interactions, and it is not related to mentalization development in children.

Another construct involved in mentalization is mentalized affectivity, which develops in adulthood and takes mentalization into account in the emotional regulatory process (Greenberg et al., 2017). Jurist (2018) assumes that emotions are both regulated through behavioural and cognitive strategies, and then reevaluated in their meaning. Individuals mentalize about their emotions by reflecting on their past emotional experiences and understanding how these experiences influence the present situation, to better understand themselves and to anticipate their own emotional reaction in the future. Mentalised affectivity is evaluated using the Mentalized Affectivity Scale (MAS), consisting of three factors: identifying emotions, which involves the ability to make sense of emotions and to attribute a meaning to them based on personal experiences; processing emotions, which refers to emotion-regulation strategies; and expressing emotions, the tendency to communicate emotions from the inside to the outside. The Italian validation of the MAS (Rinaldi et al., 2021) evidences the complexity of this construct, due to the emergence of two new factor: Curiosity about Emotions, referring to the interest that a subject demonstrate about her/his emotions, and Autobiographical Memory, referring to one's tendency to use memories of childhood emotional experiences to attribute meanings to current emotions. Therefore, mentalized affectivity can be considered the affective facet of mentalization, and its levels could represent people's approach towards their minds, a sort of 'starting point' from which people understand their minds' functioning from an affective point of view.

Mentalization and attachment in multiple educational contexts

Mentalization and attachment play an important role not only inside the family, but also in other contexts in which adults and children build affective relationships—first of all, the school. Teachers, like parents, although in a professional role, take care of a child's needs, participate continuously in her/his experiences, and they are emotionally involved with her/him; for all these reasons, they are conceived as extrafamilial or professional caregivers (Howes & Spieker, 2008).

Although the number of studies on the development of mentalization is still limited, their results highlight the role of school relationships in supporting children's mentalization abilities. For example, Bak and colleagues (2015) suggested that the creation of an adult mentalizing community promotes children's mentalization, and further studies have supported this hypothesis for primary schools (Bracaglia et al., 2016; Valle et al., 2018; Valle et al., 2016) and communities for adolescents (Twemlow et al., 2005).

Further, mind-mindedness has recently been studied in relational contexts different from the family, such as peer relationships (Meins et al., 2006; Pequet & Warnell, 2020), early child-care centres (Colonnesi et al., 2017; Ornaghi et al., 2020), and primary schools (Florio, Cornaggia, Caso, & Castelli, *in prep.*). These studies evidence the important role of mind-mindedness in the assessment of an adult's sensitivity and allow the possibility to use this construct to analyse mentalization and affective relationships in educational and school contexts, with adults different from the parental caregivers.

In the theory of the developmental systems, Pianta (1999) highlights the important role of teachers as attachment figures. The author shows that the teacher-child relationship has a direct impact on a child's emotional development, behaviours, school well-being, and academic skills (Pianta et al., 2003; Pianta, 2019), and has a regulatory function of a child's social development (Pianta et al., 1995). Although much research has focused on the quality of children's relationships with educators and teachers in the early years of life, Ansari and Pianta (2018) have recently demonstrated that children benefit until adolescence from the positive relationship with their teacher that has been built since infancy, provided that they experience high-quality care during primary school. In this context, Pianta and Stuhlman (2004) indicate the teacher's perception of conflict and of the closeness in the relationship with the child as the core aspects of this relationship, which in turn impact children's prosocial behaviour and their academic adjustment. In line with these results, Valle and colleagues (2019) evidenced the links among mentalization, attach-

ment representation, and emotion regulation abilities in primary school children, suggesting that the characteristics of the teacher-child relationship contribute to creating a relational classroom climate where children can mentalize in a secure environment (Fonagy et al., 2016).

Aims and Hypotheses

This study aims to explore the possible impact of the teacher's mind-mindedness, mentalized affectivity and the pupil's representation of the educational attachment relationship on the mentalization abilities of children aged 8 to 10.

We hypothesise that a teacher's tendency to describe a pupil as endowed with mental states, her/his level of mentalized affectivity, and the pupils' secure attachment representation may contribute to improving the child's mentalization abilities.

In this research, we decided to analyze the link between teacher's mentalization and pupils' representation of attachment in middle childhood, an age named by Mah and Ford-Jones (2012) "the forgotten years," because of the limited attention devoted to it so far. At this age, children have Internal Working Models for the teachers already stable, because their experience in the school context. Then, we think that to study this age offers the opportunity to better understand the role of mentalization and attachment, from a representational point of view, in one of the main extra-familial relationship.

Materials and methods

Participants

A total of 47 children (in their 3rd to 5th year of primary school, corresponding to the same grades in the British and American school systems) and their 16 female teachers were recruited in the area of Bergamo, northern Italy. The children's mean age was 9 years and 4 months, or 113.94 months (S.D.=7.77 months; Min=99 months; Max=126 months; Females=21). The teachers' mean age was 50.50 years (S.D.=8.53 years; Min=29 years; Max=63 years). The inclusion criterium was that teacher knew the pupils since at least two-year: all teachers that decided to participate in this research were in the respective classrooms since first grade.

Procedures

The research project was presented to the school's Director and, upon her/his approval, to teachers and parents.

Informed written consent for participation in the research was collected from teachers and parents. All participants were treated in accordance with the ethical guidelines for research provided by the Declaration of Helsinki (World Medical Association, 2014), the American Psychological Association (APA, 2020) and the Italian Psychological Association (AIP, 2013). The study was approved by the local ethical committee of the Department of Psychology of the Catholic University of the Sacred Heart of Milan, based on APA ethical standards.

Teachers filled in an online survey launched on the Qualtrics platform, lasting approximately 30 minutes, comprising items measuring the mind-mindedness of the participating students and the mentalized affectivity [MAS]

Children were tested at school, in one collective session for the mentalistic control measure (the Reading the Mind in the Eyes test [RME] and the Yoni task) and the linguistic control measure (the Primary Mental Ability [PMA]) tasks (approx. 30 minutes) and in one individual section for the attachment test, the Separation Anxiety test (SAT; approx. 10 minutes) and eventually for the inhibitory control the Fruit Stroop (Stroop; approx. 20 minutes).

Tasks for the teachers

Mind-mindedness

The researchers randomly extracted two to four pupils' names out of each teacher's class list: the teacher performed the mind-mindedness task for these pupils only.

Teachers had to freely describe each selected pupil. Each description was analysed using the coding system devised by Meins and Fernyhough (2015), which categorises all the comments in the following categories: physical (MM_P, describing the child's physical characteristics); behavioural (MM_B, indicating the child's ways of behaving); mental (MM_M, describing the child's mental and personality characteristics); self-referential (MM_S, describing the child's personal experience in relation to that of the teacher); relational (MM_R, describing the child in her/his interactions with other subjects); general (MM_G, attributes that do not fall into the previous categories). A score was obtained by calculating the number of attributes in each category. A total score (MM_TOT) was also computed. To control for teachers' verbosity, we calculated the percentage of comments for each category out of the total number of comments produced. Two independent coders coded the min-

d-mindedness task, and the inter-rater reliability was calculated (K MM_P=1; K MM_B=.68; K MM_M=.74; K MM_S=1; K MM_R=1; K MM_G=.64).

MAS – Italian version

The Italian version of the MAS (Greenberg et al., 2017), devised by Rinaldi et al. (2021), is composed of 35 items; for each of them, the subject has to indicate her/his degree of agreement on a 7-point Likert scale. The Italian version of the MAS consists of 5 factors: Identifying Emotions (MAS_IE), a self-evaluation of one's ability to be aware of one's own emotions (score 10-70); Expressing Emotions (MAS_EE), assessing the tendency to express and communicate emotions with others (score 8-56); Curiosity about Emotions (MAS_CE), assessing people's tendency and interest in recognizing and label their emotions (score 7-49); Processing Emotions (MAS_PE), evaluating people's capacity to cognitively control their emotions using cognition (score 7-49); Autobiographical Memory (MAS_AM), assessing people's tendency to remember personal childhood emotional experiences (score 3-21).

Tasks for the children

SAT - School Version

The SAT (Fonagy, Redfern, & Charman, 1997) is an assessment of the internal working models of child-parents relationships. The Italian SAT-School Version (Liverta Sempio et al., 2001) concerns the representation of the pupil-teacher attachment relationship. It is a semi-projective test composed of six items, each of which presents a story describing a separation between a teacher and a child. Each item requires participants to answer three questions. The first is about the protagonist's emotion, the second is about the justification of the origin of this emotion, and the third is the anticipation of the protagonist's coping strategies. The coder places each item in different categories (from 1 to 21) and computes scores on three scales: Attachment, Self-Reliance, and Avoidance. The final total score is a combination of these three scores (range 6-36); higher scores correspond to a more secure internal working model. Two independent coders encoded the SAT-SV, and inter-rater reliability was determined to be 20% (Cronbach's alpha=.93).

RME test

The RMET (Baron-Cohen et al., 1997), in its Italian version for children (Castelli, 2010), assesses the affective theory of mind (ToM): the ability to attribute mental states to individuals by observing only their

eyes. The RMET is composed of 28 pictures of the eye region from various human faces; subjects have to choose what the depicted character is feeling or thinking from among four mental states written underneath each picture. The scoring system assigns 1 point to each correct answer and 0 points to each incorrect answer, for a total score ranging from 0 to 28 (cut-off = 9/28).

Yoni task

The Yoni task (Rossetto et al., 2018; Shamay-Tsoory & Aharon-Perez, 2007) assesses the cognitive and affective theory of mind (ToM). It consists of 98 trials, in each of which the image of Yoni's face is shown in the centre of the screen, surrounded by four images at the four corners of the screen. The images refer to various semantic categories of faces; the participants have to indicate which one Yoni's face is referring to, based on a sentence that appears at the top of the screen and some available cues, such as Yoni's eye gaze or facial expression, or the eye gaze/facial expression of the other faces around him. Each trial differs by the level and the type of reasoning that the subject has to apply to obtain the correct answer: first- or second-order ToM levels, affective ToM, cognitive ToM, or a physical (control) condition. As regards the first-order ToM, for the cognitive condition, participants were asked to indicate which prompt the main character named Yoni was thinking about, out of a group of four choices. For the affective condition, subjects had to indicate which image Yoni loves/does not love, again out of four choices. Regarding the second-order ToM, participants had to understand the interaction between Yoni's mental state and those of other characters in the four choices around him (e.g. 'Yoni is thinking of the chair that X wants' or 'Yoni loves the animal that X loves'). Only one of the four alternatives is correct.

The participants' performance is rated in terms of accuracy (1 point for each correct answer). The total score (YONI_TOT) ranged from 0 to 98; as regards the subscales, the total affective items score ranged from 0 to 48 (YONI_A), and the total cognitive items score ranged from 0 to 36 (YONI_C). No participants exhibited an accuracy rate lower than 50% on the physical (control) condition, so no participants were excluded.

Control measures

PMA

Verbal ability was assessed through the vocabulary subtest of the PMA test (Thurstone & Thurstone, 1962; Italian version: Rubini & Rossi, 1982). Children had to choose the correct synonym among four

words. The task has 30 items, and the score is calculated by assigning one point for each correct answer; the total score is the number of correct answers (range: 0-30).

Fruit Stroop task

Inhibitory control was tested by the Fruit Stroop task (Archibald & Kerns, 1999). This task comprises four pages of stimuli, each constituting three fruits and one vegetable in rows consisting of five items arranged in a pseudo-random order. The familiarisation phase is three pages long: the researcher presents a stimuli page with fruit and vegetables displayed in incongruent colours (e.g. a red salad) and the child is asked to name the real colours of the fruit and vegetables (e.g. green for a salad). Children were instructed to do this as quickly as possible, with a 45-second time limit. Scores is calculated by counting the number of items completed within the time limit for each stimuli page.

Results

The descriptive statistics of the measures collected on teachers and children are reported in Tables 1-3. The variables related to language, to the Yoni test (mentalization), and to some mind-mindedness scales do not have a normal distribution, so non-parametric analyses were conducted.

Tab. 1 - *Descriptive of children's variables*

		Min	Max	Mean	S.D.
Attachment	SAT	18	35	28.66	3.87
Mentalization	YONI_C	10	35	28.51	5.55
	YONI_A	16	47	39.60	6.52
	YONI_TOT	26	80	68.11	11.78
	RMET	9	25	17.55	3.81
Inhibition	Stroop	0	54	34.23	9.69
Language	PMA	8	30	27.07	3.61

Tab. 2 - *Descriptive of the teachers' mentalized affectivity*

	Min	Max	Mean	S.D.
MAS_IE	40	64	55.75	6.07
MAS_EE	12	43	27.31	7.84
MAS_CE	29	48	39.56	5.75
MAS_PE	24	43	33.56	5.70
MAS_AM	9	19	15.75	3.11

Tab. 3 - *Descriptive of teachers' mind-mindedness*

	Min	Max	Mean	S.D.
MM_M	0	9	2.60	1.57
MM_B	1	14	6.17	3.33
MM_P	0	4	0.38	0.85
MM_G	0	4	1	1.14
MM_S	0	2	0.15	0.47
MM_R	0	2	0.04	0.29

We computed non-parametric correlations to determine the possible links between (1) mentalization, mind-mindedness and attachment and (2) inhibition, language, and age. Only significant correlations were reported in Table 4.

Tab. 4 - *Correlation among language and (1) attachment and (2) mentalization*

		Attachment		Mentalization		
		SAT	YONI_A	YONI_C	YONI_TOT	RMET
Language	PMA	rho=.37 p<.05	rho=.48; p=.001	rho=.31; p<.05	rho=.42; p<.005	rho=.47; p=.001

Moreover, age is negatively correlated with the mind-mindedness physical scale (rho=-.30; p<.05).

We obtained the partial correlations between (1) attachment, mind-mindedness, and mentalized affectivity and (2) children mentalization, controlling for language and age. The significant partial correlations are shown in Table 5.

Tab. 5 - *Partial correlations between (1) attachment, mind-mindedness and mentalized affectivity and (2) mentalization, controlled for language and age*

		Mentalization		
		YONI_A	YONI_C	YONI_TOT
Mind-Mindedness	MM_P	r=-.48; p=.001	r=-.57; p=.00	r=-.52; p=.00
Mentalized affectivity	MAS_AM	r=.37; p<.05	r=.32; p=.05	r=.36; p<.05

Based on the results of the correlation analysis above, we performed linear regression with the mind-mindedness physical scale (MM_P), autobiographical memory of the mentalised affectivity, language, and age as independent variables (MAS5) and mentalization as the dependent variable. Of all the models, only the one for the mind-mindedness physical scale (Table 6) is significant.

Tab. 6 - *Linear regression with mind-mindedness physical scale as IV and mentalization as DV*

		β; F (p)	R2	R2Adj
Mentalization	YONI_A	-.444; 4.86 (<.005)	.316	.251
	YONI_C	-.489; 5.48 (=0.001)	.343	.281
	YONI_TOT	-.934; 5.43 (=0.001)	.341	.278

In light of the negative correlation between children's age and the mind-mindedness physical scale, and of the significant linear regression models involving the latter variable, we decided to explore the differences in the performances of younger vs. older children. Therefore, we divided the total sample into two groups based on mean age: Group 1 was composed of children aged 8 (N=25; M age in months=107.88,

S.D.=5.04; Min=99; Max=114, Females=12), and Group 2 consisted of children aged 10 (N=22; M age in months=120.82, S.D.=3.58; Min=115; Max=126, Females=9).

The Mann-Whitney test applied to the inhibition, language, mentalization, and mind-mindedness variables evidenced significant differences in (1) the Yoni_Cognitive mentalization scale ($Z=-2.10$; $p<.05$), with the performance of Group 1 (mean rank=20.10) being lower than that of Group 2 (mean rank= 28.43); (2) the Yoni_Affective mentalization scale ($Z=-2.10$; $p<.05$), with the performance of Group 1 (mean rank=20.08) being lower than that of Group 2 (mean rank= 28.45); (3) the Yoni_total mentalization scale ($Z=-2.30$; $p<.05$), with the performance of Group 1 (mean rank=19.70) being lower than that of Group 2 (mean rank= 28.89); and (4) the mind-mindedness physical scale ($Z=-1.98$; $p<.05$), with the performance of the teachers in Group 1 (mean rank=26.66) being higher than that of the teachers in Group 2 (mean rank= 20.98).

To determine the possible link between (1) inhibition and language and (2) children's performances, for each group, we computed the non-parametric correlations between (1) inhibition and language tasks and (2) attachment and mentalization tasks. No significant correlations are found for Group 1. The significant correlations in Group 2 are shown in Table 7.

Tab. 7 - Correlations among (1) language task and (2) attachment and mentalization tasks for the Group 2

		Attachment		Mentalization		
		SAT	YONI_C	YONI_A	YONI_TOT	RMET
Language	PMA	rho=.47 p<.05	rho=.53 p<.05	rho=.50 p<.05	rho=.60 p<.005	rho=.50 p<.05

Then, controlling for language in the case of the Group 2, we computed the correlations between (1) attachment, mentalized affectivity, and mind-mindedness and (2) mentalization, to explore the links between these variables in each group. The significant results found are shown in Table 8.

Tab. 8 - Correlations between (1) mentalization and (2) attachment, mentalized affectivity and mind-mindedness (*=significant correlations)

			Mind-min- dedness	Mentalized affectivity	
			MM_P	MAS_EE	MAS_CE
Mentaliza- tion	Group 1	YONI_C	*rho= -.54, p=.005	rho= -.19, p=.37	*rho= -.45, p<.05
		YONI_A	*rho= -.58, p<.005	rho= -.20, p=.34	rho= -.28, p=.17
		YONI_TOT	*rho= -.56, p<.005	rho= -.21, p=.32	rho= -.37, p=.07
		RMET	rho= .06, p=.68	*rho= -.48, p<.05	rho= .22, p=.28
	Group 2	YONI_C	rho= .28, p=.24	rho= .21, p=.36	*rho= .47, p<.05
		YONI_A	rho= .42, p=.06	rho= .40, p=.07	*rho= .63, p<.005
		YONI_TOT	rho= .41, p=.07	rho= .36, p=.11	*rho= .64, p<.05
		RMET	rho= .01, p=.96	rho= -.05, p=.81	rho= .31, p=.17

Based on these results, we conducted linear regressions for each group. For the Group 1, we used (1) mind-mindedness and mentalized affectivity as independent variables and (2) mentalization tasks as dependent variables. All the models for the mind-mindedness physical scale were significant (Table 9)

Tab. 9 - *Linear regressions with mind-mindedness physical scale as IV and mentalization as DV for the Group 1*

		β ; F (p)	R2	R2Adj
Mentalization	YONI_A	-.589; 9.30 (<.01)	.288	.257
	YONI_C	-.432; 6.99 (<.01)	.389	.333
	YONI_TOT	-1.122; 10.61 (<.01)	.316	.286

For the Group 2, we used (1) mentalized affectivity and language as independent variables and (2) mentalization tasks as dependent variables. All the models were significant for the mentalized affectivity (Table 10)

Tab. 10 - *Linear regressions with mentalized affectivity – curiosity about emotions as IV and mentalization as DV for the Group 2*

		β ; F (p)	R2	R2Adj
Mentalization	YONI_A	.378; 7.68 (<.005)	.447	.389
	YONI_C	.22; 3.55 (<.05)	.272	.196
	YONI_TOT	.593; 8.451 (<.005)	.471	.415

Discussion

This study aimed to expand our knowledge of the teacher-child relationship, focusing on the psychological constructs of mentalization and attachment. Our hypothesis was that the mentalization of children aged 8 to 10 could be influenced by the teachers' mind-mindedness ability and mentalized affectivity, and by the children's attachment representation of the educational relationship. For the total sample, our results show that the larger the number of physical comments the teacher makes about the pupils in terms of mind-mindedness, the lower children's performance is on the Yoni task, both in terms of the total score and scores on the cognitive and affective scales. Physical comments refer to a teacher describing her pupils in terms of physical characteristics that are objectively observable by the children themselves. We can assume that a teacher thinking about her pupils in a physical way may direct their attention on external and concrete aspects of the world rather than on internal ones, so that

children anchor themselves and their reasoning about the social world to external aspects of people rather than to those evaluated by the Yoni task (i.e. mental states inferred from eye-gaze detection).

Our results also evidenced a link between the Autobiographical Memory component of the mentalised affectivity and the Yoni mentalization task: the greater the teachers' ability to use their autobiographical memory in the emotional analysis of their experience, the greater the children's mentalization abilities. Fivush (2003) defines autobiographical memory as a skill that develops from childhood onwards and consists of talking about one's past in an organised and coherent way, building a framework for evaluating events themselves, and promoting self-understanding, self-regulation, and self-management in relation to others. The construction of self-narratives takes place within meaningful relationships, where a competent adult guides the recovery of memories, their organisation, and the attribution of a meaning to them, also from an affective point of view (Oppenheim, 2006). This may suggest that a teacher with a high tendency to reflect on her/his own experiences brings this competence back into her/his relationship with the pupils through, for example, emotional matching dialogues (Valle et al., 2019a). This may build an environment where it is possible for all the children to recover their emotional experiences and to construct new meanings together. This result is in line with the proposal of Valle and colleagues (2019b), which refers to the school context the Fonagy and Campbell (2017) hypothesis that the adult mentalization represents an important cue for the child about the possibility of mentalizing in a specific relational context. Moreover, the teacher's proclivity to reflect on her/his own experiences may be a relevant factor in preventing possible challenging situations at school. Ansari and colleagues (2020) have recently demonstrated that a teacher's emotional exhaustion impacts the quality of the class interactions in a preschool context, so we may consider a teacher's ability to mentalize about her/his personal and professional experience as a possible protective factor, both for the quality of their relationships with her/his pupils and for their professional well-being.

Considering the two group of age, the results partially confirm those of the total sample. In the younger group of children, when the Yoni task performances are lower than those of the older children, teachers tend to use more physical comments; this result disappears in children' older group, where the Yoni performances are higher and the teachers tend to use fewer physical comments. Furthermore, in the 8-years-old group, the teachers' tendency to use physical comments negatively predicts children's mentalization abilities, whereas in the 10-years-old pupils' group

there is no such link. We think that the observed differences in the two age groups may depend on two factors: teachers' individual characteristics or children increased age.

With respect to the first factor, in the Italian context, most of primary school teachers mainly teach one class, spending most of their work time with the same students. Thus, the tendency of some teachers to provide physical comments may be a subjective factor, which could deserve further attention in future research. There is already a relevant body of literature that has investigated the possible factors that may shape teacher-student interactions, such as the teachers' own personal skills in emotion regulation, self-awareness, stress management, and emotional exhaustion (Abenavoli et al., 2013; Ansari et al., 2020; Jennings, 2015; Kemeny et al., 2012; Pianta, 2016; Roeser et al., 2012). Other teachers' personal characteristics, such as the degree of mind-mindedness and mentalising skills, may be new candidate factors to better understand the dynamics of teachers' relational abilities over time. Regarding the second factor, children's increased age, several possible explanations can be suggested. First, this phenomenon may occur because the teacher knows her/his pupils better at the end of the five-year school cycle, so she/he may tend to focus her/his attention on other aspects that characterise them. Second, a fifth-grade teacher is preparing her/his students for the transition to secondary school, so she/he pays particular attention to didactic preparation and to the cognitive skills they need to acquire so as to achieve good academic results. It is possible that the teacher, when describing the children, focuses less on the physical aspect and considers other characteristics as more important. Moreover, the children's performances on the Yoni task increase with age, highlighting the sensitivity of this mentalization task in discriminating differences between children aged 8 to 10, as in the development of the theory of mind in middle childhood (see, e.g. Bianco et al., 2019). Consequently, it is possible that in the older group, the impact of the teacher's tendency to physically describing pupils, due to the tendency of older children's teachers to use fewer physical comments than those of younger ones, encourages children to focus their minds on other aspects of the social world. Alternatively, it is possible that the increase in pupils' mentalising abilities allows them to better understand the social world, independently from their teacher's comments.

A further difference that emerges between the two age groups concerns the relationship between the teacher's mentalized affectivity and the children's mentalization. If in the group of little pupils, the correlational pattern seems ill-defined (we found only one negative correlation between the teacher's ability to recognize and label her emotions and the

pupils' cognitive mentalization), in the group of 10-year-olds we found positive correlations between this mentalized affectivity component and mentalization abilities in children (abilities that are higher respect to the other group). Moreover, linear regression shown that, in this group of age, the more the teacher is interest in her emotions, the higher the children mentalization score. Curiosity about emotions is a component of the mentalized affectivity referring to the interest and the ability to recognize and to name emotions and to be aware of their meaning in the situations in which they occur or, later on, when rethinking about past experiences. The complexity of this factor, referred to the recognition and the awareness of emotions both in the present and in the past, well exemplifies the fact that mentalised affectivity is considered a construct that develops in adulthood, thanks to high cognitive and emotional-affective skills and experiences. It is possible that the impact of the teacher's emotions emerges at the end of the primary school because pupils reach a level of development that allows them to grasp and use the teacher's tendency and ability to improve their own mentalization skills (Apperly et al., 2010). Moreover, it is possible that the teacher has to apply this capacity for a long time in the relationship with her pupils to train them in the mentalization, then the positive impact of her mentalized affectivity emerges after a long period of time, in which the relationship has also been fostered by its mentalized affectivity.

Finally, our results show that the children's attachment representation of their relationship with their teachers is not involved in the pupils' mentalization abilities; only teachers' mentalization abilities correlate with and impact those of the children, highlighting the asymmetry in the teacher-child relationship. In fact, the teacher guides the relationship and she/he can support the construction of a mentalising community, the classroom, in which pupils can mentalise about their minds and, consequently, can recognise their selves and improve their own abilities (Valle et al., 2016). Thus, in schools, educational interventions aimed at supporting the teachers' mentalising ability should be improved because of the positive effects they can have in building a mentalising environment.

There already exists interesting evidence for the positive effects of interventions on student-teacher interactions, such as the evidence found by the research group by Robert Pianta (Hamre et al., 2012) with the coaching program 'My Teaching Partner' across different school grades. This program, based on the observation of the teacher-student interactions used to train teachers in relational competences, evidences that the increase in the relational quality between teacher and child is related to educational achievements, efforts, and motivation in all school grades (Allen et al., 2019; Ansari & Pianta, 2018; Hatfield et al., 2016). This in-

dicates the relevance of teachers' characteristics and relational competences in the children's well-being. In the future, it could be interesting to include some interventions on mentalising in this program, to further improve the quality of teacher-student interactions, which is known to be a key element of students' achievement and motivation, independent of the subject being taught.

Starting from the mentalization literature, according to which mentalization abilities develops in the attachment relationships thank to the adult support (Fonagy et al, 2002), we discuss the results mainly in the hypothesis that the teacher's mentalization abilities impacts on pupils' mentalization development; data seem to confirm this hypothesis, showing that children' internal working models do not correlate with the teacher's characteristics. Nevertheless, the teacher-child relationship at this age is complex and consists of the characteristics of both partners. Primary school children develop increasingly refined mentalistic abilities: it cannot be excluded, therefore, that they influence the teacher's representation of each pupil, as well as the change in that representation over time. We think that future studies focused on the middle childhood will clarify this point, individuating all the aspects involved in this attachment relationship and the reciprocal influences.

We are aware that the results above do not yet allow a generalisation, given the main limitation of this study, i.e. the number of teachers, which is small compared to the number of children; in fact, in the mind-mindedness task, one teacher described several children. In the future, it will be interesting to examine the one-to-one relationship between a teacher and a child, to better control the role of the teachers' individual differences in mentalization and their impact on each child. In particular, the present study does not allow us to disentangle the link between the teacher's mind-mindedness and the children's age, as it is a cross-sectional study with a single teacher for each class, so it is not possible to state if this link is due to the teacher's personal characteristics or the children's increased age. To overcome this obstacle, it would be useful to study the aforementioned link through longitudinal research in the future. Moreover, future research could analyse attachment and mentalization concurrently in teacher-child and parent-child relationships, to compare the role of these two types of caregivers in the development of children's mentalization.

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**Rappresentazioni e atteggiamenti degli insegnanti verso le diagnosi di DSA:
costruzione e validazione preliminare di un questionario**

**Teachers' representations and attitudes towards SLD diagnoses:
Construction and preliminary validation of a questionnaire**

Eleonora Florio*, Letizia Caso°, Ilaria Castelli*

* Dipartimento di Scienze Umane e Sociali,
Università degli Studi di Bergamo.
Piazzale S. Agostino 2, 24129 Bergamo, Italia.
e-mail: eleonora.florio@unibg.it;
e-mail: ilaria.castelli@unibg.it
° Dipartimento di Scienze Umane,
Libera Università Maria SS. Assunta
Piazza delle Vaschette, 101, 00193 Roma, Italia.
e-mail: l.caso@lumsa.it;

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Riassunto

Questo lavoro presenta un questionario sviluppato per raccogliere ed esplorare le rappresentazioni e gli atteggiamenti degli insegnanti rispetto al recente e considerevole aumento di diagnosi di Disturbi Specifici dell'Apprendimento (DSA) nelle scuole italiane. Il questionario Rappresentazione e Atteggiamenti rispetto ai DSA (RADSA) è stato elaborato sulla base della letteratura di riferimento e di 11 focus group con 92 insegnanti italiani di scuola primaria (96.7% femmine, età $M = 47.2$ anni, $DS = 8.8$). I trascritti dei focus group sono stati analizzati con il software T-LAB (Lancia 2012, 2018) e i contenuti sono stati convertiti in item per il questionario. Successivamente, è stata condotta un'analisi fattoriale esplorativa (con rotazione Direct Oblimin) sulle risposte di 111 insegnanti italiani di scuola primaria, per la maggior parte femmine (94.6%), che hanno partecipato alla seconda fase dello studio. Il range di età di questo secondo campione era compreso tra i 25 e i 63 anni ($M = 46.1$, $DS = 9.34$), con una media di 20.18 anni di insegnamento ($DS = 11.49$).

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Il questionario RADSA, grazie ai suoi 62 item, divisi in 12 sottoscale, è risultato capace di riflettere la complessità dell'argomento e rappresenta uno strumento di valutazione mirato ad esplorare gli atteggiamenti di insegnanti ed educatori verso la diagnosi di DSA, specialmente quelli che possono minare la qualità della relazione alunno-insegnante. Siccome il RADSA è in grado di identificare le principali rappresentazioni personali riguardanti gli alunni con DSA, si possono progettare interventi mirati per uno specifico contesto educativo, basandoli sui risultati ottenuti dalla sua somministrazione.

Parole Chiave: Disturbi Specifici dell'Apprendimento, incremento diagnosi, insegnanti, atteggiamento, medicalizzazione, questionario RADSA

Abstract

This work presents a questionnaire developed to gather and explore teachers' attitudes and representations in respect to the recent considerable increase of Specific Learning Disability (SLD) diagnoses in Italian schools. The RADSA questionnaire (acronym including the Italian equivalent of SLD: "DSA") has been constructed on the basis of the reference literature and of 11 focus groups with 92 Italian primary school teachers (96.7% females, age $M = 47.2$ years, $SD = 8.8$). Transcripts of focus groups have been analyzed with T-Lab software (Lancia 2012, 2018) and contents have been converted in questionnaire items. Subsequently, Exploratory Factor Analysis (EFA – Direct Oblimin rotation) was conducted on the responses of 111 Italian primary school teachers, mostly females (94.6%), who participated in the second phase of the study. The age range of this second sample was from 25 to 63 years ($M = 46.1$, $SD = 9.34$), with a mean length service of 20.18 ($SD = 11.49$).

RADSA questionnaire, thanks to its 62 items loading on 12 subscales, resulted capable of reflecting the complexity of the topic. It represents an assessment tool aimed at exploring teachers' and educators' attitudes towards SLD diagnosis, especially those representations that can undermine the quality of teacher-student relationship. Since RADSA can identify the main attitudes concerning pupils with an SLD diagnosis, intervention targeted on a specific educational context can be designed on the basis of the results obtained from its administration.

Keywords: Specific Learning Disabilities, diagnoses increase, teachers, attitude, medicalization, RADSA questionnaire

Introduction

In recent years, it has been observed a considerable increase of Specific Learning Disabilities (SLD) in the Italian school system: in school year 2010/2011, the incidence of SLD diagnoses was estimated equal to .9% and reached the 2.9% in 2016/2017 (MIUR, 2011, 2018). It has been hypothesized that such increase may be due to a greater cognizance of SLD (MIUR, 2011, p. 3), but most of all it would be due to the approval of Law 170/10 “New rules on specific learning disorders in schools”. This law promoted awareness and an assumption of responsibility by schools and teachers (MIUR, 2018). Nonetheless, it has been argued that the recent epidemic of SLD pertaining to Italian schools may also include false positives, meant as those cases that fall within SLD test parameters, but for which learning difficulties (e.g., reading difficulties) are not attributable to the actual neurobiological disorder (e.g., Dyslexia), but to other environmental factors (Zappella, 2017). Besides, problematic aspects of diagnosis process, in particular in respect of Dyslexia, have been highlighted in terms of the difficulty in individuating commonly accepted criteria that can help to distinguish the condition of Dyslexia from the condition of being simple “poor readers” (Elliott and Grigorenko, 2014; Pumfrey and Reason, 2013; Ramus, 2014). Hugo Kerr (2001) encountered confusion and uncertainty about Dyslexia definition, its causes and its very existence in results of a preliminary study involving ABE (Adult Basic Education) teachers as respondents. There are also other issues concerning the increase of SLD diagnoses and Special Educational Needs (SEN) labelling that have been problematized in the literature. First of all, the very linguistic act of naming a situation with specialized terms such as SLD or SEN introduced in school a pathographic perspective (Annaloro, 2015). The risk would be the replacement of the educational action with a diagnostic, clinical and therapeutic attitude, thus leading to a medicalizing tendency belonging also to the wider social context (Goussot, 2015). Beyond that, the exponential increase of diagnoses itself would reflect the fact that SLDs represent a real emergency in the context of developmental psychology (Gandolfi, 2018). The same situation seems to be present in the USA, where pupils with an SLD diagnosis would represent “the most common category of children identified and served by the public schools” (Pullen et al., 2017, p. 286). The possible problems of socialization with the peer group due to the presence of the diagnosis (Lampugnani, 2017), the attitude and role of parents towards the diagnosis (Griffiths et al., 2004; Mehta, 2011; Riddick, 1995)

and the risk of teacher's "learned helplessness" (Gwernan-Jones and Burden, 2010; Kerr, 2001) are other elements that should deserve attention in dealing with the topic of SLD diagnoses increase.

Given the variety of these issues, it results of great interest to explore teachers' perspective – in terms of attitudes and representations – on these matters. In fact, it is worth wondering if the recent considerable increase of SLD diagnoses, and the great variety of considerations that accompanied it, left teachers and educators perplexed or uncertain in taking a clear stance in the face of this phenomenon. Since teacher's attitudes towards Dyslexia – and SLDs in general – is central (Kerr, 2001; Lampugnani, 2017) and the relationship between pupil and teacher is a key element to support the process of teaching and learning (Author, 2019; Pianta, 1999), it seems useful to explore what kind of personal representation can influence teachers' educational attitude when dealing with a pupil having an SLD diagnosis. Several authors have already claimed the need to approach the problem taking into consideration also the social and emotional aspects of the SLD diagnosis with an interdisciplinary approach (Gibbs and Elliott, 2008; Gibson and Kendall, 2010; Lampugnani, 2017; Pumfrey and Reason, 2013; Riddick, 1995). Moreover, low academic performance, learning problems, distraction or disruptive behavior have been associated to difficulties in the educational relationship (Baker 2006; Brendgen et al., 2006, 2007; Longobardi et al., 2009; Nesbit and Philpott, 2002), but only few studies focused both on SLDs and on such relationship in early schooling years (Pasta et al., 2013). This fact is surprising if considered that a successful inclusion of pupils with an SLD diagnosis depends mostly on the teacher, therefore, more attention should be drawn to the impact of teachers' attitudes concerning pupils with SLD (Woodcock & Vialle, 2016). RADSA questionnaire was developed to help filling this gap, since it represents an attempt to account for the complexity of representations and attitudes of primary school teachers in respect to SLDs.

Methodology

The creation of RADSA questionnaire was structured in two phases: focus groups and pilot study. In the first phase of focus groups, teachers were asked to discuss together on the basis of four textual stimuli. The situations and information described in the textual stimuli have been elaborated from the main issues discussed in the introduction and outlined in the following list:

- Increase of SLD diagnoses (Gibbs and Elliott, 2008; Lampugnani, 2017; MIUR, 2011, 2015, 2018; Zappella, 2017);

- Problems with Peer group as a consequence of the SLD diagnosis (Lampugnani, 2017);
- Parents' attitude towards SLD diagnosis (Burden and Burdett, 2005; Griffiths et al., 2004; Riddick, 1995);
- Teacher's "learned helplessness" as a consequence of the SLD diagnosis (Gwernan-Jones and Burden, 2010; Kerr, 2001).

About 30 minutes have been dedicated to each topic, for a total duration of two hours for each session. Focus groups have been transcribed and then analyzed with the T-LAB software for thematic analysis (Lancia, 2012, 2018), which allows significantly recurring topics to emerge from the text through an inductive approach.

In the second phase of pilot study, each main topic proposed to focus groups participants has been treated as a separate section and associated with items developed on the basis of the themes emerged in T-LAB outputs and following item constructions rules (Chiorri, 2011). The questionnaire finally proposed to the validation sample was composed by 120 items, with a 4-point Likert scale response set based on agreement (1 = "Fully disagree"; 2 = "Slightly agree"; 3 = "Agree"; 4 = "Fully agree") and it requested approximately 30 minutes for its completion. The procedure of elaborating a questionnaire on the basis of the contents emerged in focus groups was inspired by the work of Simona Caravita and Sarah Miragoli (2007).

Participants

During first phase, 11 focus groups have been conducted with a total of 92 Italian primary school teachers and a mean of eight participants for each group. Focus groups have been moderated by a psychologist; one focus group took place at the University, whereas the remaining 10 group sessions have been hosted by teachers' primary schools. Participating teachers were mostly females (96.7%), whereas male teachers represented only the 3.3%. "Curricular teachers" (i.e., regular teacher of a certain subject) represented the 81.5% of focus groups participants, the 16.3% was the proportion of teaching assistants and the remaining 2.2% were project representatives. Age range was from 25 to 62 years ($M = 47.2$, $SD = 8.8$), the mean of teaching hours per week was 21.6 ($SD = 5.97$), while the length of service resulted in a mean of 22.1 years ($SD = 11.1$).

In second phase, RADSA questionnaire was administered through an online survey platform to 111 Italian primary school teachers. The age range of this validation sample was from 25 to 63 years ($M = 46.1$, $SD = 9.3$), the length of service calculated in years resulted in a mean of 20.18

($SD = 11.49$), and the mean of teaching hours per week was 21.33 ($SD = 3.38$). The validation sample was composed mainly by females (94.6%) and the totality of participants was divided in “curricular teachers” (94.6%) and teaching assistants (19.8%). Fifty-six percent of the sample held an upper secondary school qualification, 4.5% held a “University Diploma” (qualification established by Law 341/90, no longer in force), 6.3% a bachelor’s degree, 24.3% a master’s degree and, finally, 8.1% held a post-master’s qualification.

In both phases, participants have been informed about the objectives and procedures of the research, as well as their rights (including the guarantee of anonymity and the possibility of dropping out from the study at any moment). All participants were treated in accordance with the Declaration of Helsinki (World Medical Association 2008), with the ethical guidelines for research provided by American Psychological Association (APA, 2017), and with those indicated by Italian Psychological Association (AIP, 2015). Participants were asked to express their informed consent in order to participate in focus groups or to proceed in filling out the online questionnaire.

Data analysis

After assessing the adequacy of data, Maximum Likelihood Exploratory Factor Analysis has been performed in order to make a first exploration (Williams et al., 2010) of the four RADSA sections. Since a general correlation among factor is expected in social sciences (Costello and Osborne, 2005), Direct Oblimin rotation (with Kaiser normalization) was preferred. Subsequently, the factors emerged from the analyses have been explored and investigated in their correlations with all the other dimensions and sample descriptives. Differences in groups (formed on the basis of educational qualification, professional role, and gender) have been also investigated performing one-way between-groups ANOVAs. Normality and homogeneity of variance assumptions have been respected: the absence of important violations of normality was assessed considering that values of skewness and kurtosis between -1 and +1 are considered acceptable (Muthén and Kaplan 1985), and also that thresholds of $sk > 2$ and $ku > 7$ have not been exceeded, thing that would indicate a severe violation of normality (Costello and Osborne, 2005; Kim, 2013; West et al., 1995). Cross-loading items have been excluded (Costello and Osborne 2005), as well as items with not satisfying loading ($< .35$), considering the minimum acceptable loading value of .32 (Tabachnick and Fidell, 2013).

Results

The main impression from the first qualitative phase of focus groups was that the overall complexity of the topic was respected enough through this approach of instrument development. The four main topics represented by the textual stimuli have been maintained as sections of RADSA questionnaire because, according to focus groups participants, such areas resulted adequate in treating the topic. Only the fourth area, namely the one pertaining to teacher's "learned helplessness" had a meaning shift thanks to the work with focus groups: in fact, participants tended to associate it with opinions and attitudes concerning the moment in which the teacher refers parents to an SLD specialist, rather than with the concept of "learned helplessness" described in the literature. No further topics emerged from participants' discussions, suggesting a saturation of the discourse on the SLD diagnoses increase phenomenon. For reasons of space, it was not possible to include a summary of T-LAB outputs in this work (cf. Author, 2018).

Results of validation study

In Table 1, explorations of four sections forming RADSA questionnaire are presented in a summary of means, standard deviations, standard errors of the mean, along with results of the assessment of adequacy of data for factor analysis (Bartlett, 1954; Kaiser, 1970, 1974).

As it can be seen, distributions are all positively skewed, indicating that responses tend, more or less slightly, to low score values. For what concerns kurtosis, sections related to peer group and to parents' attitudes toward SLD diagnosis resulted particularly heavy-tailed, meaning that there are more scores in the extremes than what it would be expected in a normal distribution with same mean and standard deviation (Westfall 2014). Data of all sections resulted adequate for factor analysis (cf. Table 1) in the light of the resulting Kaiser-Meyer-Olkin value and of the not significant Bartlett's Test of Sphericity (Bartlett, 1954; Kaiser, 1970, 1974).

Tab. 1 - *Minimum and maximum possible scores, characteristics of distribution of RADSA's sections, and adequacy of data for factor analysis*

Scale	Min score	Max score	M	SD	sk	ku	KMO	Bartlett's test
Diagnoses	39	156	104.8	12.62	.215	-.113	.708	$p = .000$
Peers	25	100	65.84	7.02	.549	1.197	.664	$p = .000$
Parents	28	112	77.64	7.66	.738	1.712	.673	$p = .000$
Teacher	28	112	72.98	6.93	.196	.206	.659	$p = .000$

Note.

Diagnoses: "Increase of SLD diagnoses" section;

Peers: "Peer group" section;

Parents: "Parents' attitudes towards SLD diagnosis" section;

Teacher: "The moment in which the teacher refers parents to an SLD specialist" section.

Subsequently, Maximum Likelihood Exploratory Factor Analysis (with oblique rotation) has been conducted for each RADSA section. Following tables (Tables 2, 4, 6, and 8) present the final factorial structures of the four RADSA sections, resulting from the decision of forcing the extraction of three factors on the basis of Kaiser's criterion and inspection of Scree Plots (Cattell, 1966; Kaiser, 1960). Factor correlation matrix is also provided for each section (Tables 3, 5, 7, and 9).

Table 2 shows the factorial structure of first RADSA section. According to items' meanings and loadings, the three extracted factors have been entitled "Medicalization" (factor 1, 22.77% of variance explained), "System-level causes" (factor 2, 15.8% of variance explained) and "Causes related to how children are raised nowadays" (factor 3, 9.27% of variance explained) for a total variance explained of 47.8%.

Tab. 2 - Summary table of ML EFA (Direct Oblimin rotation) best solution for RADSA section entitled "Increase of SLD diagnoses"

Item (re-numbered)	Pattern Matrix			Structure Matrix		
	F1	F2	F3	F1	F2	F3
12†	.845			.851		
9	.804			.775		
14	.696			.724		
5	.598			.641		
3	.469			.444		
16 (reversed)	-.407			-.405		
18	.394			.428		
8‡		.649			.678	
7		.620			.620	
2		.577			.555	
17		.498			.516	
1		.456			.467	-.363
11		.408			.435	
13		.381			.403	
10§			-.697			-.689
4			-.576			-.653
6			-.561			-.563
15			-.525			-.532

Note.

Rotation converged in 4 iterations.

F1 = Factor 1, "Medicalization";

F2 = Factor 2, "System-level causes";

F3 = Factor 3, "Causes related to how children are raised nowadays".

†Sample item (F1): "Diagnoses increase is not linked to the real neurological disorder: SLD certificate is being misused";

‡Sample item (F2): "Today's parents have less time to dedicate to their children";

§Sample item (F3): "SLD diagnoses increased due to the massive use of technology (smartphones, tablets, etc.) which provides more numerous and frenetic stimuli to today's children".

Tab. 3 - Factors correlation matrix of RADSA first section “Increase of SLD diagnoses”

Factor	1	2	3
1	1	-.006	-.211
2	-.006	1	-.262
3	-.211	-.262	1

High scores on first factor indicate the opinion that the increase in the diffusion of SLD diagnoses may be due to the medicalizing tendency of the learning process by professionals, specialists and society, rather than to an actual increase in the number of SLD cases or to a greater ability in recognizing SLDs as such (sample item: “SLD diagnoses increased because our society is characterized by an increasingly marked medicalization movement”). High scores on second factor, instead, indicate the agreement with the opinion that SLDs are actually more diffused nowadays compared to the past, and that this is ascribable to various causes connected to the level of the society system (e.g., parents’ more chaotic life, too complex work for teachers, etc.). Similarly, high scores on third factor refer to the agreement with the idea that the way in which children are raised in the current culture and society may represent a further cause of SLD diagnoses increase (e.g., massive use of technology, development acceleration, etc.). Table 4 presents item loadings on the three factors emerged in “Peer group” section.

Tab. 4 - Summary table of ML EFA (Direct Oblimin rotation) best solution for RADSAs section entitled "Peer group"

Item (re-numbered)	Pattern Matrix			Structure Matrix		
	F1	F2	F3	F1	F2	F3
1†	.800			.804		
10	.661			.674		
13	.652			.655		
4	.643			.668		
6	.628			.627		
15 (reversed)	.495			.462		
7‡		.674			.655	
2		.520			.508	
5		.449			.450	
8 (reversed)		-.428			-.434	
12		.402			.415	
14		.365			.370	
16 (reversed)§			-.590			-.613
9			.583			.569
17			.556			.547
3			.402		.365	.452
11			.397			.388

Note.

Rotation converged in 6 iterations.

F1 = Factor 1, "Complaints about facilitations";

F2 = Factor 2, "Attention to classroom emotions and to individual needs";

F3 = Factor 3, "Fairness of evaluation".

†Sample item (F1): "The other pupils complain in order to get the same facilitations as a classmate having an SLD";

‡Sample item (F2): "Teachers' attention to the emotional sphere gradually decreases in school grades after Primary school, until it disappears";

§Sample item (F3): "Sometimes one wonders whether if the grade achieved in a facilitated test has the same value of an identical grade achieved in the complete version of the test".

Tab. 5 - *Factors correlation matrix of RADSA second section "Peer group"*

Factor	1	2	3
1	1	.088	.044
2	.088	1	.163
3	.044	.163	1

The first factor has been entitled "Complaints about facilitations" and it explains 19.8% of the variance. High scores on this factor reflect the opinion that usually classmates complain about the facilitations reserved to pupils with an SLD diagnosis (sample item: "Pupils complain about the facilitations available for a classmate with SLD because there is a strong competition for grades").

The second factor, "Attention to classroom emotions and to individual needs", explains the 14.4% of variance. Responses tending to high scores indicate agreement with the idea that carefulness towards emotions and individual needs is necessary to promote an inclusive classroom climate. Low values, instead, refer to the opinion that such attention is not necessary, since inclusion climate occurs spontaneously in classroom daily life. Third Factor has been named "Fairness of evaluation" (11.3% of explained variance), high scores on this subscale reflect the idea that it is fair to differentiate tests and homework between pupils who have an SLD diagnosis and those who do not have it. Low scores regard instead the opinion that it is not fair to differentiate tests and homework. The three factors considered together explained an overall variance of 45.5%.

Table 6 displays item loadings on the three factors (53% of total variance explained) pertaining to the section dedicated to parents' attitudes towards an SLD diagnosis: "Roles and information" (factor 1, 22.3% of variance explained), "Diagnosis as alibi" (factor 2, 17.9% of variance explained) and "Parents' negative reactions to SLD diagnosis" (factor 3, 12.8% of variance explained).

Tab. 6 - Summary table of ML EFA (Direct Oblimin rotation) best solution for RADSAs section entitled "Parents' attitudes towards SLD diagnosis"

Item (re-numbered)	Pattern Matrix			Structure Matrix		
	F1	F2	F3	F1	F2	F3
8†	.858			.804		
1	.593			.612		
4	.480			.489		
7	.370			.391		
6‡		.749			.745	
9		.749			.755	
2		.458			.450	
10		.359			.371	
5§			-.762			-.773
3			-.688			-.676
11			-.485			-.544

Note.

Rotation converged in 7 iterations.

F1 = Factor 1, "Roles and information";

F2 = Factor 2, "Diagnosis as alibi";

F3 = Factor 3, "Parents' negative reactions to SLD diagnosis".

†Sample item (F1): "A change of mentality should occur in society so that parents would not be informed through a 'top-down' process, but in a manner that really helps them to understand SLDs"

‡Sample item (F2): "Parents tend to 'rest on' the SLD diagnosis, desisting from stimulating the child and delegating everything to the school"

§Sample item (F3): "Parents experience SLD diagnosis as something painful"

Tab. 7 - Factors correlation matrix of RADSAs third section "Parents' attitudes towards SLD diagnosis"

Factor	1	2	3
1	1	.047	-.255
2	.047	1	-.096
3	-.255	-.096	1

High scores on the first factor reflect the opinion that more clarity is needed for parents on the role of each professional figure (e.g., teachers, psychologists, etc.) and on the nature of SLDs (sample item: “If family denies the problem when it is present, the child remains very confused and unaware of his/her potential”). In particular, it is felt the need for an informative process that allows the parent to truly understand the nature of SLD condition. Agreement with items loading on second factor (“Diagnosis as alibi”) reflects the opinion that parents tend to connect all problems of their child to the SLD diagnosis, thus using it as a justification for difficulties or situations that may be not connected to it. As a consequence, parents may not accept teacher’s attempts to further stimulate the child on an intellectual level. Third and last factor (“Parents’ negative reactions to SLD diagnosis”) of this section regards parents seen as those who tend to react negatively to the idea that their child could have an SLD.

The last section of RADSA regards the SLD diagnosis itself and the moment in which the teacher decides to share with parents his/her opinion that the child needs an SLD assessment: Table 8 presents the three factors that have been extracted for this section.

Tab. 8 - *Summary table of ML EFA (Direct Oblimin rotation) best solution for RADSA section entitled “The moment in which the teacher refers parents to an SLD specialist”*

Item (re-numbered)	Pattern Matrix			Structure Matrix		
	F1	F2	F3	F1	F2	F3
16†	-.834			-.844		
6	-.531			-.567		
15	-.431			-.412		
4‡		.644			.641	
14		.594			.599	
7		.578			.557	
10		.517			.515	
8 (reversed)		-.375			-.405	
2		.351			.368	

9§	.699	.704
11	.566	.566
13 (reversed)	.534	.554
12 (reversed)	.531	.536
5	.487	.505
4 (reversed)	.471	.443
3 (reversed)	.403	.432

Note.

Rotation converged in 17 iterations.

F1 = Factor 1, “Diagnosis usefulness”;

F2 = Factor 2, “Teacher positioning in respect to other professionals”;

F3 = Factor 3, “Strengths and weaknesses”.

†Sample item (F1): “Many ‘SLDs’ would not exist if teachers could simplify school programs as they used to be in the past, giving value to time, repetitiveness and experiences”

‡Sample item (F2): “Often there is no gratification because parents do not recognize the teacher’s great dedication”

§Sample item (F3): “Those who have an SLD diagnosis have to be also stimulated and strengthened because they can still improve”

Tab. 9 - *Factors correlation matrix of RADSA fourth section “The moment in which the teacher refers parents to an SLD specialist”*

<i>Factor</i>	<i>1</i>	<i>2</i>	<i>3</i>
1	1	-.171	.057
2	-.171	1	.148
3	.057	.148	1

The first factor, “Diagnosis usefulness”, explained the 19.1% of variance and high values on this dimension refer to the opinion that the diagnosis is not particularly useful for teachers in dealing with a pupil with an SLD (sample item: “SLD diagnosis does not add particular suggestions to what the teacher was already doing to help the pupil”). Second factor, “Teacher positioning in respect to other professionals”, explains the 16.1% of the variance and reflects the idea that teacher’s role is penalized (high values) or is central (low values) in respect to the other professionals involved in SLD assessment (e.g., neuropsychiatrists, psychologists, etc.). The third factor, “Strengths and weaknesses” (9.4% of ex-

plained variance) and renders an image of strength and resourcefulness (high values) or of weakness and overwhelm (low values) of the teacher dealing with a pupil with an SLD or suspected to be in this condition. The total variance explained by these three factors was 44.6%.

As reflected by factorial structures, there is a substantial variety of subtopics for each main section. Consequently, the total score of a section appears not informative as much as comparing responses on each factor. For this purpose, Table 10 summarizes the characteristics of response distributions for all subscales separately.

After performing one-way between groups ANOVAs for each subscale, no significant differences were found in scores when comparing groups based on educational qualification, professional role (i.e., curricular teachers and teaching assistants) or gender. Table 11 summarizes correlations between subscales and with continuous sample descriptive measures.

Tab. 10 - *RADSA: Minimum and maximum possible scores, and characteristics of the distribution of each subscale*

	<i>Min score</i>	<i>Max score</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>sk</i>	<i>ku</i>
Section 1: Diagnoses increase							
Medicalization	7	28	16.01	3.25	.33	-.052	-.904
System-level causes	7	28	21.22	3.05	.313	-.272	-.416
How children are raised nowadays	4	16	10.54	2.2	.225	.47	.145
Section 2: Peer group							
Complaints about facilitations	6	24	11.93	3.14	.323	.314	-.247
Attention to emotions and needs	6	24	18.02	2.03	.209	.382	-.181
Fairness of evaluation	5	20	13.25	1.94	.199	.174	1.14
Section 3: Parents							
Roles and information	4	16	13.04	1.57	.162	.170	-.240
Diagnosis as alibi	4	16	9.9	2	.206	.035	.093

Parents' negative reactions to SLD diagnosis	3	12	7.93	1.42	.146	.274	.42
Section 4: Teacher							
Diagnosis usefulness	3	12	7	1.75	.18	.236	.06
Teacher positioning	6	24	16.13	2.25	.232	.063	-.25
Strengths and weaknesses	7	28	23.62	2.67	.27	-.165	-.807

Note.

Diagnoses increase: "Increase of SLD diagnoses" section;

Peers: "Peer group" section;

Parents: "Parents' attitudes towards SLD diagnosis" section;

Teacher: "The moment in which the teacher refers parents to an SLD specialist" section.

Tab. 11 - Summary of Pearson Product-moment correlations between RADSA subscales and sample descriptives

<i>Subscale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>
1. Medicalization	-											
2. System-level causes	.12	-										
3. Causes related to how children are raised nowadays	.26**	.31**	-									
4. Complaints about facilitations	.20	-.04	.31**	-								
5. Attention to classroom emotions and to individual needs	.09	.36**	.21*	.11	-							
6. Fairness of evaluation	.18	.16	.05	.07	.11	-						
7. Roles and information	-.08	.39**	.37**	.05	.36**	.31**	-					
8. Diagnosis as alibi	.3**	.21*	.29**	.26*	.16	-.22*	.01	-				
9. Parents' negative reactions to SLD diagnosis	.22*	.25*	.28**	.1	.07	.18	.24**	.12	-			
10. Diagnosis usefulness	.37**	.21*	.25*	.38**	.13	.15	.03	.27**	.07	-		
11. Teacher positioning in respect to other professionals	.28**	.20	.24*	.22*	.19	-.03	.24*	.24*	.26*	-.22*	-	
12. Strengths and weaknesses	-.09	.17	.13	-.13	.29**	.26*	.32**	-.20	.12	.04	-.03	-

<i>Subscale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>
Age	.01	.17	.18	-.09	.04	-.07	-.06	.24*	-.02	-.03	-.22*	-.10
teaching hours per week	0	-.06	.12	.013	-.02	.09	.19	-.11	.22*	-.03	.05	-.1
Years of teaching	.05	.14	.14	-.09	.04	.08	.03	.21*	-.01	-.01	-.19	-.03

* $p < .05$ Correlation is significant at the 0.05 level (two-tailed)

** $p < .01$ Correlation is significant at the 0.01 level (two-tailed)

Discussion and conclusions

Considering each subscale separately, strong deviations of distributions from the symmetry axis are not visible. The dimension with the most pronounced tendency is “How children are raised nowadays”, in which answers tend towards lower values ($sk = .47$), thus indicating that respondents tend to disagree with the idea that the way of raising children in the current culture and society may represent a cause of SLD diagnoses increase. Kurtosis presents instead more perceptible fluctuations: besides subscales with kurtosis close to zero, other dimensions are observable with fairly lower or higher values. For example, “Medicalization” and “Strengths and Weaknesses” are characterized by negative kurtosis values close to 1, indicating a light-tailed distribution in which there are less scores in the extremes than what it would be expected in a normal distribution with same mean and standard deviation (Westfall 2014). On the contrary, “Fairness of evaluation” ($ku = 1.14$) presents a heavy-tailed distribution, thus being a sign of the presence of more extreme values.

As it is visible in Table 11, various significant correlations are present among RADSA subscales. “Roles and information” is the factor presenting the strongest correlations with other dimensions: results suggest that those teachers who scores higher on this factor (concerning the need of more clarity for parents on the role of each professional figure and on the real nature of SLDs), tend to agree with the opinion that the increase of SLD diagnoses may be due to some external cultural and social factors (“System-level causes” and “Causes related to how children are raised nowadays”), with the idea that carefulness towards emotions and individual needs is necessary to promote an inclusive classroom climate, as well as with the opinion that it is fair to differentiate evaluations according to pupils’ idiosyncrasies. Another emerging aspect that seems interesting to be underlined is that the more the diagnosis in itself is considered useless, the more agreement is present with the opinions reflected by factors “Medicalization”, “System-level causes” and “Causes related to how children are raised nowadays”. Moreover, it appears that age negatively correlates with a more central role of the teacher in respect to other professionals.

The final version of RADSA is composed by 62 items divided into four thematic areas derived from the reference literature, which were confirmed as significant by focus groups participants. Only the fourth area, namely the one pertaining to teacher’s “learned helplessness” had a meaning shift, becoming “The moment in which the teacher refers parents to an SLD specialist”. The 4-point Likert scale response set based on agreement has been maintained and the estimated time of administration

is 15 minutes. The impression that the topic of teachers' attitudes and representations towards the increase of SLD diagnosis is a complex issue seems to be confirmed by the final structure of this instrument (cf. Table 10).

Considering the reflection of Gwernan-Jones and Burden, (2010) about the possibility that teachers' knowledge, attitudes, and beliefs towards learning difficulties could affect their ability in dealing with children having such difficulties, as well as the importance of focusing research on teacher-pupil relationship with a specific reference to SLD in early years of schooling (Pasta et al., 2013), the RADSA questionnaire may represent a very useful instrument to conduct research and to design focused intervention for teachers and educators, especially if associated with other measures. Thanks to its complex structure arose from the direct contribution of teachers, it can be used to explore various research lines pertaining to the school context, e.g. it can be associated to measures of teacher-pupil relationship quality (Pianta and Nimetz, 1991) or of teaching style (Deci et al., 1981). The absence of concurrent validity assessment represents a limitation of this study, therefore, it should be addressed through future investigations. Moreover, we believe that deepening the presented topic through the combined use of RADSA questionnaire with other measures, may bring positive implications for an innovative course of intervention targeting teachers, since the instrument has been constructed also on the basis of participants' contribution and it helps in individuating teachers' strengths and weaknesses, attitudes, as well as the more needed themes of intervention in a particular school or educational context.

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Student-teacher relationship representation and school adjustment in primary school

Anna Di Norcia, Eleonora Cannoni e Anna Silvia Bombi

Dipartimento di Psicologia dei processi di Sviluppo e Socializzazione
Sapienza, Università di Roma,
Via dei Marsi, 78, 00185 Roma, Italy;
e-mail: anna.dinorcia@uniroma1.it;
e-mail: eleonora.cannoni@uniroma1.it;
e-mail: annasilvia.bombi@fondazione.uniroma1.it.

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Abstract

The present study investigates student-teacher and student-peer relationships, as well as school adjustment. A novelty element is the use of drawing of oneself with a teacher to predict some aspects of children's adjustment in primary school. Our aim was to evaluate what aspects of student-teacher relationship as perceived by children were more predictive of relational wellbeing in class and school adjustment. In sum, our results confirm that, as predicted by the attachment theory (Hamre & Pianta, 2001), a relationship perceived as close by the teacher goes hand in hand with school adjustment and relational wellbeing in school. Autonomy, too, play a positive role. In terms of predictive power, gaining autonomy from teachers seems to predict students wellbeing even more than closeness, at least as it appears from students pictorial representation.

Keywords: student-teacher relationship, children drawing, primary school, school adjustment

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Introduction

Many empirical works have been devoted to the quality of the student-teacher relationship (see Koca, 2016 for a review). Researches on the links among student-teacher relationships, students' motivational attitudes and beliefs, and their academic adjustment have been frequently embedded in a tradition that extends the attachment perspective to the bond between teacher and student (Bowlby, 1969; Hamre & Pianta, 2001). Central to this approach is the notion that relationships in which teachers communicate warmly and openly with their students (high closeness), have few conflicts, and are not concerned about students' overreliance (low dependency) may help students to feel emotionally secure. In turn, emotional security arising from a positive student-teacher relationship may promote a better academic performance, and students' motivational attitudes and beliefs may be the mechanisms explaining this association (Roorda, Jak, Zee, Oort, & Koomen, 2017).

However, some studies have also indicated that students' and teachers' reports of their relationships are only weakly to moderately correlated (Koomen & Jellesma, 2015). A recent study by Zee et al., (2020) extended prior knowledge on student-teacher relationship quality by illustrating how the direction of associations between students' relationships with teachers and their academic adjustment vary across informants and different dimensions of motivational beliefs, academic subjects, and relational quality. These authors also found transactional pathways among negative, but not among positive aspects of the student-teacher relationship and students' adjustment. These findings support the idea that closeness, conflict, and dependency assess each unique aspects of the student-teacher relationship quality, instead of falling along an underlying continuum (Verschueren & Koomen, 2012) and are therefore likely to be differently associated with students' academic achievement.

According to Ladd (1996) school adjustment can be evaluated in four dimensions: school liking, collaborative participation, self-directedness, and adaptive behavior. In addition to the relationship with teachers, also children's relationship with peers has a role in school adjustment. Children's successful integration in their social environment and their feelings of being appreciated by peers are some of the school adjustment factors (Wentzel, 1999). Studies on this topic showed that good peer relationships had a positive effect (Boulton, Don, & Boulton, 2011; Ladd, 1990) while poor relationships had a negative effect on school adjustment (Buhs, Ladd, & Herald, 2006).

In particular, externalizing behavior has a mediating role not only between student-teacher relationship and school adjustment, but also between peer relations and school adjustment. Children displaying problematic behavior such as aggression and rule-breaking are often rejected by peers and cannot fully participate in school activities and games, so that school may become an unpleasant setting in which they are left alone and experience conflict (Demirtaş-Zorbaz, & Ergene, 2019).

However, also the relationship with teachers can influence the child's status in his/her group of classmates. Teachers as “architects of school context” (Hughes, Im, Wehrly, 2014) have a great influence on children's groups. Day by day students observe the interactions between their teachers and classmates, and even the younger pupils are able to evaluate the different quality of these interactions: approving with most students, but conflicting with some of them. Children can use these observations as a social reference orienting their personal judgment about niceness and “value” of each classmate (Hughes, Im, Wehrly, 2014). Moreover, since the student-teacher interactions are under everybody's eyes in the classroom, they become part of shared information about each child, promoting a general consent about them. As a consequence each child's reputation deriving from his/her interaction with teachers can orient peer's interpretations of that child's behavior in class and his/her level of popularity or rejection (Hymel, 1986).

In sum, it's important to know more about students' point of view about student-teacher relationship (Koomen & Jellesma, 2015) and a functional way to do so is to resort on children drawings of themselves with a teacher, since drawing is generally a well-accepted task, easy to administer. As a method of analysis we will adopt the Pictorial Assessment of Interpersonal Relationships (PAIR; Bombi, Pinto, & Cannoni, 2007), which is based on modern theories of pictorial development (Golomb 2004; Milbrath & Trautner, 2008) and has already proved to be a reliable mean to assess closeness and autonomy in relationships with different partners, such as friends, siblings and romantic partners (Laghi et al., 2013; Cannoni & Bombi, 2016; Guidotti et al., 2020). PAIR has recently extended to teacher-student relationships (Bombi, Cannoni, Galli, & Di Norcia, 2020) in line with other studies that rely on drawing to examine children's mental states and socio-emotional dimension in school (Harrison, Clarke, & Ungerer, 2007; Pezzica, Vezzani & Pinto, 2018).

In this study we will add children drawings to other classical means of investigation to examine various facets of school adaptation. Our aim is to evaluate what aspects of student-teacher relationship are more predictive of positive relationships with peers and school adjustment in general. Previous research (Koomen & Jellesma, 2015; Zee et al., 2020)

has demonstrated a fairly high level of disagreement among teachers and students about the quality of their mutual relationship and students' academic adjustment problems. Relying on both teachers and students as informants should provide a more accurate picture of the complex associations between student-teacher relationships and academic adjustment.

Given the discrepant perspectives above mentioned, we expect that the correlation between teachers' and students' perception of their relationship would not be high. Second, we expect that some dimensions of student-teacher relationship (as perceived by teachers and by students) will correlate with peer relationship and school adjustment, as shown by many studies examined in the Introduction. Finally we want to explore if students' pictorial representation of their relationship with teachers predicts school adjustment and/or the relationship with classmates; according to the attachment theory and empirical studies, a student-teacher relationship based on closeness and low dependency, should predict school adjustment and low peer rejection.

Method

Participants

Participants were 177 fourth graders (99 boys; 78 girls, $M_{age} = 9.6$; $SD_{age} = 0.33$) from nine classes in primary schools in the outskirts of Rome. A preliminary informed consent ensuring the complete voluntariness and anonymity of children's participation was signed by parents. The research and its procedure were approved by the ethic committee of the department of afference of the authors.

Each class group has more than one teacher; the participant teachers were those spending at least 22 hours per week with the class group. No information was available about teachers' demographic characteristics.

Most of the children (85%) lived with both parents, the remaining 15% lived with the mother. Mothers were from 25 to 52 years of age ($M = 42$; $SD = 5$), the number of their children ranged from 1 to 5 ($M = 2$; $SD = 1$). The educational level of mothers who provided the required demographic information (88 % of participants) was as follows: 18.5% only grade school, 49.7% only high school degree, 31.8% college degree.

Instruments

Teacher-perceived relationship quality. Teachers' perceptions of the quality of their relationships with individual students were measured using the Student-Teacher Relationship Scale (STRS; Pianta, 1999) in the Italian adaptation for children 6 to 11 years old (Molinari & Melotti,

2010). This instrument measures five distinct dimensions of the relationship: Conflict, Closeness, Dependency, Insecurity and Educational Difficulties, the first two of which are very similar to the corresponding originals; the original Dependency dimension, instead, is divided in two components, which the authors labelled respectively Dependency and Insecurity: the first also includes items of conflict and appears to measure a relationship marked by jealousy and relational difficulties; the second includes items suggesting an insecure type of attachment. Finally, the fifth dimension includes three items of Conflict which are focused on the teacher's feelings of stress and lack of efficacy, as well as a reversed item of Closeness. All teacher-rated items are based on a five-point, Likert-type scale (1 = definitely does not apply to 5 = definitely applies). Coefficient alpha reliabilities were as follows: for Conflict score ($\alpha = 0.89$) Closeness score ($\alpha = 0.73$) Dependency ($\alpha = 0.81$) Insecurity ($\alpha = 0.53$) Educational Difficulties ($\alpha = 0.77$).

School adjustment. Teachers' perceptions of each child's adjustment to school was measured using the School Adjustment Scale (SAS; Bombi, Galli, Di Norcia, 2014). This scale was developed by an original instrument by Molinari and Melotti (2009) to measure each student's learning, participation, autonomy (e.g. "school frequency" "school engagement at home" "respect for the rules and the others"). Answers are on a 4 points scale (from inadequate to excellent, $\alpha = 0.87$)

Student-perceived relationship quality. Student-perceived relationship quality was assessed through drawings. Each child was given a white sheet of $8\frac{1}{2} \times 11$ in. and a pencil, and required to draw oneself with the teacher; no time limits were assigned, but children completed the drawing in 20' as a maximum. The scales of Cohesion and Distancing from the above mentioned PAIR instrument (Bombi et al., 2007) were used to score the drawings. Each scale includes six subscales to be scored dichotomously (0 = absence; 1 = presence of one or more pictorial indices), pertaining to various aspects of the represented interactions (such as looking to each other, or looking away) and the spatial distribution of the figures (such as inclusion in the same area or in separate areas of the depicted scene). Cohesion is a measure of interpersonal relatedness, while Distancing is a measure of individual autonomy; they are not the poles of a continuum, as they can coexist in the same drawing (e.g. figures can look to each other, while being in separate spaces). Each drawing was rated by two independent judges, who had not participated in the data collection and were blind to the aims of the study. The two judges reached a significant level of interreliability (correlation coefficients: Pearson's: 0.84 and 0.90, with $p < 0.001$). For the final score assignment,

they discussed each score on which they disagreed, until a full agreement had been reached. Alpha reliability indices in the present sample were 0.81, 0.83, for Cohesion and Distancing, respectively.

Peer relationships. Peer relationships were measured through Peer Nominations (Caprara, Pastorelli, 1993). Each student chose three classmates who he/she disliked for each of following activities: playing, doing an academic task, playing a sport game. They were also asked to name three children who were frequently physically and/or verbally aggressive (3 items). The number of nominations each child received for aggressive behaviours and dislike were standardized among each class to calculate Aggressive Behavior ($\alpha = 0.88$) and Rejection scores ($\alpha = 0.85$).

Data Analyses

Pearson's correlation was calculated on teachers' and students' perceptions of their relationship, school adjustment, peer relationships. Four separate hierarchical regressions were conducted using School Adjustment or Rejection scores as a dependent variable; in all these regressions the child's sex (1 = boys, 0 = girls) was entered in Step1, Cohesion or Distancing was entered at the second step.

Results

The descriptive statistics for the students' measures (drawing scores and peer evaluations) are shown in Tab.1, while those pertaining to the teachers' measures (STRS dimensions and school adjustment) are shown in Tab. 2.

Tab.1 – *Descriptive Statistics for drawing scores and peer evaluations*

		Distancing	Cohesion	Rejection	Agg. B
Boys	M (SD)	2.96 (1.94)	1.46 (1.84)	.16 (.14)	.19 (.20)
Girls	M (SD)	2.82 (1.72)	3.47 (2.16)	.13 (.11)	.09 (.13)
TOT	M (SD)	2.90 (1.84)	3.11 (2.00)	.15 (.13)	.15 (.18)

Tab.2 – *Descriptive Statistics for STRS dimensions and School Adjustment*

		Con	Clo	Dep	Ins	Edu	Adj
Boys	M (SD)	1.46 (.82)	3.99 (.70)	1.51 (.89)	3.69 (.77)	1.34 (.71)	2.39 (.69)
Girls	M (SD)	1.19 (.43)	4.12 (.72)	1.36 (.57)	3.70 (.78)	1.21 (.47)	2.50 (.52)
TOT	M (SD)	1.34 (.69)	4.04 (.71)	1.44 (.77)	3.69 (.77)	1.28 (.62)	2.43 (.62)

The correlational analyses showed that students' Distancing in their drawing of oneself with the teacher were negatively correlated with teachers' scores of Conflict ($r = -.19$; $p = .02$) and Dependency ($r = -.16$; $p = .05$) (see Table 3).

Distancing was also negatively correlated with Rejection ($r = -.21$; $p = .01$) and Aggressive Behavior ($r = -.24$; $p < .002$), while it was positively correlated with School Adjustment ($r = .18$; $p = .05$). Cohesion, too, was negatively correlated with Rejection ($r = -.18$; $p = .02$) (see Table 4).

Finally Dependency, as evaluated by teachers, was positively correlated with Rejection ($r = .35$; $p < .001$) and Aggressive Behavior ($r = .42$; $p < .001$) and Negatively with school Adjustment ($r = -.48$; $p < .001$; see table 3).

Tab.3 – *Correlations between STRS, Drawing Scores, Peer evaluations and School Adjustment*

		Drawn Cohesion	Drawn Distancing	Peer Rejection	Aggressive behavior	School Adjustment
STRS	Conflict	-.140	-.186*	.391**	.560**	-.466**
	Closeness	-.025	.066	-.213**	-.129	.312**
	Dependency	-.144	-.161*	.353**	.421**	-.477**
	Insecurity	-.038	-.067	.096	.026	-.070
	Educational Difficulties	-.098	-.112	.349**	.343**	-.505**

* $p < .05$; ** $P < .01$

Tab.4 – *Correlations between Drawing Scores, School Adjustment and Peer evaluations*

		Rejection	Aggressive behavior	School Adjustment
Drawing	Cohesion	-.185*	-.130	.050
	Distancing	-.210**	-.243**	.178*

* $p < .05$; ** $P < .01$

Through regression analyses we found that only Distancing predicted School Adjustment ($R^2 = .05$; $\beta = .18$; $p = .02$; see Table 6). Rejection was negatively predicted by Cohesion ($R^2 = .04$; $\beta = -.17$; $p = .03$; see Table 5) and Distancing ($R^2 = .06$; $\beta = -.22$; $p = .003$; see Table 6). We did not find any effect of gender.

Tab.5 – Summary of Hierarchical Regressions Predicting School Adjustment or Rejection from Cohesion

Step	Variable	Rejection				School Adjustment			
		B	SE B	β	R^2	B	SE B	β	R^2
1					.014				.012
	Sex	-.03	.02	-.12		.14	.10	.11	
2					.042*				.017
	Sex	-.02	.02	-.09		.15			
	Cohesion	-.011	.005	-.17*		-.02	.03	-.07	

* $p < .05$

Tab.5 – Summary of Hierarchical Regressions Predicting School Adjustment or Rejection from Distancing

Step	Variable	Rejection				School Adjustment			
		B	SE B	β	R^2	B	SE B	β	R^2
1					.014				.012
	Sex	-.03	.02	-.12		.14	.10	.11	
2					.060**				.045*
	Sex	-.03	.02	-.13		.15			
	Distancing	-.01	.005	-.22*		.06	.03	.18*	

* $p < .05$; ** $p < .01$

Discussion

Data from the correlational analyses confirmed our first hypothesis. In line with previous research (Koomen & Jellesma, 2015) we found few and low correlations between student-teacher relationships as perceived by each partner. It must be noted that, in this study, the diversity of research instruments could have stressed the divergence between the two informants. For instance, in a single drawing a child is not likely to include Conflict, since he/she has to choose a prototypical image of the relationship, in which open conflicts are more rare and less representative of the relational climate. However, Closeness and Cohesion are both measures of relatedness, and the absence of correlation speaks for a real diversity of perspectives. It is possible that students did not introduce indices of this aspect of the relationship, simply taking for granted the ongoing relationship with teachers with whom they were working since the first grade of primary school. Some convergence did emerge in the students' perception of their own autonomy (shown by high Distancing scores) and low Dependency and low Conflict from the teachers' point of view. Distancing appears a potential marker of wellbeing in students who are almost at the end of primary school, and at the threshold of pre-adolescence.

Also our second hypothesis was confirmed. In fact, we found that aggressive behavior and peer rejection were correlated with negative aspects of the student-teacher relationship as evaluated by the teachers in the STRS (Conflict Dependency, Educational Difficulties); school adjustment, instead, was positively correlated with Closeness and negatively correlated with the problematic dimensions of the STRS. From children's point of view the most significant dimension of student-teacher relationship appeared again to be Distancing, that correlated negatively with rejection and aggressive behavior and positively with school adjustment. Cohesion, however, was negatively correlated with rejection, which is in line with the studies outlining the teacher's role in building children's reputation (Hughes, Im, Wehrly, 2014).

The regression analyses showed that drawing can provide useful information about protective factors for school adjustment and peer relationships. Cohesion and Distancing in student-teacher relationship serve positive effects: the first prevents from rejection by peers and the second enhances also the students' school adjustment.

In sum, our results confirm that, as predicted by the attachment theory (Hamre & Pianta, 2001), a relationship perceived as close by the teacher goes hand in hand with school adjustment and relational wellbeing in school. Autonomy, too, seems to play a positive role both from the tea-

chers and the students perspective. In terms of predictive power, gaining autonomy from teachers seems to predict students wellbeing even more than closeness, at least as it appears from students pictorial representation. These results are generally coherent with previous researches that recommended multi informant studies to better understand relations in schools (Zee et al., 2020). A novelty element is the possible use of drawing to study student-teacher relations in primary school.

We are aware of the study limitations, first of all the marginal space given to the school performance (assessed only through one item of our SAS scale), a well known factor of school adjustment. The representation of oneself with a teacher gives voice to children, but provides only an indirect information of wellbeing or distress in a variety of school situations, that could be better assessed with other measures. Also, it could be interesting to extend the research to younger children in first and second grade, in order to better understand the evolution of the relationship with teachers and to see if Cohesion is a more central aspect of the relation for younger children. Another aspect that could be considered in future longitudinal studies is the hypothetical mediation role of rejection: in fact, it is possible that Cohesion and Distancing could prevent from rejection, and low rejection, in turn, could predict school adjustment. It could also be interesting, in continuity to Demirtaş-Zorbaz, Ergene (2019) to better explore the relation between aggressive behaviors, student-teacher relationship measured by drawing and school adjustment in a longitudinal study through primary school years.

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Perception of school climate, academic performance and risk behaviors in adolescence

Carolina Lunetti*, Laura Di Giunta*, Irene Fiasconaro*, Reout Arbel[°],
Emanuele Basili*, Eriona Thartori*, Ainzara Favini*, Giulia GlioZZo*,
Concetta Pastorelli*, Jennifer E. Lansford[^]

* Sapienza University of Rome, Department of Psychology
Via dei Marsi, 78, 00175 Rome - Italy.
e-mail: Carolina.lunetti@uniroma1.it
e-mail: carolina.lunetti@uniroma1.it

[°] University of Haifa, Department of Counseling and Human Development
indirizzo: 199 Aba Khoushy Ave. Mount Carmel, Haifa, Israel
e-mail: reout.arbel@gmail.com

[^] Duke University, Center for Child and Family Policy
indirizzo: 2024 West Main Street, Bay C
e-mail: lansford@duke.edu

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Abstract

Previous studies support the relevance of students' perception of positive and negative school climate to learning processes and adolescents' adjustment. School climate is affected by both the interactions that are established within the classroom, and by the teachers' behaviors. This study has the overall objective of investigating the relationship between the perception of positive and negative school climate and students' (mal)adjustment during adolescence.

Participants were 105 Italian adolescents (52.5% boys, mean age = 15.56, SD = .77) who responded for 15 consecutive days (ecological momentary assessment) to questions related to their perception of positive and negative school climate (Time 1). After one year (Time 2), students' academic performance reported by mothers and fathers and adolescents' self-reported propensity to engage in risk behaviors were examined.

Four hierarchical regression models were implemented considering the mean and the instability levels (RMSSD) of the perception of positive and negative school climate as independent variables and, respectively, academic performance and risk behaviors as dependent variables.

Results suggest that a higher perception of positive school climate and its instability predict higher academic performance one year later, while a higher perception of negative school climate and its instability predict higher risk behaviors.

This study provides an innovative perspective to reflect on the relationship between students' perceptions of school climate and adolescents' (mal)adjustment.

Keywords: school climate, academic performance, risk behaviors, adolescence.

Introduction

Empirical research emphasizes the importance of students' academic success in predicting job performance and long-term adaptive developmental trajectories (Andersson & Strander, 2004). School climate (or school environment) has an important role in promoting positive long-term outcomes.

School climate is a multidimensional construct that includes physical, social and academic dimensions (Loukas, 2007). The physical dimension is composed of the appearance of the school building and classrooms, the size of the school, the proportion of students and teachers in the classrooms and the school's availability of resources. The social dimension includes the quality of interpersonal relationships between students and

teachers, the degree of social comparison among students, and the degree to which students, teachers and the school staff contribute to the school's decisions. Finally, the academic dimension includes the quality of teaching, the students' and teachers' expectations about academic success, and the teachers' monitoring of students' progress. How students perceive the school climate affects individual attitudes, behaviors and group norms (Loukas, 2007). In this framework, the present study attempts to provide important directions about the promotion of positive youth development by acting on the school climate.

Perception of school climate and academic performance

School climate is a relevant factor in affecting students' academic performance (e.g. Stewart, 2008). Moos and Moos (1978) showed that students' positive relationships within the school were significantly associated with students' higher grades. The same results were confirmed by other relatively recent studies conducted on North American samples (Crosnoe et al., 2004; O'Malley, Voight, Renshaw, & Eklund, 2015), which showed that stronger relationships between students and teachers positively affect academic achievement. Kwong and colleagues (2015) and Reynolds and colleagues (2017) demonstrated the relevance of feeling psychologically linked to the school in determining students' academic success.

Empirical studies are consistent in showing that the relationship between school climate and academic achievement could be explained by the association between school climate and other factors such as the students' sense of belonging to the school (Blum, 2005), the teachers' commitment (Collie, Shapka, & Perry, 2011), and the students' motivation to learn (Battistich, Solomon, Kim, Watson, & Schaps, 1995).

Furthermore, empirical studies conducted in the Italian context suggest that the perception of a positive school climate, characterized by good or excellent quality of the relationship between students and school and by teachers' definition of academic objectives and their willingness to support students in achieving their academic objectives, predict students' adaptive behavior, low levels of school absenteeism, and high academic success (Boncori, 2018; Catalano, Perrucchini, & Vecchio, 2014; Di Vita, 2017).

Perception of school climate and adolescents' risky behaviors

The literature that has examined the perception of school climate has also investigated its association with maladaptive outcomes, such as internalizing and externalizing problems (Astor, Benbenishty, Zeira, & Vinokur, 2002). Previous studies highlighted the predictive role of several variables in determining the perception of negative school climate, such as observing violent behaviors within the school, students' fear of attending school, and authoritarian and low supportive teaching. Astor and colleagues (2002) examined the association between the perception of school climate and adolescents' antisocial behavior. Students' antisocial behaviors were associated with the negative perception of school climate, which was operationalized as low quality of student-teacher relationships and high perception of fear by students toward the school context. A further relevant study was conducted by Hendron and Kearney (2016) on a large sample of adolescents. Several constructs included in the perception of positive school climate, such as sharing resources, parental school involvement, positive relationships among students, and positive relationships between students and teachers, correlate significantly and negatively with adolescents' externalizing problems. Moreover, those students who harbor negative feelings in their relationship with the school and with their teachers show high absenteeism and high antisocial behavior (Corville-Smith, Ryan, Adams, & Dalicandro, 1998). Overall, these studies empirically support the negative association between students' perception of positive school climate and youth externalizing behaviors.

The present study

The overall aim of the present study was to longitudinally examine the contribution of students' perception of school climate to academic performance and risk behaviors a year later, controlling for students' gender. In particular, this study includes two specific goals: a) first, to examine the impact of the perception of positive and negative school climate on adolescents' later academic performance and risk behaviors; b) second, to examine the impact of the instability (variability) in the perception of positive and negative school climate, over a period of 15 days, on adolescents' later academic performance and risk behaviors. In accordance with previous studies supporting that the perception of positive school climate is positively associated with students' academic achievement through a heightened sense of belonging to the school, high levels of support and cooperation between students and teachers, and through teachers' heightened commitment (e.g. Boncori, 2018), we expect that

the perception of positive school climate will be positively associated with adolescents' later academic performance. Furthermore, in accordance with previous studies suggesting that the perception of negative school climate is positively related to students' externalizing problems, through perceived lack of supportive student-teacher relationships and lack of safety in the school environment (e.g. Corville-Smith, Ryan, Adams, & Dalicandro, 1998), we expected that students' perception of negative school climate positively predicts adolescents' later risky behaviors. Finally, we are not aware of previous studies that have examined the association between instability (variability) in the perception of positive and negative school climate and youth (mal)adjustment; thus, our goal in this direction is exploratory.

Methods

Participants and procedures

Participants were part of a larger longitudinal study, titled Parenting Across Cultures (PI: J. Lansford; PI for the Italian site: C. Pastorelli) that started in 2008 when children were 8 years old. The present study focuses on the eighth and ninth years of the data collection in Rome, specifically targeting 105 Italian family triads (T1: youth $M_{age} = 15.66$, $SD = .77$; 52.5% boys; T2: $N = 95$, youth $M_{age} = 16.45$, $SD = .67$). Adolescents' mothers had 13.88 years of education on average ($SD = 4.25$) and fathers had 13.46 years on average ($SD = 4.24$). In addition, 72% of the parents were married or cohabitating, whereas 28% were divorced, separated, or widowed. Participants were recruited from diverse schools with high-, middle-, and low-income families in Rome, with the attempt to overlap as much as possible the national socio-economic distribution (ISTAT, 2007).

After obtaining parental informed consent and child assent, interviews with adolescents were conducted at Time 1 by using the mobile ecological momentary assessment (mEMA; Wen et al., 2017). For 15 consecutive days, adolescents received a personalized email on their mobile phones, containing the URL link to complete a questionnaire via Qualtrics. Each online questionnaire lasted approximately five minutes. One year later (Time 2), interviews with parents and adolescents were conducted in families' homes or another preferred location. Each interview lasted approximately one hour.

All procedures were approved by Sapienza University of Rome's Institutional Review Board.

Measures

Adolescents' gender. Adolescents' gender (1 = boys, 2 = girls) at Time 1 was included as a covariate.

Time 1 Adolescents' perception of positive and negative school climate. Through mEMA, students evaluated whether they experienced (yes = 1; no = 0) 4 positive (“Since this morning, did any of these things happen at school?...”; e.g., “Teacher helped me”; $\alpha = .86$) and negative school events (e.g., “Teacher was mean to me”; $\alpha = .85$). School climate items were adapted from a previously validated protocol used in similar EMA research designs (Jensen, George, Russell, & Odgers, 2019). Then, the answers to those items were summed to create a total score for positive and negative school climate, respectively. In addition, the root mean square of successive differences (RMSSD; Ebner-Priemer & Trull, 2012) was calculated for each of those total scores in order to calculate the instability/variability score around each adolescent's perception of positive and negative school climate over the 15 days.

Time 2 Adolescents' academic performance. Mothers and fathers completed seven items from the Child Behavior Checklist (CBCL; Achenbach, 1991), in which they indicated (from 1 = “failing” to 4 = “above average”) the academic performance of their child compared to the students from his/her classroom, in seven subject matters (reading, writing, math, spelling, social studies, science, other). We created a composite score for academic performance by averaging the mean levels of adolescents' academic performance reported by mothers and fathers (inter-parent $r = .34, p < .001$).

Time 2 Adolescents' risky behaviors. Adolescents completed 11 items from the Youth Self-Report (YSR; Achenbach, 1991) referring to behaviors such as stealing from home and disobeying school rules (from 0 “not true” to 2 “very true/often true”) during the last six months. Items were averaged to create a total score ($\alpha = .77$).

Analytical approach

After examining Pearson correlations among the variables of interest, we implemented four hierarchical regression models (see Figure 1) using SPSS.20.

In the first regression model (Model 1), academic performance was the dependent variable; adolescents' gender was included in the first step and positive and negative school climate were included in the second step. Model 2 was similar to Model 1, with the difference of including the instability of positive and negative school climate in the second step, rather than the average level of these constructs. Models 3 and 4 overlap-

ped the former models in terms of the two steps of independent variables, with the difference of focusing instead on adolescents' risky behaviors as the dependent variable.

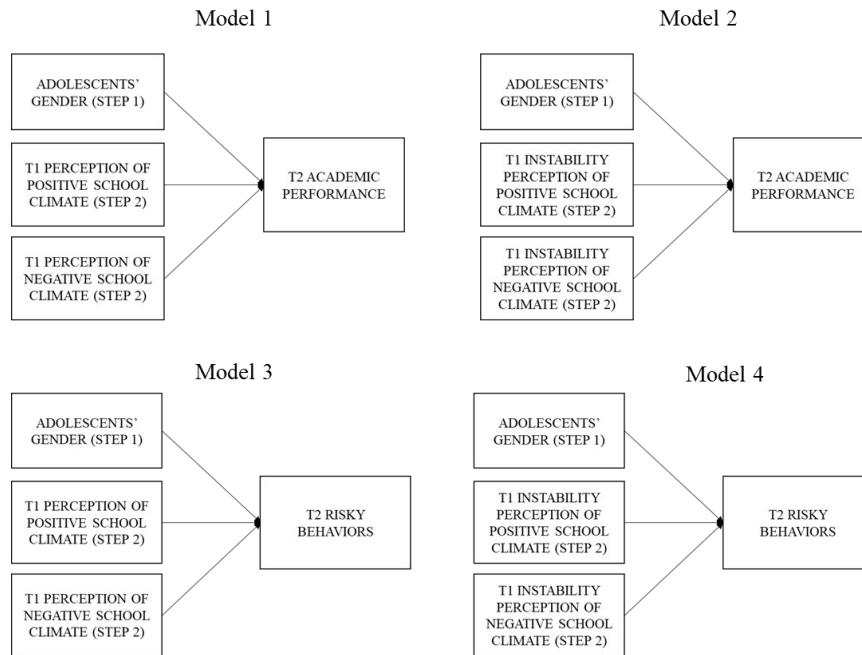


Fig. 1 - Tested hierarchical regression models

Results

Descriptive statistics and correlations

Table 1 reports means, standard deviations, skewness, and kurtosis of the study variables for the overall sample (skewness and kurtosis were in acceptable range; Curran, West, & Finch, 1996). Correlations among variables within the overall sample are reported in Table 2. Adolescents' gender correlated significantly only with Time 2 academic performance; academic performance was higher in girls than in boys. Adolescents' perception of negative school climate and its instability at Time 1 correlated positively and significantly with adolescents' later risky behaviors, whereas adolescents' Time 1 perception of positive school climate and its instability did not. Finally, adolescents' Time 1 perception of positive school climate and its instability correlated positively and significantly with adolescents' later academic performance, whereas adolescents' Time 1 perception of negative school climate and its instability did not.

Tab. 1 - *Descriptive statistics*

<i>Constructs</i>	<i>Mean</i>	<i>SD</i>	<i>Range (min-max)</i>	<i>Skewness</i>	<i>Kurtosis</i>
1) T1 Perception of negative school climate (self-report)	0.01	0.01	0.00-0.06	1.36	1.78
2) T1 Perception of positive school climate (self-report)	0.02	0.02	0.00-0.10	1.29	1.55
3) T1 Instability of the perception of negative school climate (self-report)	0.07	0.06	0.00-0.25	0.65	0.17
4) T1 Instability of the perception of positive school climate (self-report)	0.12	0.07	0.00-0.35	0.90	0.77
5) T2 Academic performance (parents' report)	3.10	0.31	2.40-4.00	0.71	0.70
6) T2 Risky behaviors (self-report)	0.38	0.23	0-00-1.00	0.68	0.01

Note: SD = Standard Deviation.

Tab. 2 - *Correlations among the study variables*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Adolescents' Gender	-						
(2) T1 Perception of negative school climate (self-report)	.04	-					
(3) T1 Perception of positive school climate (self-report)	-.09	.07	-				
(4) T1 Instability of the perception of negative school climate (self-report)	.01	.95**	.07	-			
(5) T1 Instability of the perception of positive school climate (self-report)	-.12	.03	.97**	.02	-		
(6) T2 Academic performance (parents' report)	.24*	-.08	.21**	-.13	.21*	-	
(7) T2 Risky behaviors (self-report)	-.04	.29*	-.20	.24*	-.18	-.22	-

Note: Adolescents' Gender: 1 = boys, 2 = girls. ** $p < .01$; * $p < .05$.

Hierarchical regression models

Model 1 significantly explained 14.8% of the Time 2 academic performance variance [$F(3,87) = 5.05, p < .01$]. Specifically, at the first step, adolescents' gender significantly predicted Time 2 academic performance ($\beta = .24, p = .02$), and at the second step, only the perception of positive school climate significantly predicted Time 2 academic performance ($\beta = .27, p < .01$), whereas the perception of negative school climate did not ($\beta = -.15, p = .12$) (see Table 3).

Tab.3 - Hierarchical regression model 1

Time 2 academic performance					
Predictors	R	ΔR^2	β	B_{SE}	F
Step 1	.24	.06*			$F(1,89)=5.65, p = .020$
Adolescents' Gender			.15	.24*	
Step 2	.38	.08**			$F(2,87)=5.05, p = .003$
Time 1 Perception of negative school climate			3.6	-.15	
Time 1 Perception of positive school climate			-3.6	.27*	

Note: Adolescents' Gender: 1 = boys, 2 = girls. ** $p < .01$; * $p < .05$.

Model 2 significantly explained 17% of the Time 2 academic performance variance [$F(3,87) = 5.93, p < .01$]. Specifically, at the first step, adolescents' gender significantly predicted Time 2 academic performance ($\beta = .24, p = .02$), and at the second step, only the instability in the perception of positive school climate significantly predicted Time 2 academic performance ($\beta = .28, p < .01$), whereas the instability in the perception of negative school climate did not.

Tab. 4 - Hierarchical regression model 2

Time 2 academic performance					
Predictors	R	ΔR^2	β	B_{SE}	F
Step 1	.24	.06*			$F(1,89)=5.65, p = .020$
Adolescents' Gender			.01	.01	
Step 2	.41	.11**			$F(2,87)=5.94, p = .001$

Time 1 Instability of the perception of negative school climate	- .93	-.18
Time 1 Instability of the perception of positive school climate	1.14	.28**

Note: Adolescents' Gender: 1 = boys, 2 = girls. ** $p < .01$; * $p < .05$.

Model 3 significantly explained 13.6% of the Time 2 risky behaviors variance [$F(3,70) = 3.66, p < .05$]. Specifically, at the first step, adolescents' gender did not significantly predict Time 2 risky behaviors ($\beta = -.04, p = .73$), and at the second step, both the perception of positive school climate ($\beta = -.22, p < .05$) and the perception of negative school climate ($\beta = .30, p < .01$) significantly predicted Time 2 risky behaviors (see Table 5).

Tab. 5 - Hierarchical regression model 3

Predictors	Time 2 risky behaviors				
	R	ΔR^2	β	B_{SE}	F
Step 1	.04	.00			$F(1,72)=0.11, p = .738$
Adolescents' Gender			-.01	-.04	
Step 2	.36	.13*			$F(2,70)=3.66, p = .016$
Time 1 Perception of negative school climate			5.7	.30**	
Time 1 Perception of positive school climate			-2.2	-.22*	

Note: Adolescents' Gender: 1 = boys, 2 = girls. ** $p < .01$; * $p < .05$.

Finally, Model 4 explained 9% of the Time 2 risky behaviors variance [$F(3,70) = 3.30, p = .08$]. Specifically, at the first step, adolescents' gender did not significantly predict Time 2 risky behaviors ($\beta = -.04, p = .73$), and at the second step, only the instability of the perception of negative school climate significantly predicted Time 2 risky behaviors ($\beta = -.24, p < .05$), whereas the instability of the perception of positive school climate did not ($\beta = -.17, p = .13$) (see Table 6).

Tab. 6 - Hierarchical regression model 4

Predictors	Time 2 risky behaviors				
	R	ΔR^2	β	B_{SE}	F
Step 1	.04	.00			$F(1,72)=0.11, p = .738$
Adolescents' Gender			-.01	-.04	
Step 2	.30	.01*			$F(2,70)=2.30, p = .039$
Time 1 Instability of the perception of negative school climate			.93	.23*	
Time 1 Instability of the perception of positive school climate			-.53	-.17	

Note: Adolescents' Gender: 1 = boys, 2 = girls. ** $p < .01$; * $p < .05$.

Discussion

Recent studies focusing on the determinants of students' positive development emphasize the importance of students' perceptions of the school climate in promoting students' adaptive outcomes, such as academic success, and counteracting students' maladaptive outcomes, such as risky behavioral problems.

The present study had the overall aim of longitudinally examining the contribution of students' perceptions of positive and negative school climate, and instability in these perceptions, as predictors of students' later academic performance and risky behaviors, in a sample of Italian adolescents. The present study is innovative being one of the few studies to consider the positive and negative dimensions of school climate as separate constructs, and the only one, to our knowledge, that uses the innovative methodology of the mobile ecological momentary assessment to examine the contribution of the instability (variability) in students' perception of the school climate over a 15 day period.

The first objective of the present study was to examine the predictive value of the average perception of positive and negative school climate with respect to later academic performance and risky behaviors in adolescence. Our results, like previous studies (e.g. Boncori, 2018), support the importance of the perception of a positive school climate, characterized by high support in the relationship between students and teachers, high motivation to learn, perception of the school as a safe environment, and high sense of belonging to the school, in promoting high academic performance one year later. With respect to risky behaviors, our findings

are consistent with previous studies (e.g. Corville-Smith, Ryan, Adams, & Dalicandro, 1998) suggesting that the perception of a negative school climate, characterized by low support and cooperation in the relationship between students and teachers and low sense of belonging to the school, predicts high levels of students' risky behaviors.

A second objective of this study was to examine how the instability in adolescents' perceptions of positive and negative school climate over a 15-day period was associated with students' later academic performance and risky behaviors. Our results suggested that instability in the perception of positive school climate significantly and positively predicted later academic performance, and instability in the perception of negative school climate positively predicted later risky behaviors.

Our findings may also be interpreted in light of studies attesting to the role of adolescents' sensitivity to rewards and punishments (i.e., feedback sensitivity) on their school success. In particular, previous studies have shown that school performance is more influenced by sensitivity to rewards than by sensitivity to punishment, which instead was associated with maladaptive behaviors (Cauffman et al., 2010). In the operationalization of our score of positive school climate, we included items that may be related to sensitivity to rewards in the school context (e.g., "Teacher was proud of me"), whereas in the operationalization of our score of negative school climate we included items that may be related to sensitivity to punishment in the school context (e.g., "Didn't do well at school). Consistent with such a perspective, we found that students' perception of a positive school climate, even when it occurs occasionally (i.e., high instability in perceived positive school climate), is related to students' academic performance. On the other hand, the perception of a negative school climate, even when it does not occur as often (i.e., high instability in perceived negative school climate) may be associated with students' disengagement from learning processes, which in turn may lead them to engage more often in risky behaviors. However, this is only a hypothesis that deserves to be explored in future studies.

Despite the significant contribution of this study to understanding the importance of students' perceptions of positive and negative school climate in relation to adolescents' adaptive and maladaptive outcomes, the present study has some limitations. In particular, we did not control for the effects of the stability of the outcomes or family socio-economic status, which might influence or moderate the association between perceptions of school climate and adolescents' (mal)adjustment. Moreover, we did not examine the effects of other variables, such as parental involvement at school and the personality characteristics of both students and teachers, on the considered outcomes. Future studies may overcome the-

se limitations and clarify the role played by instability in the perception of the school climate on positive youth development. Overall, the present study provides important implications for guiding programs aimed at preventing adolescents' risky behaviors and promoting adolescents' academic success, by acting on the characteristics of the school environment.

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**The role of teachers' intelligence conceptions,
teaching beliefs and self-efficacy on classroom
management practices**

Maria Gaetana Catalano, Giovanni Maria Vecchio e Paola Perucchini

Università degli Studi Roma Tre
Via Ostiense, 159, 00154 Roma RM
e-mail: maria.catalano@uniroma3.it, tel: +39 380.5309.529
e-mail: paola.perucchini@uniroma3.it;
e-mail: giovannimaria.vecchio@uniroma3.it.

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Abstract

Substantial evidence has been collected over decades of research on the relationships between optimal classroom management and student learning. In addition, there is a growing body of research on teachers' beliefs, in which their relationships with teachers' practices is viewed as significant. This study investigated classroom management practices in a sample of 1,056 Italian teachers working from pre-primary to secondary school, to analyse the differences by school level and teaching experience, and their associations with three categories of teachers' beliefs: self-efficacy, teaching beliefs and intelligence conceptions. Three dimensions of classroom management were considered: educational relationships, active strategies and emotion regulation. The results show that teachers differ in their practices in relation to school level and years of experience, with associations between different categories of beliefs highlighted. Classroom management was positively linked to self-efficacy, constructive teaching beliefs and constructive intelligence conceptions, and negatively linked to traditional teaching beliefs and innate intelligence conceptions. Hierarchical multiple regression analyses that considered the three dimensions of classroom management as dependent variables highlighted the concurrent contribution of: innate and constructive teaching beliefs for educational relationships; school level, intelligence conceptions, constructive teaching beliefs and self-efficacy on

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classroom management for active strategies; and school level for emotion regulation. These results confirm the strong relationships between classroom management and teachers' beliefs and conceptions. Thus, it is important for teachers to develop reflective processes of their own practices.

Keywords: classroom management, teaching beliefs, self-efficacy, intelligence conceptions, teaching experience.

Introduction

Substantial evidence has been collected over decades of research into the relationships between optimal classroom management and student learning (Emmer & Evertson, 2013), where correct classroom management leads to the expected results for the students (Calvani, 2011). Therefore, one of the primary responsibilities of the teacher is to promote educational practices for effective classroom management (Molinari & Mameli, 2015). At the same time, teachers' practices and decisions in the classroom are influenced by their beliefs (Buehl & Beck, 2015). In this study we investigated the role of different teacher beliefs on their classroom management practices, and in particular, the teacher beliefs about student intelligence conceptions, teaching beliefs and self-efficacy.

Classroom management

The concept of classroom management has various definitions that usually include all of the actions taken by a teacher to establish order, and to engage the students and elicit their cooperation (Jones, 1996; Emmer & Stough, 2001). Emmer and Evertson (2013) suggested that classroom management involves two main aspects: interactions and planning. For interactions, this implies a set of strategies and behaviours, which include careful observation, an ability to relate to the students with support and feedback, and interventions to redirect the activities of students and to stimulate their interest and participation. As many studies have documented, teachers are especially relevant in creating emotional and social support for all of their students, which includes forming good relationships with them, and encouraging positive relationships among the students themselves (Pianta Hamre, & Allenet, 2012; Hamre, Pianta, Downer et al., 2013). When students experience positive and warm relationships with their teachers, they are more likely to respect the rules of their classroom (Rubie-Davies, Asil, & Teo, 2016; Hughes & Coplan, 2017).

Teachers often face situations that can make them feel angry, frustrated or sad, and they need to find appropriate ways to regulate these emotions in the classroom (Hargreaves, 2000). Teachers' emotions are rela-

ted to classroom effectiveness (Sutton, 2005), and therefore the use of emotion regulation strategies can maintain classroom well-being and improve interpersonal relationships between teachers and students.

For planning, this includes organisation of the classroom space, development of incentives to encourage the desired student behaviour, and organisation of activities that promote the engagement and commitment of the students (Emmer & Evertson, 2013). As noted by Danielson (2013), the hallmarks of a well-managed classroom are that instructional groups are used effectively, non-instructional tasks are completed efficiently, and transitions between activities are skilfully managed to maintain the 'momentum' and to maximise instruction time. Activities should be designed to emphasise important learning outcomes that require thoughtful participation on the part of the students (Prince, 2004). Examples of active strategies include brainstorming, collaborative writing, cooperative learning, role-playing, simulation, project-based learning and peer teaching (Zayapragassarazan & Kumar, 2012).

The classroom management practices adopted by teachers are related to their years of teaching experience (Berger, Girardet, Vaudroz, & Crahay, 2018). Comparing novice and expert teachers, several studies have shown that expert teachers are significantly more effective at predicting classroom management events, through their greater repertoire of classroom skills and strategies compared to novice teachers (Martin & Shoho, 2000; Wolff, van den Bogert, Jarodzka, & Boshuizen, 2014). Teachers with more years of experience can typically prioritise tasks, to selectively cover a number of key classroom matters, and to manage the dynamic nature of the classroom setting (Hagger & McIntyre, 2000). Teachers with fewer years of experience tend to be more hesitant, less able to work with speed and fluidity, or to have mental models that allow large amounts of information to be accessed and handled effectively (Kerrins & Cushing, 2000).

The school level is also a determinant in the adoption of specific practices to manage a classroom. There are several reasons why differential practices can be expected from pre-primary schools to secondary schools, at least in Italy. However, there is little empirical evidence to verify this line of reasoning.

As noted by Randall and Engelhard (2009), primary schools use a system in which students remain with one academic lead teacher throughout the day, while in middle and secondary schools, they generally receive instruction from teachers who are specialised in specific academic subjects. For these reasons, the majority of research has focused on student-teacher relationships through analysis of the changes in relationship quality from pre-primary to secondary schools (Hamre & Pianta, 2000;

Prewett, Bergin, & Huang, 2019). At the higher school levels, the student-teacher closeness generally decreases, as teachers become more focused on academic aspects rather than interactions (Jerome, Hamre, & Pianta, 2009). While the evidence is strong on how student-teacher relationships change, less is known about the changes at the different school levels for the more specific aspects of classroom management, such as teaching strategies, classroom setting and student engagement.

Teachers' beliefs and classroom management practices

There is a growing body of research on teachers' beliefs, in which their relationship with teachers' practices is viewed as significant (see Buehl & Beck, 2015 for a review).

An important category of teachers' beliefs is the construct of 'self-efficacy'. According to social cognitive theory (Bandura, 1997), Tschanen-Moran and Woolfolk Hoy (2001, p. 783) defined teachers' self-efficacy as "judgements of their capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated". Research has shown that self-efficacy is a strong predictor of teacher behaviour: if a teacher believes that he/she is capable of managing the classroom and conducting meaningful lessons, he/she will be more likely to do just that (Hoy, 2004). A meta-analysis by Klassen and Tze (2014) showed that a high level of self-efficacy is positively related to the adoption of new practices and innovations in schools. Teachers with strong self-efficacy have closer relationships with their students, are more organised, better prepared, and more likely to select complex challenging tasks and to use different teaching strategies (Anthony & Kritsonis, 2007). Conversely, teachers with lower self-efficacy have a more pessimistic view of students, tend to adopt controlling practices (such as punishment), and strive to maintain strong discipline (Martin & Sass, 2010).

Furthermore, Berger and colleagues (2018) indicated that the general conceptions teachers hold about teaching might explain why they adopt certain teaching practices. For instance, constructivist beliefs about teaching are defined as viewing students as active participants in the process of acquiring knowledge and stressing the development of thinking processes more than the acquisition of specific knowledge. These are significantly related to student-oriented practices and enhanced activities (OECD, 2009). In contrast, direct transmission beliefs are defined as viewing the student as a passive recipient and the role of a teacher as communicating knowledge while making sure that the students concentrate. These are instead related to structuring practices, such as summarising former lessons, reviewing homework and checking exercise books

(OECD, 2009). Among the different methodologies, student-oriented teaching facilitates the optimisation of learning (Lopez, Torres-Vallejos, Ascorra et al., 2018).

Brooks and Brooks (1999) identified some classroom characteristics that are related to traditional or constructivist teacher beliefs. In the traditional case, a strict adherence to a fixed curriculum is highly valued, and the students primarily work alone and are viewed as ‘blank slates’ onto which the information is sketched by the teacher. In the constructivist case, activities rely heavily on manipulative materials, and the students primarily work in groups and teachers seek the students’ points of view, thus behaving in an interactive way.

In addition to their teaching beliefs, teachers also hold beliefs regarding the capabilities of their students. According to Dweck (2000), how teachers define intelligence affects their views towards students’ roles. Teachers who believe that intelligence can be cultivated through learning hold an incremental (or constructivist) theory of intelligence. In contrast, those who subscribe to an entity theory of intelligence (as innate) believe that intelligence is fixed and cannot be changed. The literature has illustrated the variations in teachers’ conceptions of intelligence (Albanese & Fiorilli, 2003), and it supports the claim that these intelligence conceptions influence the planning, teaching and strategies used (Garcia-Cepero & McCoach, 2009). However, few studies have focused on the relationships between intelligence conceptions and classroom management.

A short literature review relating to teachers’ beliefs and practices shows that previous studies have looked at the outcomes of classroom management, rather than the sources, and most of these studies have tended to consider only a limited number of teachers’ beliefs when studying their relations to practices. In addition, these categories of beliefs are often referred to specific subjects (e.g., mathematics, science), or to groups of teachers (e.g., pre-service teachers, primary school teachers). As a result, little is known about what drives teachers to adopt one practice rather than another.

Recently, Berger and colleagues (2018) used a dynamic and comprehensive perspective to describe the association between classroom management and some categories of secondary school teachers’ beliefs: self-efficacy, general conceptions about teaching and learning, and beliefs about student motivation. Their results suggested that some aspects of classroom management can be predicted by different beliefs and are positively linked to teaching experience.

The present study

According to Berger and colleagues' comprehensive perspective, our study investigated classroom management practices in a sample of Italian teachers working in pre-primary to secondary schools. We analysed the different management practices according to school level and teaching experience, and their association with three categories of teachers' beliefs: self-efficacy, teaching beliefs and intelligence conceptions. In a previous study, we developed a self-reporting instrument, the *Teacher's Educational Practices Questionnaire* (TEP-Q; Catalano, Perucchini, & Vecchio, 2014), to analyse three dimensions of classroom management: educational relationships, active strategies and emotion regulation (Catalano, Vecchio, & Perucchini, 2019). Thus, the three specific aims of the present study were:

1. To explore the differences in these three dimensions of classroom management according to school level and teaching experience;
2. To analyse the relationships between these three dimensions of classroom management and self-efficacy, teaching beliefs and intelligence conceptions;
3. To investigate the concurrent contributions of these teachers' beliefs (i.e., self-efficacy, teaching beliefs, intelligence conceptions) on each of the three dimensions of classroom management.

First, we expected that teachers with more years of teaching experience will adopt more effective classroom management practices (as investigated through the TEP-Q), such as more attention on educational relationships, more emotion regulation capabilities, and more frequent use of active strategies. For the effects of school level on these management practices, no hypothesis can be proposed due to the poor literature.

Secondly, we hypothesised positive correlations of classroom management with self-efficacy, constructive teaching beliefs and constructive intelligence conceptions, and negative correlations with traditional teaching beliefs and innate intelligence conceptions.

The last hypothesis was that self-efficacy has a role in explaining the variance of the different dimensions of classroom management above and beyond the role of intelligence conceptions and teaching beliefs, while controlling for school level and teaching experience.

Methods

Sample

A total of 1,056 Italian in-service teachers were involved in the study, 91.7% of whom were female. The mean age was 43.9 years (SD = 8.9 years), covering a range from 24 years to 66 years. The sample included 16.7% pre-primary school teachers, 51.0% primary school teachers, 14.4% lower-secondary school teachers, and 17.8% upper-secondary school teachers. As their highest educational level, more than half of the teachers (55.2%) had a Master's degree, 6.5% had a Bachelor's degree, and 30.3% had a high school diploma (and 8% not specified). Their mean teaching experience was 14 years (SD = 10.95 years), covering a range from 1 year to 45 years. Across this range, five levels of teaching experience were defined, as less than 6 years (29.9%), 6-10 years (21.3%), 11-20 years (22.9%), 21-30 years (15.6%), and more than 30 years (10.4%).

Instruments and procedures

Data collection was carried out over a period of 4 years. The first data were obtained using a paper-and-pencil questionnaire, and subsequently using the online platform *Uniroma3 Survey RC*. Informed consent was obtained from all participants.

In the first phase, we administered the *Teacher's Educational Practices* (TEP-Q, Catalano et al., 2014) to all of the participating teachers. The TEP-Q contains 24 items that are designed to measure three dimensions of classroom management: Educational Relationships (ER; e.g., “*I show attention and involvement when children express their emotions*”; Cronbach alpha = .81); Emotion Regulation (EMR; e.g., “*When I'm angry, I shout at the class*”; Cronbach alpha = .65); and Active Strategies (AS; e.g., “*During activities, I organise group working*”; Cronbach alpha = .75). The teachers rated their perceived practices on 6-point Likert scales that ranged from 0 (never) to 5 (always).

In the second phase, we administered two further questionnaires to a subsample of 600 teachers: the Constructive Conceptions of Intelligence Scale (CCIS; Albanese & Fiorilli, 2003) and the Teaching Beliefs Survey (TBS; Woolley, Benjamin, & Woolley, 2004).

The CCIS analyses teachers' conceptions about the intelligence of their pupils. This includes 29 items that are designed to measure: Constructive Conceptions (CC; e.g., “*The quality of the teacher-pupil relationship has a lot of influence on school performance*”; Cronbach alpha = .80); and Innate Conceptions (IC; e.g., “*Intellectual potentials are in-*

nate; nobody can change them”; Cronbach alpha = .71). The items were scored based on 6-point Likert scales, which ranged from 1 (strongly disagree) to 6 (strongly agree).

The TBS measures teaching beliefs that are referred to as: Constructive Teaching (CT; e.g., “I prefer to cluster students’ desks or use tables so they can work together”; Cronbach alpha = .69); Traditional Teaching (TT; e.g., “I teach subjects separately, although I am aware of the overlap of content and skills”) and Traditional Classroom Management (TCM; e.g., “It is important that I establish classroom control before I become too friendly with students”). In the current study, TT and TCM were considered as a unique dimension, termed Traditional Teaching and Classroom Management (TTCM; Cronbach alpha = .72). The teachers rated their beliefs here on 6-point Likert scales, which ranged from 1 (strongly disagree) to 6 (strongly agree).

In the last phase, the Teachers’ Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001) was administered to a subsample of 260 teachers. The TSES contains 24 items that refer to three dimensions of self-efficacy: Efficacy for Instructional Strategies (EIS; e.g., “How well can you use a variety of assessment strategies?”; Cronbach alpha = .90); Efficacy for Classroom Management (ECM; e.g., “How well can you control disruptive behaviour in the classroom?”; Cronbach alpha = .92); and Efficacy for Student Engagement (ESE; e.g., “How well can you get students to believe they can do well in school-work?”; Cronbach alpha = .88). The teachers rated their perceived self-efficacy here, on 9-point Likert scales that ranged from 1 (nothing) to 9 (a great deal).

The SPSS (version 26) was used for all of the statistical analyses carried out.

Results

Differences in classroom management practices

To investigate possible differences in the teachers’ practices according to their years of teaching experience and school level (aim 1), we ran two multivariate analyses of variance (MANOVA). These data are presented as means, SD and *post-hoc* tests in Table 1.

The teachers differed significantly for both of these variables, as teaching experience [$F(12.958) = 9.18, p < .001, \text{Wilk}'s \lambda = .89, \eta_p^2 = .04$] and school level [$F(9.983) = 32.12, p < .001, \text{Wilk}'s \lambda = .76, \eta_p^2 = .09$]. For their teaching experience, univariate ANOVA revealed significant differences for ER ($p < .001, \eta^2 = .07$) and AS ($p < .001, \eta^2 = .07$). Duncan corrected *post-hoc* tests revealed higher ER and AS scores in the tea-

chers with more than 10 years of experience. For their school level, univariate ANOVA revealed significant differences for ER ($p < .001$, $\eta^2 = .04$), AS ($p < .001$, $\eta^2 = .21$) and EMR ($p < .01$, $\eta^2 = .02$). Duncan corrected *post-hoc* tests revealed significantly higher ER and AS scores for pre-primary and primary school teachers. For EMR scores, the upper-secondary school teachers had higher scores than the primary and lower-secondary school teachers, whereas pre-primary school teachers did not differ from the other school levels.

Tab. 1 – *Statistics for the Teacher’s Educational Practices Questionnaire (TEP-Q) dimensions of classroom management according to teaching experience and school level*

Dimen- sions	Variables					Dun- can post hoc	School level				Dun- can post hoc
	Teaching experience (years)						Pre- primary	Primary	Lower se- condary	Upper se- condary	
	<6	6-10	11-20	21-30	>30						
	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	
Educational Relationship (ER)	4.02 (0.49)	4.13 (0.43)	4.23 (0.43)	4.31 (0.39)	4.33 (0.41)	1,2 < 3,4,5	4.24 (0.43)	4.23 (0.43)	4.05 (0.47)	4.01 (0.48)	6,7 > 8,9
Active Strategies (AS)	2.53 (0.87)	2.68 (0.85)	2.95 (0.84)	3.12 (0.80)	3.07 (0.70)	1,2 < 3,4,5	3.59 (0.65)	2.83 (0.75)	2.43 (0.83)	2.38 (0.88)	6,7 > 8,9
Emotional Regulation (EMR)	3.88 (0.57)	3.82 (0.60)	3.84 (0.57)	3.83 (0.61)	3.87 (0.49)		3.86 (0.61)	3.80 (0.54)	3.77 (0.65)	3.98 (0.55)	9 > 7,8

Data are means (standard deviation)

Tab. 2 – Descriptive statistics and correlations for study variables

Variables	n	Range	Mean	SD	1	2	3	4	5	6	7	8	9	10
					ER	AS	EMR	CC	IC	CT	TTCM	EIS	ECM	ESE
TEP-Q:														
1. ER	1056	1-5	4.17	.46	1									
2. AS	1036	1-5	3.23	.87	.42**	1								
3. EMR	1055	1-5	4.25	.57	.18**	.10**	1							
CCIS:														
4. CC	528	1-6	5.12	.50	.30**	.12**	.10*	1						
5. IC	528	1-6	3.14	.45	-.11*	-.05	-.11*	-.20**	1					
TBS:														
6. CT	600	1-6	4.29	.53	.38**	.40**	.14**	.56**	-.15**	1				
7. TTCM	591	1-6	3.39	.55	.03	-.16**	-.05	-.07	.38**	-.15**	1			
TSES:														
8. EIS	258	1-9	7.07	.92	.45**	.27**	.25**	.16*	-.19**	.11	-.00	1		
9. ECM	259	1-9	7.03	.12	.43**	.34**	.23**	.12	-.15*	.04	-.05	.76**	1	
10. ESE	259	1-9	7.23	.93	.47**	.31**	.25**	.26**	-.20**	.16**	-.07	.85**	.80**	1

*p < .05; **p < .01

TEP-Q, Teacher's Educational Practices Questionnaire; CCIS, Constructive Conceptions of Intelligence Scale; TBS, Teaching Beliefs Survey; TSES, Teachers' Sense of Efficacy Scale; ER, Educational Relationships; AS, Active Strategies; EMR, Emotion Regulation; CC, Constructive Conceptions; IC, Innate Conceptions; CT, Constructive Teaching; TTCM, Traditional Teaching and Classroom Management; EIS, Efficacy for Instructional Strategies; ECM, Efficacy for Classroom Management; ESE, Efficacy for Student Engagement.

Relationships between classroom management practices and beliefs

To investigate the association between practices and beliefs, we examined intercorrelations among the classroom management practices of intelligence conceptions, teaching beliefs and self-efficacy (aim 2). As shown in Table 2, the three dimensions of the TEP-Q were positively related to constructive intelligence conceptions (CCIS) and constructive teaching beliefs (TBS). In addition, the correlations with innate intelligence conceptions (CCIS) were negative and moderate for the subscales ER and EMR ($-.11$, for both), while those with traditional teaching and classroom management beliefs (TBS) were negative and strong for the subscale AS ($-.16$). Similarly, all of the TEP-Q dimensions of classroom management were strongly related to self-efficacy (TSES), with correlations ranging from $.23$ to $.42$. As expected, teachers who scored higher on their own educational practices were more likely to score higher on their self-efficacy for classroom management, student engagement and instructional strategies.

Effects of beliefs, school level and teaching experience on classroom management practices

For the third aim, three hierarchical regression analyses were conducted as predictors of the three TEP-Q dimensions, which considered: school level and teaching experience (step 1); intelligence conceptions (step 2), teaching beliefs (step 3); and lastly, self-efficacy (step 4). These data are presented in Table 3. For ER, at the second step, the additional contribute of CC significantly improved the explained variance ($R^2 = .10$). At the third step, IC and both teaching beliefs (CT, TTCM) significantly improved the explained variance ($R^2 = .23$). At the final step, the contribution of teaching beliefs was still significant, and the explained variance further increased, but there were no effects of the self-efficacy dimensions ($R^2 = .33$). For AS, at the first step, the effect of school level and teaching experience was significant ($R^2 = .09$). At the second step, the variables did not significantly contribute to increase the explained variance. At the third step, there were significant effects of school level, teaching experience, both intelligence conceptions (IC, CC) and CT, with a large increase in the explained variance ($R^2 = .30$). At the final step, the contributions of school level, intelligence conceptions and CT were still significant, with the additional contribution of only ECM self-efficacy, further increasing the explained variance ($R^2 = .35$). For EMR, there were significant effects of school level for all of the steps, and for CT at the third step ($R^2 = .16$).

Tab. 3 – *Hierarchical multiple regression models*

Step	Variable	Dimensions								
		Educational relationships			Active strategies			Emotion regulation		
		B	SE B	β	B	SE B	β	B	SE B	β
1	School level	.03	.04	.06	-.23	.06	-.26**	.14	.05	.22**
	Teaching experience	.07	.05	.12	.17	.08	.16*	.05	.06	.07
2	School level	.06	.04	.11	1.78	.85	-.26**	3.44	.62	.23**
	Teaching experience	.06	.05	.09	-.23	.06	.17*	.15	.05	.06
	IC (CCIS)	-.15	.09	-.14	.01	.01	.11	.05	.06	-.07
	CC (CCIS)	.21	.08	.21**	.01	.01	.06	-.10	.11	.05
3	School level	.06	.04	.12	.10	.13	-.21**	.06	.09	.24**
	Teaching experience	.06	.04	.09	-.30	.89	.15*	2.58	.73	.06
	IC (CCIS)	-.20	.08	-.18*	-.01	.01	-.17*	.15	.05	-.08
	CC (CCIS)	.04	.08	.04	.01	.01	.18*	.04	.06	-.04
	CT (TBS)	.39	.09	.36**	.32	.13	.51**	-.11	.11	.19*
	TTCM (TBS)	.24	.07	.25**	-.30	.13	-.05	-.05	.10	.08
4	School level	.03	.04	.06	.91	.14	-.24**	.25	.11	.21**
	Teaching experience	.03	.04	.04	-.09	.11	.11	.09	.09	.01
	IC (CCIS)	-.13	.08	-.12	-.02	.01	-.21**	1.68	.76	-.03

CC (CCIS)	.04	.08	.04	.01	.01	.18*	.14	.05	-.02
CT (TBS)	.28	.08	.26**	.11	.07	.45**	.01	.06	.13
TTCM (TBS)	.21	.07	.22**	.40	.13	-.07	-.04	.11	.05
EIS (TSES)	.05	.07	.09	-.28	.12	.05	-.03	.10	.22
ECM (TSES)	.06	.05	.13	.81	.14	.20*	.17	.11	.14
ESE (TSES)	.09	.07	.16	-.12	.11	.01	.06	.09	-.09
R ²	.33			.35			.16		
F	8.97			9.90			3.34		

Step 1, teaching experience; step 2, intelligence conceptions, step 3, teaching beliefs; step 4, self-efficacy; CCIS, Constructive Conceptions of Intelligence Scale; TBS, Teaching Beliefs Survey; TSES, Teachers' Sense of Efficacy Scale; IC: Innate Conceptions; CC: Constructive Conceptions; CT: Constructive Teaching; TTCM: Traditional Teaching and Classroom Management; EIS: Efficacy for Instructional Strategies; ECM: Efficacy for Classroom Management; ESE: Efficacy for Student Engagement.

Discussion

This study uncovers the differences in classroom management practices according to school level and teaching experience, and their associations with the three categories of teachers' beliefs: intelligence conceptions, teaching beliefs and self-efficacy. We considered three dimensions of classroom management: educational relationships, active strategies and emotion regulation.

For the first aim, the results indicate that teachers significantly differed in their practices in relation to their years of experience and the school level where they were teaching. Consistent with previous studies (Martin & Shoho, 2000; Wolff et al., 2014; Berger et al., 2018), the more expert teachers (i.e., those with more than 10 years experience) paid more attention to educational relationships and used more active strategies. This suggests that the quality of teachers' practices develop with their experience. In addition, there were significant differences according to school level. In the literature (Randall & Engelhard, 2009; Jerome et al., 2009), pre-primary and primary school teachers indicated that they use more active strategies and pay more attention to educational relationships. Also, upper-secondary school teachers showed more control of their emotion regulation processes, compared to primary and lower-secondary teachers. The teachers appeared to adopt improved emotional regulation strategies potentially to better cope with the behaviour of adolescents.

The second aim was to analyse the relationships between classroom management practices and different teachers' beliefs. The assumed positive correlations between the three dimensions of classroom management with constructive intelligence conceptions, constructive teaching beliefs and self-efficacy were confirmed by these data. Constructivist beliefs about teaching and students' intelligence were related to teachers' practices. Here, viewing pupils as active participants in the process of acquiring knowledge, and stressing the development of thinking processes more than the acquisition of specific knowledge (OECD, 2009), defines teachers who are more oriented to optimal classroom management practices. In contrast, we hypothesised negative correlations among classroom management, traditional teaching beliefs and innate intelligence conceptions. This hypothesis is only partially satisfied, because the data did not show links for all of the dimensions of classroom management. Teachers who have traditional teaching and traditional classroom management beliefs do not use active strategies. Here, their role is the communication of knowledge, while making sure that the students concentrate, whereby they are better working alone. Instead, teachers who have

entity theories of intelligence will dedicate less attention to educational relationships, and are less able to regulate their emotion in the classroom (Brooks & Brooks, 1999; OECD, 2009). In line with the literature (Hoy, 2004; Anthony & Kritsonis, 2007; Klassen & Tze, 2014), self-efficacy and practices were linked. Therefore, to feel effective as teacher is strongly related for all of the dimensions of classroom management.

Finally, the results of the hierarchical regression analyses only partially support the third hypothesis. First of all, teaching experience did not explain any of the dimensions of classroom management, while school level was a strong predictor of emotion regulation and active strategies. In line with the already mentioned literature and the MANOVA results, active strategies are explained by lower school levels, while emotion regulation is explained by higher school levels.

For the role of the three categories of beliefs, these did not contribute to the explanation of emotion regulation. On the contrary, all of these beliefs had a role in adoption of active strategies. Intelligence conceptions explained active strategies in the expected direction. According to Dweck (2000), how teachers define intelligence affects their views towards students' roles. It follows that teachers who believe that intelligence can be cultivated through learning tend to use more active strategies, while those who believe that intelligence cannot be changed tend to use more transmissive teaching strategies. Similarly, constructive teaching belief was a predictor of active strategies, as the teachers who adopted more active strategies believed in constructive teaching, as has been shown by previous studies (OECD, 2009). Considering self-efficacy beliefs, only those related to classroom management had a role in active strategies. Teachers who used active strategies felt more confident about managing discipline in the classroom, motivated even the less interested students, and expressed their expectations in the student behaviour. According to Buehl and Beck (2015), the study of teachers' beliefs forms part of the process of understanding how teachers conceptualise their work, which is important, in turn, to an understanding of teachers' practices and their behaviour in the classroom. By empirically examining different teachers' beliefs here, we were able to provide a more comprehensive perspective of classroom management practices in this sample of Italian teachers.

This study has several limitations that can be improved upon in future studies. First, the self-reporting nature of the data might have limited the interpretation of the results. Here, the teachers might have reported their ideal behaviour, which might differ from the real educational practices that they adopt in the classroom. In addition, the data were collected at one time point, while practices and beliefs will indeed vary across one or

more school years. Future studies need to consider the same variables within a longitudinal design, while also considering outcomes variables, such as the school climate and academic achievements.

The results of this study have some particular implications for teacher training. To better equip teachers to manage the classroom, pre-service teacher and continuing education programmes could be used to introduce the impactful role that practices and beliefs have in the classroom. In particular, it will be important to create concrete opportunities for teachers to develop systematic reflective processes (e.g., Perrenoud, 1996), to provide occasions of mastery experience and modelling (see Bandura, 1997), and to develop socio-emotional key competences in the school context (Jennings & Greenberg, 2009).

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Un intervento per il potenziamento della lettura: nuove evidenze

An intervention to improve reading abilities: Further evidence

Melissa Scagnelli*, Francesco Della Beffa*, Francesca Santulli**

* Centro Euresis, Università IULM Milano
Via Carlo Bo 1 - 20143 Milano ;
e-mail: melissa.scagnelli@iulm.it;
e-mail: francesco.dellabeffa@iulm.it;
** Università Cà Foscari, Venezia
Dorsoduro, 3246, 30123 Venezia VE
e-mail: francesca.santulli@unive.it.

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Riassunto

L'articolo riferisce dei risultati di una sperimentazione relativa alla validità di un intervento volto a promuovere le abilità di lettura in soggetti adulti. Il corso Super Reading, che combina il potenziamento di diverse componenti della lettura (abilità metacognitive, mnemoniche, visuo-percettive e componenti emotive e motivazionali) ha mostrato di permettere ai partecipanti (giovani adulti, sia normolettori sia soggetti con DSA) miglioramenti significativi nella velocità di lettura e nella comprensione. Per escludere che tali miglioramenti siano dovuti a fattori diversi dalla partecipazione al corso, e in particolare per escludere la presenza di un effetto di apprendimento della tipologia di test utilizzato per misurare le prestazioni, si è proceduto alla raccolta e all'analisi di dati di controllo. Un gruppo di controllo di 34 soggetti normolettori ha svolto gli stessi test proposti durante il corso. Sono state misurate le differenze in 8 diversi parametri tra la prima e l'ultima prova. Tali parametri rispecchiano la struttura della prova, per la quale viene proposto un brano da leggere due volte, rispondendo dopo ciascuna lettura alle stesse dieci domande di comprensione; pertanto si considerano: tempo in prima lettura, in seconda e totale, comprensione in prima e seconda lettura; efficacia di lettura (in prima, in seconda lettura e totale), un indice che combina tempo e percentuale di comprensione. Questi dati sono stati messi a

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confronto con quelli ottenuti da un campione di 154 normolettori che hanno partecipato al corso. Le differenze tra prima e ultima prova (che corrispondono ad un pre- post-corso nel gruppo sperimentale) registrate per i due gruppi sono state confrontate e hanno mostrato di essere statisticamente significative nei parametri relativi al tempo e all'efficacia di lettura. Pari significatività non si riscontra per la comprensione, il cui dato è però soggetto alla presenza di un marcato effetto tetto. Nel loro insieme, i risultati mostrano l'efficacia del corso nel promuovere la lettura, con miglioramenti nella velocità e nella comprensione del testo.

Parole Chiave: lettura silente, comprensione, SuperReading, intervento sulla lettura

Abstract

The paper presents further results concerning the evaluation of the effects of an intervention aimed at improving reading abilities in adulthood. Previous research has shown that the Super Reading course, hinging on strategies and techniques that enhance different components of reading (i.e., metacognitive abilities, memory, visual-perceptive abilities, emotional aspects, and motivation), allows adult participants (both normotypical and with dyslexia) to improve both their reading speed and their comprehension levels. The improvement is significant and hardly attributable to different factors but course participation. In order to give evidence of this and, at the same time, to evaluate the possible effect of knowledge of the testing procedure, a control group has been taken into consideration. This group, including 34 normotypical adult readers, has been administered the same readings tests as the participants to the course, randomly distributed in three/four different sessions. Differences between the first and the last session have been measured for eight parameters reflecting the structure of the tests. Each test consists of a 400-word passage to be read silently, followed by ten open questions. The passage is then read again and the same questions have to be answered. The measures considered for the analysis comprise: first reading time, second reading time, total reading time, first reading comprehension, second reading comprehension, and three measures of reading effectiveness (at first reading, at second reading, and total), a synthetic measure combining time and comprehension. The data of the control group have been compared with those obtained by a sample of 154 normotypical readers, who attended the course. Comparing the differences between first and last session statistically significant results in the measures of both time and reading effectiveness emerged. The differences for comprehension were not statistically significant, but these measures were strongly influenced by a ceiling effect. On the whole, the results confirm the effectiveness of the course in promoting reading abilities, in terms of both speed and comprehension

Keywords: silent reading, comprehension, Super Reading, reading training

Introduzione

Nell'attuale panorama della ricerca sui vari aspetti della lettura, le conoscenze inerenti l'età adulta sono ancora ridotte, benché esse possano avere importanti ricadute in ambito clinico, diagnostico, abilitativo e formativo. L'analisi della letteratura conferma che ad oggi sono molto numerose le ricerche sullo sviluppo delle abilità di lettura e comprensione in età infantile, mentre mancano ricerche altrettanto approfondite per l'età adulta. Per quanto riguarda la disponibilità di strumenti psicometrici per la valutazione delle abilità di lettura, la pubblicazione di batterie per la valutazione delle abilità di lettura e comprensione in età adulta è relativamente recente, basti pensare che il primo test per l'età adulta in lingua italiana, adattato dal francese, è stato pubblicato nel 2017 (George & Pech-Georgel); in seguito sono state pubblicate due batterie specificamente sviluppate per l'italiano, la BDA 16-30 (Ciuffo et al., 2019) e la LSC-SUA (Cornoldi, Montesano & Valenti, 2020). Ancor più limitate sono le proposte di interventi di potenziamento (Simmons & Singleton, 2000; Tops et al., 2012; Angelini et al., 2015). Inoltre le ricerche si sono maggiormente concentrate sullo studio della lettura separando la componente della decodifica da quella della comprensione, trascurando così il fatto che lo scopo primario della lettura è l'acquisizione di nuove conoscenze e la comprensione del testo; infine, la maggiore attenzione per la lettura ad alta voce ha portato a trascurare quella silente che rappresenta, invece, la modalità privilegiata dagli ultimi anni della scuola primaria in poi (Fuchs et al., 2001).

La lettura è un'abilità molto complessa che coinvolge numerosi processi cognitivi ed emotivi (Boden & Giaschi, 2007; Geiger et al., 2008), tra cui: abilità linguistiche, visuo-percettive, memoria di lavoro, attenzione, metacognizione, motivazione all'apprendimento, atteggiamento verso lo studio (Rapp, van den Broek, 2005; Keenan, et al., 2008). L'importanza di tutti questi aspetti è confermata dal fatto che le ricerche relative ai disturbi specifici dell'apprendimento mostrano che studenti che li presentano manifestano carenze in tali componenti e che le carenze, spesso, permangono in età adulta. Nello specifico, i soggetti con diagnosi di disturbo specifico dell'apprendimento (DSA) sperimentano difficoltà di diversa natura che si possono raggruppare come segue:

1) problemi di natura linguistica (Cardinaletti, 2014), fra cui disturbi fonologici (Shaywitz et al., 1999; Ramus et al., 2003), problemi di natura lessicale con un significativo impoverimento del lessico (Snowling, et al., 2003), mancata automatizzazione dei processi lessicali (Fawcett & Nicolson, 1995; Simmons & Singleton, 2000), difficoltà in compiti di denominazione (Manis et al., 2000), deficit sintattici – per esempio fati-

cano a comprendere e produrre frasi complesse (relative, passive, con negazioni) (Wisehart et al., 2009; Robertson & Joanisse, 2010; Rizzato et al., 2014) –, difficoltà in compiti di comprensione orale (Oakhill & Cain, 1997; Simmons & Singleton, 2000);

2) problemi di natura visiva: faticano a riconoscere visivamente le lettere e le parole (Jones et al., 2008), durante la lettura compiono movimenti oculari poco efficaci in quanto tendono a compiere fissazioni più lunghe, movimenti saccadici più corti, un numero maggiore di fissazioni e regressioni rispetto ai normolettori (Eden et al., 1994; Spinelli, et al., 2002; Swanson, 1999) ed incontrano difficoltà a spostare velocemente il focus di attenzione visivo (Ziegler et al., 2008);

3) difficoltà nella memoria di lavoro (Ramus & Szenkovits, 2008; Smith-Spark & Fisk, 2007);

4) deficit nelle abilità metacognitive (Butler, 1998; Klassen, 2002, 2006; Mason & Mason, 2005; Camahalan & Marsha, 2006; Job & Klassen, 2012): faticano a scegliere strategie di lettura efficaci e ad adattarle sulla base della tipologia testuale e dello scopo della lettura, ad identificare i punti-chiave di un testo, a trovare le eventuali incoerenze, e a compiere inferenze (Oakhill & Cain, 1997; Anderson & Ambruster, 1984; Baker & Beall, 2009);

5) difficoltà emotive: nonostante i risultati non siano sempre omogenei (Novita, 2016), si riscontra spesso un alto livello di ansia e un basso livello di autostima e autoefficacia in compiti accademici (Patton & Pollaway, 1992; Cantwell & Baker, 1991).

Sono pochi gli studi che documentano i cambiamenti nella lettura in soggetti adulti con dislessia nel contesto italiano (Lami et al., 2008). Alcune ricerche mostrano che anche in età adulta permane una maggiore lentezza e una minore accuratezza nella lettura di parole ad alta voce (Bruck, 1992), difficoltà nel prendere appunti, scrivere saggi, rivedere il materiale di studio, comprendere testi complessi e lunghi (Gilroy & Miles, 1996; Riddock et al., 1997; Singleton, 1999), difficoltà in prove di vocabolario, di comprensione orale (Gottardo et al., 1997), di *spelling* e di scrittura (Shaywitz et al., 1999; Hatcher et al., 2002). Si riscontrano inoltre effetti secondari come mancanza di fiducia bassa autostima, alto livello di frustrazione (Riddick, 1996). Si rilevano, altresì, difficoltà nella memoria verbale a lungo termine (Swanson & Hsie, 2009).

Al di là della mole di studi centrati sulle difficoltà di lettura, le ricerche hanno da sempre considerato (seppure di solito separatamente) i due aspetti-chiave della decodifica e della comprensione. Per lungo tempo si è teso a considerare la comprensione come una competenza strettamente correlata alla decodifica (De Beni & Pazzaglia, 1995), ma a partire dagli anni '70 le ricerche hanno messo in evidenza che la comprensione è mol-

to più complessa e articolata e coinvolge processi di analisi linguistica, semantica e situazionale, ovvero di rappresentazione mentale dei contenuti esposti nel testo (Kintsh & Rawson, 2005), oltre alle abilità fonologiche, linguistiche, cognitive e metacognitive (Boden & Giaschi, 2007; Geiger et al., 2008). Da alcuni anni si è iniziata a mettere in evidenza l'importanza di considerare approfonditamente e maggiormente la comprensione anche in ambito diagnostico; nello specifico la Consensus Conference nel 2007 ipotizzava già l'esistenza di un disturbo della comprensione e suggeriva di approfondire la tematica, mentre il DSM 5 (APA, 2014) inserisce nel criterio A2 della dislessia l'importanza di esplicitare la presenza di difficoltà di comprensione.

Gli attuali strumenti diagnostici, in accordo con le Linee Guida, prevedono di indagare separatamente tali dimensioni: la decodifica viene indagata attraverso la lettura ad alta voce di un testo, misurando velocità di lettura e numero di errori (Hasbrouck & Tindall, 2006); la comprensione attraverso la lettura silente di un brano a cui seguono domande a scelta multipla, di cui si registra il numero di risposte corrette. I parametri velocità e accuratezza nella decodifica vengono considerati separatamente dai risultati ottenuti al test di comprensione (Cornoldi & Colpo, 2012). Tale modalità di indagine presenta alcuni limiti: innanzi tutto considera separatamente decodifica e comprensione, trascurando il fatto che lo scopo primario della lettura è la comprensione; inoltre indaga l'accuratezza e la velocità solo nella modalità di lettura ad alta voce, mentre le ricerche mostrano che già a partire dagli ultimi anni di scuola primaria le persone tendono ad adottare come modalità di lettura preferita quella nella mente (Skinner et al., 2002). Molto probabilmente il motivo per cui la ricerca ha maggiormente indagato la lettura ad alta voce rispetto a quella silente risiede nella difficoltà di averne una misura oggettiva (Rubin, 2013): sono state fatte diverse proposte in ambito psicometrico, la maggioranza delle quali appare non soddisfacente (Simmons & Singleton, 2000; Price, et al., 2016; Van den Boer et al., 2014). Di recente è stato pubblicato, invece, nel contesto italiano il primo test (Ciuffo et al., 2019) che permette di indagare la velocità di lettura silente attraverso un brano di 1200 sillabe che richiede al lettore di eseguire 9 diverse istruzioni; questo permette di verificare che il tempo dichiarato corrisponda a quello effettivamente impiegato e che il lettore stia decodificando e comprendendo nel modo corretto il testo.

D'altra parte, analizzando il panorama scientifico internazionale inerente i protocolli di valutazione e intervento sulla lettura emerge chiaramente la carenza di dati inerenti l'età adulta. Una ricerca condotta su PubMed (e pubblicata in Santulli & Scagnelli, 2019) mostra che se si indaga quanti articoli pubblicati nel decennio 2009-2018 contengono nel

titolo la parola *dyslex** (o *read**) e *child** si ottengono 1225 risultati, 717 se si considerano solo gli anni 2014-2018. Se a *child** si sostituisce *adult** i numeri diminuiscono significativamente: 301 nel decennio considerato, 157 quinquennio. Se si ripete la ricerca inserendo la parola *intervention** i numeri ovviamente sono molto più bassi, ma la differenza tra bambini e adulti aumenta sensibilmente: 47 vs 5 nel decennio considerato.

Alla luce di quanto fin qui osservato, appare particolarmente interessante e innovativo il corso Super Reading, un corso sviluppato nel contesto anglosassone (Cole, 2009; Cooper, 2009a, 2009b, 2012) rivolto nello specifico a giovani adulti, volto a migliorare le abilità di lettura e comprensione. La struttura del corso concepito da Cole (2009) tiene conto, in particolare, degli studi condotti sul ruolo delle abilità metacognitive (Klassen, 2002), mnemoniche (Ramus & Szenkovits, 2008) e visuo-percettive (Ziegler et al., 2008) nell'influenzare la prestazione dello studente in compiti di lettura e comprensione. Le diverse strategie volte a migliorare tali abilità vengono integrate e proposte in un unico corso articolato su 9 incontri. Il corso considera, pertanto, tutte le diverse componenti coinvolte nel processo di lettura: aspetti visuo-percettivi e *span* visivo, abilità di memorizzazione, abilità metacognitive, aspetti emotivi. Il corso presenta diversi aspetti interessanti in relazione alle considerazioni sopra esposte: è un corso sviluppato specificamente per l'età adulta, si rivolge sia a studenti normolettori che a studenti con diagnosi di DSA, inoltre prende in considerazione la lettura silente (Santulli & Scagnelli, 2017; 2018a, 2018b, 2019, Scagnelli et al., 2018) e utilizza test che indagano sia la velocità di lettura silente sia le abilità di comprensione, combinando inoltre i dati ottenuti in un parametro sintetico denominato "efficacia di lettura" (Scagnelli et al., 2019).

Il progetto Super Reading

Il corso Super Reading nasce in California, dall'esperienza di un ricercatore, Ron Cole, che nell'ambito della sua attività *life coach* sviluppò un programma finalizzato a promuovere la velocità di lettura e la capacità di comprensione del testo (Cole, 2009). I brillanti risultati ottenuti, misurati con test *ad hoc* e attraverso la valutazione soggettiva dei partecipanti, indussero Cole ad avviare una ricerca, in collaborazione con l'unità LLU+ (Language and Literacy Unit) della South Bank University (London), anche per indagare più a fondo le prestazioni dei partecipanti con dislessia, che mostravano miglioramenti persino maggiori di quelli dei normolettori. Questa circostanza trovava conferma nelle ricerche svolte a Londra (Cooper, 2009a, 2009b, 2012). Grazie ad un accordo con

l'Università IULM di Milano, il corso è stato tradotto ed adattato al contesto italiano e ad oggi è stato proposto ad un totale di 377 partecipanti (154 lettori normotipici e 223 lettori con DSA).

Il corso si articola in nove incontri settimanali, guidati da un *coach*, e promuove diversi processi e abilità legate alla lettura, che ricadono tra quelle menzionate sopra e generalmente problematiche in presenza di difficoltà. In particolare, ci si focalizza su:

1) abilità metacognitive, che sono ritenute essenziali nei processi di apprendimento e per lo sviluppo di numerose competenze accademiche (Pressley & Gaskins, 2006; Hacker et al., 2009; Williams & Atkins, 2009; Vanderswalmen et al., 2010; Scagnelli et al., 2018; Cornoldi, 1995; Albanese et al., 2003), soprattutto per lo sviluppo della lettura strategica e della comprensione. Per questi ultimi aspetti, fattori cruciali sono ritenuti: l'attivazione delle conoscenze pregresse, la creazione di connessioni tra nuovi contenuti e conoscenze pregresse, la discriminazione tra informazioni salienti e non, l'attivazione di strategie adeguate al testo, strumenti di auto-controllo e di auto-valutazione (Efklides, 2006; Law et al., 2008; Kostons e Van der Werf, 2015; Scagnelli et al., 2018; Santulli & Scagnelli, 2019). Nonostante la ricerca riconosca l'importanza delle strategie metacognitive, esse sono raramente oggetto di insegnamento esplicito (Pressley et al., 1998), mentre studi più recenti ne sottolineano ancora la necessità (Boulware-Gooden et al., 2007). Tutti gli aspetti più importanti della metacognizione sono affrontati nel corso, stimolando l'attivazione delle conoscenze pregresse con ipotesi a partire dai titoli, identificazione dei concetti-chiave, tecniche di anteprima e di revisione;

2) memorizzazione, in considerazione del ruolo centrale della memoria di lavoro per l'acquisizione di conoscenze e abilità (Baddeley, 1990; Alloway et al., 2005; Alloway & Alloway, 2010; Yang et al., 2017). La ricerca conferma che la memoria di lavoro è un buon predittore delle abilità di lettura (Gathercole et al., 2004; Nevo & Breznits, 2013) e del successo accademico (Holmes et al., 2009). In particolare, in età adulta essa influenza lo sviluppo di numerose abilità fondamentali per l'apprendimento, come la presa di appunti, la capacità di rispondere e di svolgere compiti (Bacon et al., 2013). Un training specifico per la memoria di lavoro ha conseguenze positive sulle abilità di lettura (Yang et al., 2017), mentre l'insegnamento di tecniche di memorizzazione migliora le abilità accademiche (Wittrock & Lumsdaine, 1997). Nel corso SuperReading la memorizzazione è stimolata con attività quali la ripetizione, la creazione di mappe mentali e la cosiddetta Stanza della Memoria, una tecnica specifica di memorizzazione che si ispira a principi derivanti dalla pratica retorica classica;

3) componenti emotive e motivazionali, con particolare riferimento alla gestione dell'ansia e all'autostima, il cui ruolo fu sottolineato per la prima volta da Borkowski e Muthukrishna (1992), i quali mostrarono che il successo nell'acquisizione di strategie efficaci si accompagna all'abilità di collegare il processo di apprendimento con il successo ottenuto nell'applicazione delle nuove procedure, attraverso un circolo virtuoso che rafforza la motivazione. Il rapporto tra autostima e successo accademico è stato messo più volte in evidenza (Kershner, 1990; Preeti et al., 2016), così come il collegamento tra risultati accademici e livelli di ansia (Alam, 2013) e tra ansia e motivazione (Damer & Melendres, 2016). Nel corso Super Reading il *coach* svolge un ruolo essenziale a supporto di quest'area, promuovendo atteggiamenti inclusivi e cooperativi, stimolando la motivazione e incoraggiando allo svolgimento degli esercizi (Angel & Amar, 2005). Si fa ricorso anche a tecniche di visualizzazione, affermazioni positive e strategie di supporto tra pari per rinforzare la motivazione e l'autostima;

4) processi visivi e attentivi che sono alla base della lettura, nella fondamentale alternanza tra fissazioni e movimenti saccadici (Franceschini et al., 2017; Grainger et al., 2016). Poiché, com'è noto, la percezione avviene durante le fissazioni, la velocità di lettura è fortemente legata alla quantità di grafemi che possono essere colti con una fissazione, ovvero riconosciuti senza movimento oculare (*visual span*) (O'Reagan, 1990, 1991). L'ampiezza del *visual span* è stata messa in relazione con la velocità di lettura (Legge et al., 2001), mostrando che per migliorare le prestazioni di lettura è importante incrementarla. Una tecnica specifica di lettura, denominata *eye-hop*, è utilizzata e esercitata costantemente durante il corso Super Reading per sviluppare la capacità di cogliere sempre più parole con una sola fissazione, con l'aiuto di un puntatore (il dito indice ovvero una matita o penna) che guida il movimento oculare. In tal modo la lettura diventa più veloce, ma non si compromette la comprensione.

Come accennato sopra, le prestazioni di lettura vengono rilevate attraverso test ad hoc, somministrati durante il corso a partire dal primo incontro e concludendo con l'ultimo, a distanza di circa nove settimane. Ad oggi i risultati di queste rilevazioni hanno mostrato, in analogia con quanto già rilevato a Londra, che i partecipanti ottengono miglioramenti statisticamente significativi in tutti i parametri considerati nel test (velocità, comprensione e la loro combinazione in un indice sintetico denominato Efficacia di Lettura), e ciò vale tanto per i normolettori quanto per i partecipanti con DSA (cfr., tra gli altri, Scagnelli et al., 2018a, 2019). Inoltre, l'effetto positivo del corso è stato confermato dal confronto con le prestazioni ottenute da un gruppo di controllo che ha effettuato le stes-

se prove, alla stessa distanza temporale, senza alcun tipo di intervento (Scagnelli et al., 2020). In quello studio, tuttavia, la numerosità del gruppo di controllo si riduceva notevolmente se in esso venivano inseriti solo i soggetti che avevano eseguito più di due prove, in analogia con quanto avviene nel normale svolgimento dei corsi.

Obiettivo di questo intervento è corroborare ulteriormente l'assunto di efficacia del corso per i normolettori attraverso l'ampliamento del gruppo di controllo, facendo in modo che anche il numero di prove eseguite dai soggetti inseriti in questo gruppo rispecchi più da vicino le condizioni individuate per i partecipanti al corso.

Metodi e materiali

Disegno di ricerca

La ricerca è concepita secondo un modello A-B (baseline /trattamento) (Cooper et al., 2007). Pertanto, per misurare l'efficacia del corso Super Reading si prendono in considerazione i risultati ottenuti all'inizio (primo incontro) e alla fine (ultimo incontro). I partecipanti al corso vengono valutati utilizzando sei diversi test di lettura (v. oltre Prove di lettura), distribuiti casualmente. Il valore di *baseline* viene quindi ottenuto con il test effettuato prima che inizi la didattica e la pratica, mentre il valore finale viene acquisito alla conclusione, dopo circa nove settimane. Il gruppo di controllo è stato testato con le stesse prove, distribuite ugualmente in modo casuale.

Campione

Per questo studio sono stati considerati 154 normolettori che hanno partecipato al corso Super Reading. Si tratta di soggetti adulti con almeno 13 anni di scolarizzazione, senza pregressa diagnosi di DSA o altri disturbi. Benché il corso prevedesse lo svolgimento di sei prove di lettura, analisi effettuate nel corso della ricerca hanno mostrato che i risultati dei partecipanti che avevano svolto 4 prove non differivano significativamente da quelli di chi ne aveva svolte 5 o sei (Santulli & Scagnelli, 2018a) consentendo di inserire anche i primi nella popolazione di studio.

Nel reclutamento del gruppo di controllo si sono incontrate difficoltà nell'ottenere da tutti i lettori coinvolti la partecipazione a tutte le sessioni di rilevazione previste. Alcuni si sono presentati per sole due rilevazioni e quindi non sono stati considerati per questo lavoro, in quanto si è ritenuto che le condizioni di somministrazione fossero troppo diverse. Si sono presi in considerazione i soggetti che hanno svolto 4 prove (N = 29), che corrispondono allo schema di somministrazione del gruppo sperimentale, ai quali sono stati aggiunti 5 soggetti che hanno svolto 3 pro-

ve, poiché un confronto tra i risultati da loro ottenuti e quelli degli altri controlli non mostrava significative differenze nella maggioranza dei parametri considerati, il test U di Mann-Whitney per la differenza tra i soggetti con 3 e con 4 prove applicato a tutti i 24 indicatori in esame è risultato significativo solo in due casi: TempoRevFirst ($U = 29.5$; $p = 0.036$) e ELTotFirst ($U = 31$; $p = 0,044$). Pertanto il gruppo risulta composto da un totale di 34 soggetti normolettori, dei quali 5 hanno svolto 3 test, mentre 29 hanno svolto 4 prove.

Il gruppo sperimentale è composto da 41 maschi e 113 femmine con età mediana pari a 22 anni e con istruzione media superiore (71%) o laurea (29%). Il gruppo di controllo è composto da 34 soggetti, di cui 11 maschi e 23 femmine con età mediana 22 e con istruzione media superiore (62%) o laurea (38%). Analisi statistiche preliminari hanno mostrato che pur prendendo in considerazione gruppi di diversa numerosità la potenza del test rimane al di sopra della soglia convenzionalmente accettata.

Prove di lettura

Le prove di lettura sono state sviluppate traducendo ed adattando i test originari in lingua inglese, già utilizzati nella pratica e nella ricerca anglosassone (per una descrizione del processo di traduzione e validazione in italiano cfr Santulli & Scagnelli, 2019: 81-82).

Ciascuna prova consiste in un brano di circa 400 parole, proposto per la lettura in modalità silente e seguito da 10 domande aperte che indagano in modo molto puntuale la comprensione. La prova viene somministrata ad un piccolo gruppo, in presenza dell'esaminatore. Viene chiesto ai soggetti di leggere, ciascuno nella propria mente, una prima volta il brano, prendendo nota del tempo impiegato; quindi vengono proposte le domande alle quali bisogna rispondere senza poter fare riferimento al testo; si procede poi ad una riletture, sempre in modalità silente, anch'essa cronometrata, in seguito alla quale sono riproposte le stesse domande a cui rispondere senza poter avere accesso né al testo né alle risposte date in prima lettura. La prova utilizzata (che non è altro che la versione italiana delle prove originariamente sviluppate per la versione inglese del corso) presenta pertanto una peculiarità: il testo viene proposto due volte per la lettura e ne viene testata in entrambe la comprensione (Scagnelli et al., 2018; Scagnelli et al., 2020). Tale scelta trova spiegazione nel rationale del corso, il cui obiettivo è insegnare e potenziare l'utilizzo di strategie di lettura che possano essere utili e funzionali nella vita quotidiana di un giovane adulto. A questo proposito, giova ricordare che a partire dai primi studi condotti sul metodo di studio è stata sottolineata l'importanza della riletture in fase di studio sia per favorire una migliore com-

preensione dei contenuti sia per identificare i concetti chiave (Thompson & Robinson, 1972; De Beni et al., 2014). Tanto in prima quanto in seconda lettura, la comprensione viene misurata assegnando un punteggio a ciascuna risposta: 10 nel caso di risposta esatta, 5 in caso di risposta incompleta o parzialmente corretta, zero in caso di risposta errata o omessa. Pertanto, mentre la scala di misura del tempo non è teoricamente soggetta a limitazioni, la misura della comprensione corrisponde alla percentuale di testo correttamente compresa e non può eccedere 100. Questa scala di misurazione, come si vedrà, produce un effetto tetto sui valori ottenuti.

Si rilevano quindi otto misure: il tempo in prima lettura (T1), il tempo in seconda lettura (T2), la comprensione in prima (C1) e in seconda lettura (C2). Viene quindi ottenuto il tempo totale di lettura ($T1 + T2 = TTOT$). Inoltre, si calcola un indice, denominato Efficacia di lettura (EL), che sintetizza la misura del tempo e quella della comprensione e indica il numero di parole correttamente comprese nell'unità di tempo, utilizzando la seguente relazione: $(Parole * C/100) / T$. Questo indice viene calcolato con i dati relativi alla prima lettura (EL1), alla seconda lettura (EL2) e infine considerando il tempo totale e il livello di comprensione finale (ELTOT).

L'analisi dei dati ottenuti è stata effettuata con il software IBM SPSS (versione 26). Dopo le verifiche preliminari, considerando che la maggior parte delle variabili indagate non soddisfacevano l'ipotesi di normalità o quella di omogeneità delle varianze tra gruppo sperimentale e gruppo di controllo, si è proceduto con l'esecuzione di test non parametrici. In particolare, il comportamento dei soggetti del gruppo sperimentale e del gruppo di controllo (separatamente considerati) è stato analizzato utilizzando il test dei ranghi con segno di Wilcoxon per tutti gli otto parametri descritti sopra. Le differenze tra il gruppo sperimentale e il gruppo di controllo sono state analizzate con il test U di Mann-Whitney.

Risultati

La Figura 1 mostra la variazione della prestazione relativamente al tempo totale impiegato per la lettura. Sommando i tempi di prima e seconda lettura, i valori medi ottenuti dal gruppo sperimentale mostrano una diminuzione pari al 29,7%, che deriva da una diminuzione del 18,4% in prima lettura e del 44,1% in seconda. Il gruppo di controllo, invece, mostra un decremento medio del tempo di lettura totale del 2,8%, con un aumento del 2,1% in prima lettura e un decremento del 8,5% in seconda.

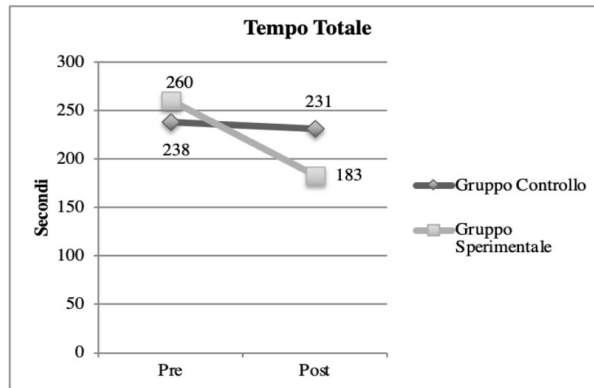


Fig. 1 - *Tempo totale medio impiegato dal gruppo sperimentale e dal gruppo di controllo pre-post corso*

Per quanto riguarda la comprensione, la prestazione dei due gruppi è simile: un miglioramento medio del 20,4% in prima lettura e del 7,3% in seconda per il gruppo sperimentale, a fronte di un miglioramento del 21,5% in prima lettura e 9,5% in seconda per il gruppo di controllo.

Per l'efficacia di lettura, la misura che fa riscontrare una differenza più marcata è quella relativa alla seconda lettura, nella quale il miglioramento del gruppo sperimentale è del 303,3%, mentre per il gruppo di controllo è 17,4%. In prima lettura, il miglioramento del gruppo sperimentale è del 47,8%, quello del gruppo di controllo del 21,8%. La Figura 2 mostra la variazione dell'efficacia di lettura totale per entrambi i gruppi: il gruppo sperimentale migliora del 58%, mentre il gruppo di controllo migliora dell'11,2%

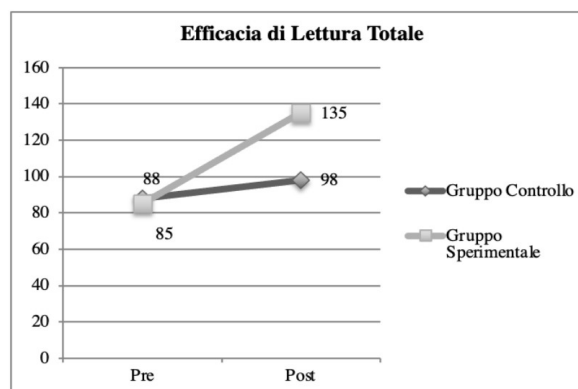


Fig. 2 - *Efficacia di lettura totale media impiegata dal gruppo sperimentale e dal gruppo di controllo pre-post corso*

Sono state condotte analisi statistiche inferenziali relativamente ai cambiamenti nella prestazione del gruppo sperimentale (Tabella 1) e del gruppo di controllo (Tabella 2) e per confrontare le prestazioni date dai due gruppi (Tabella 3).

Tab. 1 - *Analisi delle differenze pre post training gruppo sperimentale. In accordo alla classificazione di Cohen, 1988; effect size per questo e per i successivi test non parametrici calcolati come rapporto Z/\sqrt{n} , con n = numerosità campionaria, in accordo con Tomczack, 2014)*

<i>Variabili Gruppo sperimentale (N=154)</i>	<i>Wilcoxon (z)</i>	<i>Significatività</i>	<i>Effect size</i>	<i>Mediana BL</i>	<i>Mediana post</i>
Tempo I lettura	Z=-7,786	p<0,001*	0,63	139,5	115,5
Tempo II lettura	Z=-10,104	p<0,001*	0,81	115,0	65,0
Tempo totale	Z=-10,199	p<0,001*	0,82	252,5	181,0
Comprensione I lettura	Z=-5,160	p<0,001*	0,42	55,0	70,0
Comprensione II lettura	Z=-4,650	p<0,001*	0,38	87,5	95,0
Efficacia di lettura in I lettura	Z=-8,309	p<0,001*	0,67	92,0	143,9
Efficacia di lettura in II lettura	Z=-9,998	p<0,001*	0,81	170,7	349,1
Efficacia di lettura totale	Z=-10,236	p<0,001*	0,83	80,1	125,3

Come è possibile osservare nella Tabella 1, nel gruppo sperimentale si riscontrano differenze statisticamente significative in tutte le 8 variabili considerate, con dimensioni dell'effetto da moderate a grandi (in accordo alla classificazione di Cohen, 1988). L'entità di tali miglioramenti porta a ipotizzare che tali cambiamenti non siano conseguenza del semplice esercizio di lettura richiesto ad uno studente universitario, ma siano dipesi dall'aver partecipato al corso. Conferma di questa ipotesi può venire dall'analisi dei dati del gruppo di controllo.

Tab. 2 - *Analisi pre post gruppo di controllo*

<i>Variabili Gruppo di controllo (N=34)</i>	<i>Wilcoxon (z)</i>	<i>Significatività</i>	<i>Effect size</i>	<i>Mediana BL</i>	<i>Mediana post</i>
Tempo I lettura	Z=-1,248	p=0,212	0,21	125,5	122,0
Tempo II lettura	Z=-1,393	p=0,164	0,24	112,5	98,0
Tempo totale	Z=-0,342	p=0,732	0,06	252,5	226,0
Comprensione I lettura	Z=-2,425	p=0,015*	0,42	50,0	65,0
Comprensione II lettura	Z=-2,751	p=0,006*	0,47	82,5	90,0
Efficacia di lettura in I lettura	Z=-1,787	p=0,074	0,31	100,4	119,9
Efficacia di lettura in II lettura	Z=-2,334	p=0,020*	0,40	182,5	214,3
Efficacia di lettura totale	Z=-2,026	p=0,043*	0,35	81,4	95,6

La Tabella 2 mostra la prestazione data pre- e post-corso dai soggetti del gruppo di controllo. Non si riscontrano miglioramenti significativi nelle tre misure del tempo e nell'efficacia di lettura in prima lettura. Negli altri parametri si raggiunge la soglia della significatività. In particolare, per i valori relativi alla comprensione, i due gruppi si comportano in modo sostanzialmente analogo, mentre per l'efficacia in seconda lettura e per l'efficacia totale, il gruppo di controllo fa riscontrare valori di *effect size* più bassi rispetto a quello sperimentale.

Per analizzare le differenze tra le prestazioni dei due gruppi è stato effettuato il test U di Mann-Whitney. Come si evince dalla Tabella 3, i due gruppi differiscono in modo statisticamente significativo rispetto a tutte le variabili considerate, fatta eccezione per la comprensione. Per la variabile tempo ed efficacia di lettura in revisione e totale le differenze mostrano un *effect size* medio. Si riscontrano differenze statisticamente significative anche per l'efficacia in prima lettura, con *effect size* basso.

Tab. 3 - Prestazione del gruppo sperimentale vs gruppo di controllo

<i>Variabili</i>	<i>Mann-Whitney U</i>	<i>Significatività</i>	<i>Effect size</i>	<i>Mediana della variazione BL-post</i>	
				<i>Gruppo sperimentale</i>	<i>Gruppo di controllo</i>
Tempo I lettura	U=1224,0	p<0,001*	0,36	-24,5	4,5
Tempo II lettura	U=794,0	p<0,001*	0,47	-52,0	-5,0
Tempo totale	U=724,5	p<0,001*	0,48	-72,5	-5,5
Comprensione I lettura	U=2609,5	p=0,976	0,00	10,0	12,5
Comprensione II lettura	U=2421,5	p=0,491	0,05	5,0	10,0
Efficacia di lettura in I lettura	U=1868,0	p=0,009*	0,19	44,4	10,3
Efficacia di lettura in II lettura	U=953,0	p<0,001*	0,42	172,1	47,5
Efficacia di lettura totale	U=1121,0	p<0,001*	0,38	43,2	13,2

Discussione

I risultati nel loro insieme mostrano che la partecipazione al corso, nel quale si combinano interventi finalizzati al potenziamento di diverse componenti della lettura, permette di ottenere significativi miglioramenti nella prestazione di lettura, sia per quanto riguarda il tempo impiegato, sia per quanto riguarda la comprensione del testo. Tutte le misure considerate per l'analisi (T1, T2, TTOT, C1, C2, EL1, EL2, ELTOT) fanno registrare un miglioramento statisticamente significativo con una dimensione dell'effetto che varia da medio a alto.

I miglioramenti nelle misure di comprensione sono meno marcati, con una dimensione dell'effetto sensibilmente più bassa rispetto agli altri parametri. Questo si può spiegare considerando come viene effettuata la misura della comprensione che, come si è detto sopra (Prove di lettura), può raggiungere al massimo 100, determinando un effetto tetto che limita, di conseguenza, il miglioramento raggiungibile.

Le prestazioni del gruppo di controllo relativamente al tempo non mostrano alcun cambiamento significativo: i soggetti che non hanno seguito il corso, pur avendo presumibilmente avuto nell'intervallo di tem-

po intercorso tra le prove un comportamento di lettura analogo a quello del gruppo sperimentale (la maggioranza sono studenti universitari), dal primo all'ultimo test non fanno riscontrare riduzione significativa del tempo impiegato.

Per quanto riguarda la comprensione, invece, i risultati del gruppo di controllo non differiscono significativamente da quelli del gruppo sperimentale. Anch'essi, difatti, fanno registrare miglioramenti sia in prima sia in seconda lettura. In questo caso, oltre al già citato effetto tetto che appiattisce gli effetti di miglioramento, si può ipotizzare che il gruppo di controllo si sia giovato di un effetto di apprendimento. Benché le prove utilizzate siano sempre diverse, in quanto sono stati sviluppati sei differenti test di identica tipologia e di pari difficoltà che vengono casualmente distribuiti nelle sessioni di rilevazione, è tuttavia lecito ipotizzare un effetto di apprendimento della tipologia del test e della modalità di svolgimento della prova. Difatti, la prima volta i partecipanti potrebbero non aspettarsi domande specifiche su date, nominativi, luoghi ed eventi citati nel testo e potrebbero inoltre non avere adeguatamente compreso che le domande a cui dovranno rispondere dopo la seconda lettura saranno le stesse a cui hanno risposto dopo la prima lettura. Alla seconda sessione di prova la conoscenza di questi aspetti specifici della tipologia del test può ovviamente risultare vantaggiosa dal punto di vista della capacità di rispondere in modo corretto alle domande, sia in prima sia in seconda lettura.

I risultati più importanti ai fini della valutazione dell'effetto di miglioramento determinato dal corso sono quelli ottenuti dal confronto diretto tra le variazioni nelle prestazioni dei due gruppi.

Anche se i valori della comprensione migliorano in modo analogo (per l'effetto combinato della valutazione percentuale e dell'apprendimento della tipologia di test da parte dei controlli), i valori dell'efficacia di lettura e, in misura ancor maggiore, del tempo risultano statisticamente significativi. Per i controlli conoscere la tipologia della prova e le caratteristiche delle domande non influisce sul tempo impiegato nella lettura, presumibilmente perché questi soggetti non hanno sviluppato specifiche abilità per velocizzare la lettura esercitate durante il corso e in particolare non hanno svolto gli esercizi di *eye-hop*, che sembrano essere un elemento fondamentale per il successo di questa formazione (Santulli & Scagnelli, 2019: 113-116). Similmente, dal confronto tra i due gruppi emerge che le variazioni relative all'efficacia di lettura sono significativamente diverse, in particolare in revisione e nel valore totale, dove si riscontra una dimensione di effetto media. Quindi, anche nel parametro finale che sintetizza più globalmente la qualità della prestazione di lettura (Scagnelli et al., 2019) si conferma la differenza tra gruppo sperimentale e

gruppo di controllo. Ciò costituisce una prova della validità del corso Super Reading nel migliorare le abilità di lettura di soggetti normolettori adulti.

Conclusioni

I risultati di questo studio indicano che i miglioramenti significativi ottenuti dai partecipanti al corso Super Reading non possono essere attribuiti alla semplice pratica della lettura durante il periodo di svolgimento del corso, né alla conoscenza della tipologia di test e delle modalità di somministrazione. Se questi aspetti possono essere origine di miglioramenti molto più modesti, presumibilmente a causa di un effetto di apprendimento prevedibile e in qualche misura inevitabile, permangono tuttavia differenze significative tra le prestazioni di partecipanti e non partecipanti al corso.

Diversi aspetti del corso lo rendono particolarmente interessante: si rivolge all'età adulta, lavora sulla lettura silente, considera insieme velocità di decodifica e comprensione, può essere seguito sia in presenza che in assenza di difficoltà di lettura.

Innanzitutto, è noto che, a fronte di numerosi interventi a supporto della lettura in età infantile, sono ancora poco numerosi i programmi specificamente sviluppati per l'età adulta, nella quale la comprensione più che la mera decodifica del testo assume una rilevanza particolare, anche ai fini del successo accademico. La lettura silente, peraltro, è la modalità quasi esclusivamente utilizzata dall'adulto e sulla quale è pertanto particolarmente importante focalizzare l'intervento. Inoltre in età adulta gli scopi della lettura risultano maggiormente differenziati, circostanza che richiede lo sviluppo specifico di capacità metacognitive per ottimizzare i tempi di lettura. In particolare, l'incremento dei materiali di studio proposti per la lettura allo studente universitario richiede strategie adeguate di approccio al testo in relazione alle finalità dell'apprendimento. Per queste considerazioni, Super Reading appare particolarmente utile in ambito accademico.

Inoltre, benché il presente studio si sia limitato ad analizzare dati relativi a normolettori, i risultati emersi fino ad ora dell'insieme del progetto (Scagnelli et al., 2019) mostrano che il corso ha pari (se non superiore) efficacia anche con soggetti con DSA. Mancano al momento dati di controllo sufficientemente ampi che mettano direttamente a confronto un gruppo sperimentale di soggetti con DSA con un gruppo di controllo di pari caratteristiche. Tra i prossimi obiettivi del progetto di ricerca vi è quello di procedere ad una raccolta di dati in questa direzione (al mo-

mento avviata ma con numeri ancora molto bassi), che è resa più difficile dalla minore disponibilità di soggetti con DSA a partecipare come controlli.

La natura multicomponentiale del corso rappresenta, al tempo stesso, un punto di forza e un limite del progetto di ricerca. Essa è un punto di forza in quanto permette di svolgere un lavoro integrato e congiunto sulle diverse componenti-chiave coinvolte nella lettura, da quelle neuropsicologiche, visuo-percettive a quelle motivazionali, dall'altro lato diventa difficile isolare il ruolo svolto dalle singole strategie proposte e identificare quale sia quella che svolge un ruolo maggiore nel promuovere miglioramenti nella lettura e comprensione. Data l'importanza attribuita dagli autori all'esercizio dell'*eye-hop* si è ritenuto importante sviluppare un altro filone di ricerca, attualmente in corso. Esso riguarda la valutazione dell'importanza delle diverse componenti del corso. In particolare, gli effetti dell'esercizio di *eye-hop* possono essere valutati separatamente, raccogliendo gruppi di studenti universitari disposti a fare pratica regolarmente con gli stessi esercizi di *eye-hop*, con pari intensità e per uno stesso periodo di tempo rispetto ai partecipanti al corso, e svolgere con le stesse modalità le prove di lettura già utilizzate per la sperimentazione e per i controlli.

In conclusione, alla luce dei dati analizzati per questa ricerca e delle considerazioni qui esposte, il corso Super Reading risulta particolarmente interessante, in particolare per la possibilità di proporre lo stesso programma di potenziamento della lettura a tutti i tipi di lettori, Ciò consente di realizzare quelle politiche inclusive che rappresentano oggi una priorità in tutti i contesti istituzionali e formativi.

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Religious and sacred art: Recent psychological perspectives

Sara Valentina Schieppati, Cinzia Di Dio, Gabriella Gilli

Dipartimento di Psicologia, Università Cattolica del Sacro Cuore di Milano
L.go Gemelli, 1, 20123 Milano
e-mail: saravalentina.schieppati@unicatt.it;
e-mail: cinzia.didio@unicatt.it;
e-mail: gabriella.gilli@unicatt.it.

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Abstract

The psychology of art has had an enormous development since the middle of the last century; however, no much work has been done in association with religious and sacred art. This paper aims to provide a brief history of the use of images in the three great monotheistic religions, i.e., Judaism, Christianity, and Islam.

All three religions have been influenced by the commandment (Exodus 20:4), which prohibits idolatry. Nevertheless, when it comes to the use of images with religious content, the commandment is interpreted differently by the three. If in Judaism and Islam the use of images is not particularly widespread and is bound to precise conditions, in Christianity a strong relationship with the visual arts has developed, at least until the Reformation. After this split, the use of images was only encouraged by the Catholic Church even though, with the Enlightenment, religious and sacred art suffered a decline even in Catholic culture. It was not until the twentieth and twenty-first centuries that the Catholic Church returned to support and encourage art in the religious context.

It will then be necessary to distinguish between religious art and sacred art because they serve different functions. Precisely because it is a field in which deepening is possible, it could be very interesting for the psychology of art to study the perception of religious and sacred images, for example investigating constructs associated with the perception of vitality and aesthetic judgment.

Keyword: psychology of art, religion, visual arts, sacred art.

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Introduction

The psychology of art is a branch of psychology, with an established history in research: just think that Division 10 (Psychology and the Arts), one of the 19 charter Divisions of the American Psychology Association, was established in 1945. Since then, an increasing number of published articles and several journals dedicated to this matter have emerged. Even though the psychology of art has deepened various fields of art, it seems that not much has been said about religious and sacred art.

Therefore, this article tries to explore first of all how visual art is perceived and used in the major monotheistic religions of the Western world, with particular attention to the Catholic context. Secondly, it will try to differentiate religious and sacred art and define their characteristics. Finally, reflections and the findings of psychological research related to religious and sacred art images will be illustrated. Given the contents of this article, various disciplines will be called upon to give their contributions.

Visual art in religions: a brief overview

Every religion has treated the use of visual arts in the religious context differently, whereas the supreme artist is always God. In the three monotheistic religions (Islam, Judaism, Christianity), the representation of images is linked to the problem of idolatry.

The second commandment in fact strongly influences all of these religions, since it states: «Thou shalt not make unto thee any graven image or any likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth. Thou shalt not bow down thyself to them nor serve them» (Exodus, 20:4). This commandment has been variously interpreted: according to some, all the images must be banished, whereas according to others, only the images that could be idolized must be censored.

For Judaism, the logic of the commandment is clear: “it’s non the image itself that is forbidden, but its use” (p. 3, Di Porto, 2018). This interpretation is supported by the archaeology discovery at Dura Europos of a third-century synagogue, frescoed of images taken from *Tanàkh*¹. According to the rules of *Halakhah* (generally known as the Jewish Law), it is possible to represent celestial creatures, heavenly bodies, and human figures, as long as they are incomplete or imperfect because perfection belongs only to God. Therefore, the images by themselves are not forbidden, but there are some limitations in their representations, and

¹ The Jewish Bible, consisting of three parts: Torah, Nevi'im and Ketuvim.

their use in particular determines whether an image is permitted or not. If used correctly, images can also have positive influences. For example, according to Rabbi Profiat Duran, deepening the *Tanàkh* by studying books enriched with miniatures and in splendid environments can increase the pleasure of study. Moreover, Maimonides, one of the most important philosophers of Judaism, suggests that people can benefit from seeing artworks, especially if there are psychological conditions, such as depression (Di Porto, 2018). Judaism, the first of the Abrahamic religions, influenced both Islam and Christianity.

In Islam, there are two approaches to figurative art: the first approach states that in the Koran there is no explicit reference to figurative prohibition, while the second approach argues that there are indirect references when taking into account *Hadiths*, *Sunnah*, and *Tafsirs*² (Basak, 2017; Soganci, 2006). In brief, there is always the prohibition to portray God and Mohammed, but the possibility of making figurative art depends on religious currents and the socio-cultural context of reference.

In the beginning, Christians fit into Jewish tradition and, for this reason, rejected the use of images so as not to incur the risk of idolatry. However, new and subsequent reflections on the mystery of the Incarnation have made it possible to establish an original relationship between the Holy Scripture and visual art (Verdon, 2012). In 787, the Council of Nicaea II established the lawfulness of sacred images: if God becomes a man in Christ, the sacred images are an evocation of this mystery, and therefore they are not venerated for themselves but in relation to the subject represented.

The Middle Ages marks the beginning of authentic Christian art (Verdon, 2012). In an early period, Romanic art stood out: this style resumes the culture of the ancient Roman Empire and communicates the Roman values of power and strength, which were however traced back to a divine origin. The Christian cult offered the main occasions of commissioning, and monasticism in particular favored the production of sacred art. From the twelfth century, the Gothic began to spread and became the first Christian style with no ties to the art of the Eastern Church. In this period, the most representative element of Christian art is the introduction of the early stained-glass windows, which were created to lead inwards the light into the church, symbolically indicating God that illuminates the soul of believers.

After the Ottomans' capture of Constantinople in 1453, in the Western world, art became a means to affirm the Christian identity. Masaccio anticipated this trend, creating works in which faith and art intertwine.

² These are respectively the precepts of Mohammed, the oral tradition of Mohammed's teaching, and the Koranic exegeses.

ned, as shown in his masterpiece “The Most Holy Trinity”. This artwork is a fresco made between 1425-1426, and it is located in the third span of the left aisle in the Basilica of Santa Maria Novella in Florence (Volponi & Berti, 1968). According to Verdon (2012), Masaccio’s artwork «is the highest expression of Western thought on the mystery of God, and the values of faith and art that it incorporates will remain typical of Italian painting. They consist in the readability of the spiritual world, even of the truths that go beyond reason; in the intercommunication of the spiritual world with the material one, suggested by anatomically and psychologically credible sacred figures; in pictorial spaces which, thanks to the perspective, seem extensive with the real space; and in eternity that is superimposed on history, thanks to the use of a classical architecture updated for the settings of sacred subjects: these are the characteristics that will give the ‘catholic’, that is universal, breath to Italian painting from Masaccio to Raphael and beyond.» (Verdon, 2012, pg. 123-124).

In brief, from the Middle Age until the fifteenth century, Christian art has represented the convergence of realism (the historical truth of Jesus), idealism (the divine beauty), and symbolism (art as a symbol of the announcement of God) (Salviucci Insolera, 2016). For example, the images of the Passion and the representations of the martyrs are realistic to respect the truthfulness of the events, but they also contain symbolic elements and express the presence of God.

In the sixteenth century, significant changes have taken place, especially because of the split between Catholics and Protestants. Reformation took sides against a certain way of using art in religious contexts (Ganz, 2000; Hart, 2004). The cult linked to sacred objects, images, or relics of Christ, the Virgin, and other Saints spread starting from the Middle Ages, fueling a large market of religious articles over the centuries; these objects were worshipped because they were thought to be imbued with holiness or with miraculous powers. Concerned about these widespread idolatrous practices, the protestant communities reacted against the use of art in religious and private contexts in different ways (Cavallotto, 2019; Hart, 2004). Calvin embraced the iconoclasm: the art in a religious context was denied, and any images were judged offensive towards God as an attempt to represent something that human standards cannot achieve. For this reason, Calvin forbade any images in any place of prayer, although the use of religious images was still allowed in private contexts. Therefore, for Calvinist communities, the legitimate or illegitimate use of images depended on the context in which the images were used (Hart, 2004). Similar to Calvin, Zwingli was not contrary to the arts itself, not even against religious images, even if the images of God or Christ were always wrong as they represented divine personali-

ties. Therefore, Zwingli interpreted the second commandment as prohibiting the use of visual arts in religious contexts seen as an act of idolatry (Hart, 2004). Unlike Calvin and Zwingli, Luther did not pay much attention to the issue of religious images. In fact, for him, the second commandment indicated the prohibition of creating a graven image and false idols, not the exclusion of arts from any contexts, even religious (Hart, 2004). In fact, images related to biblical events could have been a kind of Bible for the illiterate and in support of people's faith; for these reasons, in Lutheran communities, religious images are not banned, although they are seldom used (Cavallotto, 2019). In brief, in Protestantism, the visual arts in religious contexts were rejected or little-used but this does not mean that any art has been banished: other forms of art compatible with the second commandment, like music, were commonly used.

The split with the Protestants leads to the Counter-Reformation: in 1563 the Church published a conciliar decree on the "*Invocation and veneration of relics and sacred images*", which reaffirms the principles of faith and the functions of sacred images (Verdon, 2012). Based on this decree, in 1582 Cardinal Paleotti published the "*Discourse on sacred and profane images*", in which he states that images, and in particular sacred images, have three objectives: to delight, causing relish in the contemplation of the image, to educate, providing an educational service, and to move, causing feelings that increase faith in the observer (Ganz, 2000). These indications will be an important reference for Catholic art in the following centuries and will have a particular influence on the Baroque (Verdon, 2012) The baroque style follows indeed indications of the Church, producing artworks that stimulate strong emotional responses in believers. However, the Baroque will be the last Christian style to shape even the non-ecclesiastical culture, and the late Baroque already uses the same pictorial language in both ecclesial and profane contexts, leading to a loss of religious meaning in images.

In the modern period, the renewed interest in the ancient world and the archaeological discoveries have led to a new style: the neoclassical. This style, born in a socio-cultural context hostile to the church, will be used also as an ecclesiastical style, even if this language is not very suitable for the affirmations of the Catholic faith. In the contemporary age, Christianity is in crisis and so is religious and sacred art. According to Verdon (2012), in the early twentieth century, only architecture managed to maintain a link with these kinds of art and the contemporary world, as in the case of Sagrada Familia.

After the II World War, contemporary religious and sacred art will be dedicated to the search for powerful images capable to communicate its messages to the masses, but the efforts to make contemporary Christian

art clashed with a conservative trend, supported by the Church until the middle of the twentieth century. A major turning point comes with the Second Vatican Council, which stated that the Church had never had its own artistic style: each epoch must create its own artworks in a context of freedom of expression, including in churches, but respecting the reverence and the needs of sacred buildings and the sacred rites³.

In sum, the issue of visual art in a religious context has been very debated by several religions: few have rejected visual art in the holy places, some accepted it with some limitations and others have used visual art as a religious instrument. In this last case, Catholicism stood out establishing a special relationship with visual art: Christ is the icon of the invisible God and, for this reason, visual art leads to the center of this faith (Verdon, 2012).

Religious and sacred art

So far, we have discussed art in different religious contexts and, in particular, the development of Christian art. However, it is necessary to make a distinction between sacred art and religious art. This is a very complex matter, in which not only different disciplines but also different experts debate.

Art is defined as religious when it represents religious subjects, usually taking the style of its own historical period, and fulfilling several but specific functions (Papa & Llovera, 2012; Salviucci Insolera, 2016). Firstly, it has a didactic function: religious images disseminate the main Christian concepts and help the illiterate and children to approach figuratively the biblical events. For this reason, biblical images are also known as *Biblia pauperum* (the poor men's Bible). Secondly, religious art has a contemplative function: religious images facilitate the dialogue with God, making visible something invisible, and predispose to prayer and contemplation. Oriental icons are an example of images that facilitates prayer. Thirdly, religious art is about commemoration: religious images handed down the truth of faith and remember that God became man. For example, during the Byzantine empire, John of Damascus claimed that it is not idolatry to worship the pictures of Christ because these images represent humanity (God that becomes flesh), not deity: the incarnation is celebrated, not the mystery behind it (Salviucci Insolera, 2016). In brief, religious art commemorates the glory of God and directs the religious thoughts of the faithful toward Him.

³ http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vatii_const_19631204_sacrosanctum-concilium_it.html.

As far as sacred art is concerned, according to some authors (Papa & Llovera, 2012; Verdon 2012), the sacredness of the image depends on its religious purpose, which means that an image becomes sacred when it aims to the sacredness of the ritual. This is consistent with the etymology of 'sacred': this term refers to the Latin word *sacer*, consecrated to a god. Therefore, according to Vauchez (2019), the term sacred indicates not a divine quality, but a special status conferred by man (Papa & Llovera, 2012; Verdon, 2012). Indeed, sacred art not only retains the functions of religious art but serves above all to make the faithful pass from vision to worship (Verdon, 2012).

Instead, other art historians use the term 'sacred art' to indicate any artwork with a religious theme (De Tommaso, 2018) although, according to Burckhardt (1990), for an artwork to be defined as sacred it is not enough that religious themes are present, but it is necessary that the form and the language manifest the spiritual origin. Interestingly, according to Guardini (1998), any authentic artwork can be somehow sacred, or rather eschatological, because it opens the doors to a non-tangible world.

To better understand these concepts, take for example cult images and images of devotion: cult images are directed towards transcendence, while images of devotion arise from immanence. Therefore, sacred art is linked to cult images, while religious art is linked to images of devotion (De Tommaso, 2018). According to Guardini (1960, in De Tommaso, 2018), the cult image is not perceived as a work of art, because the author is not an artist but a servant who creates the image to make the sacred "presentification" becomes possible. A cult image not only wants to represent Christ but also, and above all, the symbol: in a sacred work of art the Other is present and affirms the existence of God. Then, the sacred art aims to create a connection between the human and the divine, making visible the invisible God.

On a theoretical level, the distinction between these two categories of images (cult images and images of devotion) is very clear. However, on a practical level, it is a very complex distinction to make, and this is probably why generally they are grouped in a single category, that of religious art.

Nevertheless, according to the Church, to be sacred the art must respect two conditions: firstly, there is an inspiration that comes from the Spirit and that animates the representation, without however removing the creativity of the artist; secondly, it meets the requirements imposed by the cult, the liturgy, and the Church (De Tommaso, 2018). In particular, according to the Constitution of Sacrosanctum Concilium (chapter

VII - Sacred art and Sacred chattels⁴), the Catholic Church chooses artworks that meet the criteria of faith, decorum, noble beauty, and religious norms handed down to be counted in sacred art. In sacred art artistic forms of every epoch and all countries are allowed, as long as they serve with honor and respect the sacred rites; instead, artworks that offend the religious sense in form or content are not allowed.

In brief, religious art includes sacred art (but not the other way around), and indeed sacred art can be considered the apex of religious art (Papa & Llovera, 2012).

Today the society has lowered contact with the sacred and the divine and the capacity of seeing the symbols of a transcendent reality, and then also religious and sacred art have lost their attractiveness, both for people and for artists (Salviucci Insolera, 2016; Guardini, 1960). Therefore, the Christian artwork today is not the result of a movement, but of the individual artist inspired by her/his faith (Salviucci Insolera, 2016).

However, the Catholic Church has repeatedly pointed out that art is needed (Dall'Asta, 2016). In 1965 Pope Paolo VI wrote a letter to artists inviting them to put their work at the service of God: artists with their works can help to spread the message of God through images⁵. In 1999 Pope Paolo Giovanni II wrote another letter to artists, underlying the relationship between religious experience and artistic creation. God created something from nothing, while man is an artificer and gives form and meaning to something already existing: in this sense, human art is an attempt of communication and participation to the essence of God (Dall'Asta, 2016). Moreover, artists are sensitive to all manifestations of beauty and try to unravel a deeper reality because beauty is the vocation of the artists, and when beauty meets truth, the artists not only will produce beautiful and true artworks but, through these artworks, they will contribute to the common good and therefore to faith. For these reasons, the Catholic Church considers art as a valid approach to faith (Dall'Asta, 2016).

In brief, the Catholic Church needs art to convey the message of God and to make the world of the Spirit perceivable.

⁴ II, V. (1963). Sacrosanctum concilium. Constitution on the Sacred Liturgy (December 4, 1963). http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19631204_sacrosanctum-concilium_it.html (accessed 23.01.2021).

⁵ http://www.vatican.va/content/paulvi/it/speeches/1965/documents/hf_pvi_spe_19651208_epilogo-concilio-artisti.html (accessed 23.01.2021).

Psychology of art and religious and sacred images: future perspectives

The psychology of arts explores the psychological processes involved in the production and fruition of an artwork. Historically, the psychology of art has dealt with four themes: the artist and his personality, the work of art from a perceptive point of view, experimental aesthetics, and neuro-aesthetics (Mastandrea, 2015).

When talking about images, one can refer to studies on psychological responses to images, which are quite recent as research has had a strong development since the discovery of the role of mirror neurons in visuo-motor responses to images (Freedberg & Perini, 2013). There are two possible ways to study people's reactions to images: the first is to go to places where artworks or images are displayed and observe and analyze the reactions of viewers to these images, considering models that take into account the psychological, socio-cultural, and environmental factors; the second is to develop theories that explain general reactions and behaviors to any images. Whereas research in this field is still very little, much of this research focuses on the study of the functions of the images and the reactions of people to them. These studies aim at exploring the relevant factors in the relationship between images and viewers: in this sense, it is necessary to take into account people's reactions, their convictions supporting their behaviors, but also the effectiveness, efficiency, and vitality of the images themselves. These studies have nevertheless also several limitations. For example, reactions to art are weakened with increasing familiarity or reproducibility or, opposite, are strengthened by the fame or reputation of the images and their economic value. Not to forget all limitations associated with the difficulty of identifying and choosing the variables that can be used to analyze these reactions. However, according to Freedberg and Perini (2013), there is always a basic level of reaction that is unrelated to contextual boundaries, a neuropsychological condition that makes the cognition of images similar among all people.

Hence, as research is focusing on common basic reactions to any image (see, for example, Di Dio et al., 2007, 2018), very little is known about the reaction to images of specific categories, such as those concerned with religious and sacred art.

Firstly, it would be interesting to see if there are any differences in the reactions in front of images of sacred art, those of religious art, and those of secular art. If this were the case, psychological research in the field of art not only could contribute to the discussion between common

and specific reactions to images but perhaps it could also participate in the debate between the definition of and the differentiation between categories of art.

Another intriguing research topic concerns the vitality of images. Although there is no unique or unambiguous definition of vitality in the psychological field, within art it could be possibly understood as the perception that the represented image is alive. Regarding the vitality of images, anthropologists and folklore scholars devoted themselves to the study of two phenomena that, while remaining distinct, both fall under the field of animism: the first regards the inanimate objects endowed or inhabited by a soul (e.g., Piaget, 1929), the second concerns the tendency to attribute vitality to inanimate objects (Freedberg & Perini, 2013). There are numerous Western written records regarding images perceived as living: for example, there are references to paintings and statues, especially religious, that bleed, strike the blasphemer or follow the viewer with their eyes. In these stories, vital powers are attributed to images, particularly through two vital attributes: movement and sight. From these testimonies, it is clear that there is no confusion between image and prototype and therefore people do not think that the representations are alive or can become so. In these cases, the people's reactions arise from believing that the vital qualities are immanent in the image, but today people tend not to admit the presence of traces of animism, understood as a degree of life that is believed to be immanent in an image. However, if there are basic neuro-psychological reactions common to all people in front of an image, as Freedberg and Perini (2013) argue, then it is necessary to investigate the influence of socio-cultural factors. Most likely there is a factor related to the repression, but if we take into consideration that the attribution of vitality in the past was mainly aimed at religious and sacred images, it is perhaps possible that less and less religious society has in some way influenced the perception of vitality in sacred or religious images or the repression of the reactions.

Again, concerning the theme of vitality, very few researchers have asked themselves if there is any difference in the reaction to the representations of living and dead people (Di Dio et al., 2020). Since there is probably a circular link between immanent divinity and the perception of vitality (Freedberg & Perini, 2013), this issue could be particularly interesting for sacred art. It might be worth noting to investigate whether the images of sacred art, where the divinity is supposed to be present, are perceived as more vital than the representation of profane images. If the answer were positive, this could confirm a difference between sacred and profane representations. However, this research could be complicated by the presence of several factors that need to be considered: for example,

the author's technical ability, the fame and the identifiability of the images, the observers' characteristics and their behaviors in front of the image, their education and religious background, familiarity with the world of art and images, and other features that could somehow influence their reactions.

Nevertheless, unique research could concern the assessment of vitality and aesthetic perception in paintings of dead saints, compared with paintings of ordinary dead people. The difference between images of sacred and religious art and common images could reverberate in different effects in terms of vitality and aesthetics in the representation of the experience of death. In particular, it could be hypothesized that images of dead saints are perceived as more vital and aesthetically more beautiful than images of common dead people. These effects could involve both believers and non-believers, but they may be more evident in believers.

Finally, it would be interesting to analyze not only the reactions to devotional images by investigating, for example, the role of expectations towards these images and the beliefs that images can act as intermediaries or facilitators of religious devotion, but also the efficacy of the image themselves, that is the power of attractions exercised by the devotional images.

All this considered, the psychology of art can provide interesting insights into the relationship between art and religion, investigating both how visual art affects people, as well as how people's deep beliefs affect the perception of images. In this way, it will be possible to fully understand the letter of Pope Paolo Giovanni II, in which art is considered a concrete means of participation in the divine essence.

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Il benessere degli studenti tra autostima e rendimento scolastico

School well-being among self-esteem and academic achievement

Chiara Palmas, Chiara Mauri, Nicoletta Scionti, Gian Marco Marzocchi

Dipartimento di Psicologia – Università degli studi di Milano-Bicocca
Piazza dell'Ateneo Nuovo, 1, 20126 Milano
e-mail: chiarapalmas0806@gmail.com;
e-mail: chiara.mauri16@gmail.com;
e-mail: n.scionti1@campus.unimib.it;
e-mail: gianmarco.marzocchi@unimib.it.

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Riassunto

In questo studio sono state indagate le relazioni esistenti tra il benessere, l'autostima e il rendimento scolastico in un campione di 311 studenti tra gli 8 e i 13 anni, prendendo in considerazione il punto di vista dell'alunno, del genitore e dell'insegnante. Attraverso questa ricerca è stata confermata l'esistenza di un'influenza reciproca tra il rendimento del bambino e la sua autostima scolastica. Inoltre, è stata dimostrata l'esistenza di una relazione significativa dell'autostima scolastica dell'alunno con l'ansia percepita, il suo benessere e le competenze possedute. Queste ultime due variabili correlano significativamente anche con il rendimento scolastico, mentre l'ansia svolge il ruolo di mediatore. Alla luce di quanto emerso, questa ricerca potrebbe rivelarsi utile per lo sviluppo di programmi volti a favorire il benessere dell'alunno, la sua autostima e il suo rendimento scolastico con il coinvolgimento degli adulti di riferimento.

Parole chiave: benessere scolastico, autostima, rendimento scolastico, ansia

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Abstract

The aim of this study was to investigate the relationships between self-esteem, school well-being and academic achievement in a sample of 8 to 13 year-old-students, taking into account the student, parent and teacher's point of view. This study has confirmed the existence of a reciprocal influence between the child's educational achievement and his/her school self-esteem. According to the findings of this investigation, the main factors related with academic self-esteem are the anxiety level, the learning skills and school well-being. The learning skills and school well-being are also significantly related with academic achievement, on the contrary anxiety is a mediator of these relationships. This research may be useful for the development of programs and strategies to promote child's well-being, self-esteem and success at school having parent's and teacher's involvement.

Keywords: school well-being, self-esteem, academic achievement, anxiety

Introduzione teorica

L'ambiente scolastico è uno dei contesti di vita più importanti per gli individui in età evolutiva e offre loro molteplici esperienze a livello emotivo, cognitivo, comportamentale e relazionale (Tobia e Marzocchi, 2015). Dal momento che bambini e adolescenti passano circa un terzo delle ore della giornata a scuola per gran parte dell'anno, è opportuno prendere in considerazione l'impatto che essa ha sul loro benessere e sulla loro qualità di vita (Tobia, Greco, Steca e Marzocchi, 2018).

L'obiettivo del presente studio è quello di mettere in evidenza i fattori potenzialmente in grado di influenzare il benessere, l'autostima e il rendimento scolastico dello studente.

Autostima

L'autostima corrisponde ad una valutazione globale positiva o negativa che il soggetto fa di sé sulla base del divario esistente tra il concetto di sé percepito e quello ideale (Pope, McHale e Craighead, 1988).

Il possedere una buona autostima è considerato un elemento fondamentale per lo sviluppo sano dei bambini, dal momento che è durante i primi anni di vita che si costruiscono le fondamenta delle percezioni che si avranno di sé in futuro e che influenzeranno diversi aspetti della vita dell'individuo, come per esempio la salute, il successo scolastico e lavorativo e la soddisfazione rispetto alle relazioni (Pazzaglia, Moè, Cipollet-

ta, Chia, Galozzi, Masiero e Punzi, 2020). A questo proposito, Di Pietro (2013) ha descritto il *circolo vizioso dell'autostima* per mettere in evidenza come il modo attraverso cui un bambino si autodefinisce tenda a influenzare la sua motivazione, i suoi atteggiamenti e il suo comportamento.

Nel complesso, elevati livelli di autostima risultano essere associati all'esperienza di affetti positivi (Bajaj, Gupta e Pande, 2016), ad un miglior benessere psicologico e fisico (Pazzaglia et al., 2020) e ad una buona performance scolastica (Cvencek, Fryberg, Covarrubias e Meltzoff, 2018).

Il primo autore a ipotizzare che il **rendimento scolastico** dell'alunno potesse essere in relazione con la percezione che lui ha di sé è stato Prescott Lecky (1945), il quale si rese conto che alcuni bambini facevano lo stesso numero di errori ortografici a ogni pagina, al netto della difficoltà del materiale. A partire da questa osservazione, iniziò a chiedersi se la prestazione di questi studenti dipendesse dalle loro effettive capacità oppure dalla percezione che avevano delle proprie potenzialità.

In letteratura si evidenzia come individui con una bassa autostima tendano a mettere in atto prestazioni più povere e a raggiungere in misura minore i loro obiettivi rispetto a coloro che possiedono un'autostima elevata (Cvencek et al., 2018). In effetti, livelli di autostima elevati correlano con voti più alti a scuola e questa correlazione si rafforza quando viene considerata, più specificatamente, l'autostima scolastica.

Se ad oggi la relazione tra autostima e rendimento scolastico è stata confermata, è però ancora da indagare il rapporto di causa-effetto; mentre alcuni autori sostengono che sia il concetto di sé a influenzare il rendimento scolastico dell'alunno, altri affermano che il concetto di sé è solo una conseguenza dei risultati ottenuti dallo studente. A seconda del punto di vista adottato, le implicazioni sono differenti. Se si considera il concetto di sé del bambino come fattore determinante i suoi successi scolastici, allora l'attività didattica, la formazione degli insegnanti e le strategie educative dovrebbero essere mirate a favorire lo sviluppo di un concetto di sé positivo del bambino, così da incrementare, di conseguenza, il suo rendimento scolastico. Al contrario, se si parte dal presupposto che il concetto di sé e l'autostima dell'alunno siano il risultato, anziché la causa, del suo successo scolastico, allora l'attività didattica dovrebbe essere mirata ad aumentare le competenze, le abilità e le conoscenze del bambino (Pajares e Schunk, 2001). Stabilire con certezza il nesso di causalità è complesso, in quanto le variabili coinvolte sono difficilmente manipolabili a livello sperimentale; tuttavia, sembrerebbe esistere una causalità bidirezionale tra le due dimensioni (Kaya e Oguriu, 2015).

Un'altra variabile che è stata presa in considerazione dagli studiosi come possibile predittore dell'autostima è l'**intelligenza**. In letteratura non esiste una definizione pienamente condivisa di intelligenza; se i diversi autori concordano nel ritenerlo un costrutto di natura multidimensionale, d'altra parte si trovano a discutere se si tratti di un fattore innato oppure acquisito, stabile o dinamico, generale o specifico. La definizione maggiormente condivisa è stata proposta da Wechsler negli anni '40 del secolo scorso. Egli definì l'intelligenza come la capacità generale di un individuo di agire intenzionalmente, pensare razionalmente e relazionarsi in modo efficace con il suo ambiente, producendo comportamenti adattivi e funzionali al raggiungimento degli obiettivi (Wechsler, 1944). L'intelligenza può dunque essere considerata come un predittore dell'autostima? Alcuni autori ipotizzano che l'immagine di sé inizi a svilupparsi all'età di cinque anni, quando un bambino incomincia a essere in grado di formare una prima valutazione di se stesso (Pyankova, Baskaeva, Chertkova e Parshikova, 2016). Con il passare del tempo, ad avere un valore predittivo rispetto all'idea che il bambino costruisce di se stesso potrebbero essere le valutazioni soggettive delle proprie capacità cognitive e il concetto di sé rispetto al contesto scolastico (Kornilova, Kornilov e Chumakova, 2009). A questo proposito, alcuni ricercatori hanno ipotizzato che concetto di sé e intelligenza siano interconnessi: questa relazione varierebbe in funzione di età, genere e quoziente intellettivo (Pyankova et al., 2016). Nello specifico, questo legame perderebbe di intensità nel gruppo delle femmine rispetto al gruppo dei maschi e le correlazioni esistenti rilevate all'età di 13 anni avrebbero una natura latente e si renderebbero manifeste all'età di 16 anni (Pyankova et al., 2016).

Secondo la letteratura, tra i predittori principali dell'ansia (Ratelle, Simard e Guay, 2013; Jongerden e Bogels, 2015) e dell'autostima (Moghaddam, Validad, Rakhshani e Assareh, 2017) del bambino ci sarebbero anche il comportamento e lo **stile educativo** dei genitori: *autoritario*, *permissivo-lassista* e *autorevole* (Baumrind, 1968). Lo *stile autoritario* è tipico di quei genitori che tendono a imporre con forza le regole, ad alzare spesso la voce, a punire severamente i figli per le loro trasgressioni e a non voler essere contraddetti. Esso può generare un ambiente rigido intorno al bambino, il quale presenta, in genere, bassa autostima e scarsa fiducia in sé e nelle proprie abilità. Al contrario, lo *stile permissivo-lassista* è caratterizzato dall'assenza o dalla scarsa coerenza di regole e di punizioni e rischia di generare confusione e angoscia nel bambino, il quale non può contare sulla presenza di una guida sicura e può mettere in atto comportamenti devianti, oltre che avere problemi nelle relazioni interpersonali. Lo stile genitoriale che si è dimostrato essere il più appropriato per una buona educazione del bambino, per promuovere il suo au-

tocontrollo e per rafforzare l'autostima è quello autorevole. I genitori che adottano uno *stile autorevole* forniscono ai figli regole chiare e coerenti, spiegano il motivo di punizioni o proibizioni e sono disposti a mettersi in discussione. I figli tendono ad avere una maggior autostima, una buona fiducia in sé e buone competenze nelle relazioni sociali (Malagoli Togliatti e Lubrano Lavadera, 2002).

Rendimento scolastico

Così come potrebbe rivelarsi utile indagare i fattori alla base dell'autostima, allo stesso modo individuare le variabili relazionali ed emotive che concorrono a determinare il rendimento scolastico degli studenti è fondamentale per poter strutturare un'attività didattica ed educativa che tenga conto di questi aspetti, al fine di migliorare l'esperienza scolastica degli studenti e il loro benessere.

Secondo la letteratura, il successo in ambito scolastico risulta essere in relazione ai **rapporti interpersonali** che l'alunno intrattiene. Nello specifico, il *rapporto con i pari* può avere un forte impatto sullo sviluppo sociale, emotivo e comportamentale del bambino, soprattutto nel momento in cui viene ignorato o rifiutato dai compagni di classe; deficit relazionali possono infatti comportare evitamento scolastico e minore investimento e impegno nelle attività scolastiche (Buhs, Ladd e Herlad, 2006), oltre che dunque influenzare la performance cognitiva e il rendimento scolastico dell'alunno (Tobia, Riva e Caprin, 2017). Inoltre, Boivin, Hymel e Bukowski (1995) hanno messo in evidenza che gli studenti che vengono rifiutati dai propri pari tendono a mostrare livelli d'ansia elevati e sentimenti di solitudine e depressione.

La *relazione tra alunno e insegnante* sembrerebbe influenzare la motivazione, il benessere psicosociale e il successo scolastico del minore (Kredriksen e Rhodes, 2004). La ricerca ha messo in evidenza che la relazione tra alunno e insegnante potrebbe condizionare il rendimento scolastico del bambino innescando un circolo vizioso noto come *effetto Pigmalione* (o effetto Rosenthal). Come conseguenza di questo fenomeno, un insegnante che crede nelle potenzialità di un alunno tenderà a stimolarlo, coinvolgerlo durante la lezione e rinforzarlo positivamente; a fronte di ciò, il bambino tenderà a impegnarsi maggiormente nello studio e nei compiti, così da non deludere l'insegnante (Malagoli Togliatti e Lubrano Lavadera, 2002). Al contrario, l'insegnante che non crede nelle risorse di uno studente lo coinvolgerà e rinforzerà di meno; non essendo stimolato, il bambino tenderà a essere disattento durante le lezioni e a impegnarsi in misura minore nello studio, con conseguenze negative sul suo rendimento scolastico.

Oltre che per l'influenza sul benessere degli studenti, la buona relazione tra alunno e insegnante risulta essere fondamentale anche per la qualità delle relazioni costruite tra i pari. Questa relazione risulterebbe essere mediata dal senso di appartenenza degli studenti, stimolato dal rapporto esistente tra i singoli alunni e l'insegnante (Ulmanen, Soini, Pietarinen e Pyhältö, 2016).

Infine, la *relazione genitore-figlio* risulta essere significativa nel predire l'adattamento scolastico dell'alunno (Caputi, Lecce, Carbonara e Pagnin, 2011); in particolare, l'interazione con la madre correla non solo con aspetti comportamentali, ma anche didattici, e ha effetti a lungo termine sul rendimento scolastico. Per esempio, lo studio di Iruka, Burchinal e Cai (2010) ha dimostrato che un rapporto di sintonizzazione affettiva tra madre e figlio è in grado di predire le abilità matematiche e di lettura in 5^a elementare.

Con l'espressione **coinvolgimento genitoriale** si fa riferimento alla partecipazione del genitore al processo educativo e alle esperienze del figlio (Jeynes, 2010). Il coinvolgimento del genitore nell'educazione del bambino risulta significativamente correlato a una miglior performance scolastica e a un atteggiamento positivo verso la scuola (Gonzalez-De-Hass, Willems e Holbein, 2005). Tuttavia, se questi autori sostengono che il coinvolgimento genitoriale sia un buon predittore del rendimento scolastico del figlio, Shumow e Miller (2001) sostengono che sia il rendimento stesso a predire il coinvolgimento del genitore. Englund, Luckner, Whaley ed Egeland (2004) hanno ipotizzato che questi risultati contrastanti potrebbero riflettere le differenti definizioni di coinvolgimento genitoriale adottate dagli autori.

Infine, il livello di istruzione dei genitori ha dimostrato di poter predire sia il loro grado di coinvolgimento (Shumow e Miller, 2001) che le loro aspettative (Gill e Reynolds, 1999). In effetti, genitori che hanno un livello di istruzione elevato tendono ad avere alte aspettative e a essere maggiormente coinvolti nell'educazione del figlio (Englund et al., 2004).

Oltre ad essere un predittore fondamentale dell'autostima, lo **stile educativo** dei genitori è risultato essere associato anche al rendimento scolastico dello studente. In particolare, alcune ricerche hanno dimostrato la presenza di una correlazione tra gli stili di parenting autoritario e permissivo ed esiti psicologici e comportamentali più poveri (Driscoll, Russell e Crockett, 2008) e tra uno stile di parenting autorevole e il successo scolastico (Jeynes, 2010). Inoltre, uno stile parentale supportivo e incoraggiante risulta associato al successo scolastico (Simpkins, Weiss, McCartney, Kreider e Dearing, 2006), al contrario dell'uso di una moda-

lità di interazione coercitiva e punitiva che risulta correlata a un rendimento scolastico di qualità inferiore (Niggli, Trautwein, Schnyder, Ludtke e Neumann, 2007).

Un'altra variabile da tenere in considerazione è l'**autoefficacia scolastica** del bambino. Sono numerose le ricerche che hanno dimostrato come il livello di autoefficacia percepita in ambito scolastico sia predittivo del successo accademico dell'alunno (Bandura, 2000). Con il concetto di *academic self-efficacy* si fa riferimento alle convinzioni personali di un individuo circa la propria capacità di raggiungere un livello prefissato in un compito scolastico o di conseguire uno specifico obiettivo (Eccles e Wigfield, 2002). Nello specifico, l'autoefficacia scolastica risulterebbe associata all'uso di adeguate strategie di apprendimento (DiBenedetto e Zimmerman, 2010), a un'elevata performance scolastica e a una buona autoregolazione (Bembenutty, 2011). Convinzioni positive di autoefficacia correlano positivamente con un buon rendimento del bambino (Urdu e Pajares, 2005) e negativamente con l'abbandono scolastico (Caprara et al., 2008; Batini, 2014) e si rivelano buoni predittori della motivazione e della persistenza nello studio dell'alunno (Gore, 2006; Robbins, Lauver, Le, Davis e Langley, 2004). Secondo Bandura (2000), gli studenti che presentano un alto livello di autoefficacia tendono ad affrontare i problemi e le difficoltà scolastiche con maggior persistenza, attenzione e impegno.

Inoltre, il rendimento scolastico risulta correlare positivamente con il **benessere** degli studenti (Wang e Peck, 2013). Questo è stato confermato anche da Kornhonen e colleghi (2014), che hanno osservato che studenti con bassi livelli di benessere sono più inclini all'abbandono scolastico nel corso della scuola secondaria.

Nello specifico, Keeley e Storch (2009) hanno messo in evidenza come i disturbi d'ansia siano i disturbi mentali dominanti tra i bambini in età scolare. Quando l'ansia si manifesta in forma eccessiva o non adeguata alla situazione impatta negativamente sul processo di apprendimento dell'alunno, compromettendone la riuscita scolastica (Morelli, Palamà e Meneghetti, 2015). Alcuni autori hanno ipotizzato che le diverse performance tra i soggetti con alti e bassi livelli di ansia possano riflettere le differenze nella loro attenzione al compito; per esempio, Rivas (1997) ha messo in evidenza come studenti con alti livelli di ansia tendano a focalizzare la loro attenzione su quanto il compito è difficile, sui fallimenti e sulla loro mancanza di abilità. Allo stesso modo, Carbonero (1999) sostiene che l'ansia possa portare al deterioramento del rendimento scolastico in quanto il bambino si focalizza sui pensieri negativi riguardanti le sue abilità, piuttosto che sul compito che sta affrontando. Alti livelli di ansia alterano dunque il funzionamento psicologico del

bambino portando a una diminuzione della memoria, dell'attenzione e della concentrazione (Franco, Mañas, Cangas e Gallego, 2010), con un conseguente calo del rendimento scolastico (Raccanello, Brondino, Moè, Stupnisky e Lichtenfeld, 2019). Al contrario, secondo Meece e colleghi (1990) l'ansia non avrebbe alcun effetto diretto sulla performance dell'alunno; la relazione sarebbe infatti mediata dalle convinzioni di autoefficacia del bambino e dalle sue aspettative.

Infine, ricerche recenti hanno evidenziato una differenza di **genere** tra gli studenti rispetto alle modalità di approccio alla scuola. Nello specifico, è stato osservato che gli studenti maschi sono in media meno coinvolti, gradiscono meno la scuola e percepiscono più tensione e problemi esternalizzanti rispetto alle femmine, le quali invece sono più inclini ad esperire problematiche internalizzanti quali, ad esempio, l'ansia e livelli di autostima più bassi (Parhiala, Torppa, Vasalampi, Eklund, Poikkeus e Aro, 2018; Bieg, Goetz, Wolte e Hall, 2015).

Obiettivi

Questa ricerca si pone tre obiettivi principali:

1. mettere in evidenza eventuali differenze nei livelli di autostima, ansia e benessere degli studenti dalla classe terza della scuola primaria all'ultimo anno della scuola secondaria di 1° grado, a seconda del sesso e della classe frequentata. Nello specifico, sulla base della letteratura, si ipotizza che le femmine partecipanti alla nostra ricerca mostrino livelli di ansia più elevati rispetto ai maschi e livelli di autostima inferiori (Parhiala, Torppa, Vasalampi, Eklund, Poikkeus e Aro, 2018).
2. indagare il rapporto tra autostima e rendimento scolastico e verificare quanto il rendimento scolastico e l'autostima siano correlati con il benessere scolastico, l'ansia e le competenze cognitive degli studenti di 8-13 anni. A questo proposito, si ipotizza la presenza di una correlazione tra il rendimento scolastico, l'autostima scolastica e il benessere degli studenti, in cui l'ansia potrebbe svolgere il ruolo di mediatore (Cvencek, Fryberg, Covarrubias e Meltzoff, 2018; Raccanello, Brondino, Moè, Stupnisky e Lichtenfeld, 2019).
3. indagare la relazione e l'intensità dell'effetto esercitato dall'ansia, dal benessere e dalle competenze dell'alunno sul suo rendimento e la sua autostima scolastica; dall'ansia dell'alunno percepita dal genitore, dalla consapevolezza che l'insegnante ha dell'alunno, dal benessere dell'alunno percepito dal genitore e dall'insegnante e dalla valutazione che essi fanno dei suoi apprendimenti sull'ansia, il benessere e le competenze dello studente. Queste analisi verranno effettuate attraverso la conduzione di una path analysis, considerando come variabili dipendenti il rendimento scolastico dello studente e la sua autostima scolastica. In linea con

la letteratura, si ipotizza la presenza di un'influenza significativa e bidirezionale tra autostima scolastica e rendimento scolastico (Kaya e Ogu-riu, 2015), oltre che un'influenza significativa del benessere sul rendimento scolastico degli studenti (Kornhonen et al., 2014).

Metodologia

Per indagare questi aspetti, abbiamo preso in considerazione il punto di vista dell'alunno stesso, del genitore e dell'insegnante, così da avere una visione multipla e comprendere meglio i rapporti tra i vari costrutti sopra descritti. Indagare questi aspetti si rivela fondamentale per la messa a punto di strategie volte a favorire il successo scolastico del bambino e il suo benessere generale.

Partecipanti e procedura

I partecipanti a questa ricerca sono 311 studenti, di cui 130 frequentanti la scuola primaria (dalla 3^a alla 5^a; 53% maschi) e 181 la scuola secondaria di 1° grado (dalla 1^a alla 3^a; 48% maschi). Dalle analisi descrittive preliminari condotte, il nostro campione risulta essere omogeneo per classe e sesso [$\chi^2(5) = 2,456; p = .783$]. Prima di procedere con la somministrazione dei questionari e delle prove agli alunni, abbiamo fatto recapitare ai loro genitori il modulo per l'espressione del consenso informato alla partecipazione al nostro progetto, che ci è poi stato riconsegnato in busta chiusa. Il campione a cui è stato proposto il progetto era composto da 522 bambini, dei quali il 59,6% (311) ha poi effettivamente partecipato grazie al consenso ricevuto dai propri genitori. I genitori che hanno aderito al nostro progetto hanno compilato anche i tre questionari a loro dedicati, ovvero l'Alabama Parenting Questionnaire (Frick, P. J., 1991), il Questionario per la valutazione del Benessere Scolastico 8-13 (Tobia e Marzocchi, 2015) e lo Screen for Child Anxiety Related Emotional Disorders (Birmaher, Brent, Chiappetta, Bridge, Monga e Baulgher, 1999) nella versione per i genitori, contenuti anch'essi nella busta insieme al modulo.

Infine, per ogni classe, abbiamo chiesto all'insegnante con il maggior numero di ore di compilare il QBS 8-13 relativo agli alunni che avevano ricevuto il consenso di partecipare alla nostra ricerca.

Tab. 1 – Numerosità del campione diviso per classe e sesso

	3° primaria	4° primaria	5° primaria	1° secondaria di primo grado	2° secondaria di primo grado	3° secondaria di primo grado	Totale
Maschi	27	15	27	36	21	30	156
Femmine	21	14	25	31	28	34	153
Sesso non indicato	-	-	1	1	-	-	2
Totale	48	29	53	68	49	64	311

Materiali

Questionari

Cosa penso di me. Il questionario “Cosa penso di me” è l’adattamento italiano curato da Mario Di Pietro del *Five Scale Test of Self Esteem for Children* di Alice Pope (1992), che non è mai stato pubblicato. Il questionario è composto da 60 domande e valuta l’autostima globale e le sue quattro dimensioni (scolastica, interpersonale, corporea e familiare). I questionari che presentavano punteggi superiori al 15 nella scala di controllo, indice di desiderabilità sociale del bambino, non sono stati ritenuti validi ai fini della nostra ricerca.

Questionario per la valutazione del Benessere Scolastico (QBS 8-13). Il QBS 8-13 è stato messo a punto da Valentina Tobia e Gian Marco Marzocchi (2015). Lo strumento è volto a indagare il benessere scolastico degli studenti tra gli 8 e i 13 anni e prevede la somministrazione del questionario all’alunno stesso, a un genitore e all’insegnante. Il QBS 8-13 nella versione dedicata allo studente è formato da 27 item che prevedono una risposta su scala Likert a 3 punti (non vero, abbastanza vero, verissimo). Le sottoscale previste sono 5 (Soddisfazione e riconoscimento, Rapporto con gli insegnanti, Rapporto con i compagni di classe, Atteggiamento emotivo a scuola, Senso di autoefficacia). Le versioni rivolte a genitori e insegnanti sono composte da 36 item e indagano 5 aree (Vissuto personale genitore/insegnante, Valutazione apprendimento figlio/alunno, Vissuti emotivi figlio/alunno, Consapevolezza figlio/alunno, Rapporto con insegnanti/genitori).

The Screen for Child Anxiety Related Emotional Disorders Questionnaire (Birmaher et al., 1999). Lo SCARED si configura come uno dei migliori strumenti per misurare i sintomi d’ansia infantile (Myers e Winters, 2002). Il questionario valuta sia il punto di vista del bambino attra-

verso una versione self-report, che il punto di vista del genitore rispetto ai sintomi d'ansia del figlio. Esso è composto da 41 item con modalità di risposta su scala Likert a 3 punti (quasi mai, a volte, spesso) relativi alle sensazioni ansiose sperimentate dal bambino nei tre mesi precedenti alla compilazione. Le sottoscale che compongono il questionario sono cinque (Disturbo d'Ansia Generalizzata, Ansia da Separazione, Disturbo di Panico, Disturbo d'Ansia Sociale, Fobia Scolastica).

Alabama Parenting Questionnaire (Frick, 1991). L'APQ si configura come un questionario di autovalutazione rivolto ai genitori, ai quali è richiesto di stimare la frequenza dei propri comportamenti educativi nei confronti del figlio. Tra le pratiche educative indagate vi sono i rimproveri, le punizioni, i complimenti e i premi a fronte del raggiungimento di un obiettivo e, inoltre, le istruzioni date al bambino per indicargli le attività da svolgere, come lavarsi, fare i compiti o andare a dormire (Benedetto e Ingrassia, 2014). L'APQ si compone di 42 item che valutano cinque dimensioni relative al parenting, a cui corrispondono altrettante scale (Coinvolgimento, Parenting positivo, Disciplina incoerente, Supervisione/monitoring inadeguati, Punizione corporale).

Culture Fair Intelligence Test. Il CFIT (Cattell, 1949) è una prova a tempo composta da stimoli non verbali che, a differenza dai tradizionali test di performance, misura l'intelligenza fluida del soggetto. La Scala 2, utilizzata nel nostro studio, si compone di 4 subtest (Serie, Classificazioni, Matrici e Condizioni), che prevedono compiti percettivi differenti. Il CFIT si rivela utile per valutare se il rendimento scolastico di un alunno rispecchia il suo livello di intelligenza, mettendo in evidenza la presenza di eventuali problemi emotivi o di apprendimento (Natali, 2008).

Apprendimenti scolastici. Il rendimento scolastico dell'alunno è stato calcolato attraverso una prova di competenza ortografica (Dettato di brano, Tressoldi, Cornoldi e Re, 2013), una prova di comprensione del testo scritto (Prove MT di Comprensione, Cornoldi e Colpo, 1995; 1998) e un test di valutazione delle abilità di calcolo e di soluzione di problemi aritmetici (AC-MT 6-11, Cornoldi, Lucangeli e Bellina, 2002; AC-MT 11-14, Cornoldi e Cazzola, 2003).

Risultati

Differenze in base al sesso e alla classe

Per indagare le differenze tra i soggetti rispetto al livello di autostima, ansia e benessere scolastico in base al sesso biologico e alla classe frequentata sono state condotte tre MANOVA 2 X 2, relative ai questionari “Cosa penso di me”, SCARED e QBS 8-13.

Relativamente al questionario “Cosa penso di me”, i risultati della MANOVA evidenziano differenze di genere significative nelle sottoscale Autostima Generale, Scolastica e Corporea, in quanto i maschi riportano punteggi più alti rispetto alle femmine. Inoltre, è stato riscontrato un effetto dovuto all’età per quanto riguarda l’Autostima Corporea; i ragazzini della scuola secondaria di 1° grado dichiarano, infatti, un minor livello di autostima rispetto al proprio corpo (si veda Tab. 2).

Per quanto concerne il questionario SCARED, è emerso un effetto significativo del genere nelle sottoscale Disturbo da Attacchi di Panico, Ansia Generalizzata e Ansia Sociale; rispetto ai maschi, le femmine riportano punteggi più alti in tutte le sottoscale. Considerando il livello scolastico, emerge un effetto significativo dato dall’età nelle subscale Ansia Generalizzata e Ansia da Separazione; rispetto agli alunni della scuola primaria, i ragazzi più grandi riportano livelli di ansia generalizzata significativamente maggiori e livelli di ansia da separazione inferiori (si veda Tab. 3).

Infine, dai risultati della MANOVA relativa ai punteggi ottenuti al QBS 8-13, è evidente un effetto significativo dato dal sesso biologico nelle scale Rapporto con i compagni, Atteggiamento emotivo a scuola e Autoefficacia, con punteggi più alti per i maschi. Prendendo in considerazione l’età degli alunni, risulta essere presente un effetto significativo nelle subscale Soddisfazione e riconoscimento e Rapporto con gli insegnanti, in quanto i ragazzini della scuola secondaria di 1° grado riportano punteggi significativamente minori rispetto agli alunni della scuola primaria (si veda Tab. 4).

In nessuno di questi casi abbiamo riscontrato interazioni significative Sesso x Età.

Tab. 2 – *Sottoscale del questionario “Cosa penso di me”, medie e deviazioni standard ed effetti Sesso x Età della MANOVA*

Variabili	Maschi (primaria)	Maschi (secondaria)	Femmine (primaria)	Femmine (secondaria)	Effetto sesso F (p)	Effetto età F (p)	Sesso x età F (p)
Generale	1.44 (ds .41)	1.45 (ds .39)	1.37 (ds .38)	1.31 (ds .46)	4.45 (.036)	.184 (.669)	.499 (.481)
Scolastica	1.53 (ds .36)	1.38 (ds .42)	1.34 (ds .35)	1.33 (ds .42)	6.65 (.010)	2.685 (.102)	2.136 (.145)
Corporea	1.54 (ds .39)	1.44 (ds .41)	1.46 (ds .37)	1.21 (ds .50)	9.30 (.003)	11.028 (.001)	1.753 (.187)
Familiare	1.65 (ds .28)	1.62 (ds .31)	1.60 (ds .29)	1.57 (ds .40)	1.52 (.219)	.334 (.564)	.002 (.968)
Interpersonale	1.38 (ds .40)	1.43 (ds .36)	1.30 (ds .35)	1.35 (ds .46)	2.70 (.102)	1.067 (.303)	.000 (.990)

Tab. 3 – *Sottoscale del questionario SCARED, medie e deviazioni standard ed effetti Sesso x Età della MANOVA*

Variabili	Maschi (primaria)	Maschi (secondaria)	Femmine (primaria)	Femmine (secondaria)	Effetto sesso F (p)	Effetto età F (p)	Sesso x età F (p)
Panico	5.44 (ds 5.18)	4.19 (ds 4.36)	6.65 (ds 4.74)	6.60 (ds 5.68)	9.375 (.002)	1.177 (.279)	1.047 (.307)
Generalizzata	5.91 (ds 3.82)	6.47 (ds 3.92)	7.03 (ds 3.36)	8.42 (ds 4.15)	11.521 (.001)	4.652 (.032)	.837 (.361)
Separazione	6.37 (ds 3.33)	4.13 (ds 2.91)	6.57 (ds 3.44)	5.05 (ds 3.02)	2.318 (.129)	26.072 (.000)	.984 (.322)
Sociale	5.15 (ds 3.29)	5.34 (ds 3.17)	6.85 (ds 3.12)	6.78 (ds 3.69)	15.888 (<.001)	.024 (.876)	.112 (.738)
Scuola	2.31 (ds 1.88)	1.93 (ds 1.67)	2.27 (ds 1.54)	2.51 (ds 1.99)	1.653 (.200)	.116 (.734)	2.239 (.136)
Totale	25.18 (ds 13.39)	22.06 (ds 12.63)	29.36 (ds 11.16)	29.37 (ds 13.85)	14.393 (<.001)	1.053 (.306)	1.073 (.301)

Tab. 4 – Sottoscale del QBS 8-13, medie e deviazioni standard ed effetti Sesso x Età della MANOVA

Variabili	Maschi (primaria)	Maschi (secondaria)	Femmine (primaria)	Femmine (secondaria)	Effetto sesso F (p)	Effetto età F (p)	Sesso x età F (p)
Soddisfazione	1.57 (ds .40)	1.35 (ds .53)	1.52 (ds .42)	1.34 (ds .46)	.307 (.580)	13.490 (<.001)	.086 (.770)
Rapporto con gli insegnanti	1.52 (ds .41)	1.49 (ds .41)	1.60 (ds .37)	1.38 (ds .50)	.089 (.766)	5.999 (.015)	3.714 (.055)
Rapporto con i compagni	1.62 (ds .40)	1.53 (ds .47)	1.49 (ds .40)	1.41 (ds .49)	5.073 (.025)	2.520 (.113)	.000 (.986)
Atteggiamento emotivo	1.18 (ds .51)	1.10 (ds .46)	.88 (ds .51)	.81 (ds .43)	28.702 (<.001)	1.627 (.203)	.002 (.965)
Autoefficacia	1.49 (ds .37)	1.37 (ds .36)	1.30 (ds .33)	1.24 (ds .39)	13.160 (<.001)	4.399 (.037)	.416 (.519)
Totale	7.36 (ds 1.34)	6.85 (ds 1.45)	6.80 (ds 1.23)	6.18 (ds 1.45)	14.369 (<.001)	12.188 (.001)	.098 (.754)

Autostima, benessere scolastico, ansia e rendimento scolastico

Gli indici di correlazione di Pearson dei punteggi dei questionari “Cosa penso di me”, SCARED e QBS 8-13 dimostrano come questi siano significativamente correlati tra loro; la correlazione elevata tra questi punteggi ci ha portati a ipotizzare che alla base di queste variabili ci sia un solo fattore comune relativo alla percezione di sé del soggetto. Analizzando e osservando i punteggi totali dei questionari, si evidenzia che l’autostima generale del bambino e il suo benessere scolastico sono negativamente correlati ai livelli di ansia e che all’aumentare dell’autostima aumentano significativamente anche i livelli di benessere dell’alunno (si veda Tab. 5).

Tab. 5 – *Indici di correlazione di Pearson dei questionari “Cosa penso di me”, SCARED e QBS 8-13*

Variabili	Autostima generale	Benessere scolastico totale	Ansia totale
Autostima generale	1	.595 (<.001)	-.424 (<.001)
Benessere scolastico totale	.595 (<.001)	1	-.453 (<.001)
Ansia totale	-.424 (<.001)	-.453 (<.001)	1

Per individuare le variabili significativamente associate al benessere scolastico dell'alunno, abbiamo condotto una regressione lineare con metodo Stepwise considerando come variabile dipendente il punteggio totale del bambino nel QBS 8-13 e come variabili indipendenti le sottoscale dei questionari “Cosa penso di me”, SCARED, APQ e QBS - G, i voti in pagella, la stima del livello intellettivo e i risultati delle prove relative agli apprendimenti scolastici. Il modello di regressione proposto è in grado di spiegare il 62,6% della varianza del benessere scolastico degli studenti.

Abbiamo poi eseguito un'analisi di regressione lineare con metodo Stepwise in cui abbiamo considerato come variabile dipendente l'Autostima Generale dell'alunno e come variabili indipendenti le sottoscale dei questionari QBS 8-13, SCARED e APQ, i voti in pagella, la stima del livello intellettivo e i risultati delle prove relative agli apprendimenti scolastici. Questo modello spiega il 23,7% della varianza dell'autostima generale dell'alunno (si veda Tab. 6).

Tab. 6 – *Variabili correlate all'Autostima Generale secondo il report degli alunni*

Variabile	R ² cumulativo (% varianza spiegata)	Beta	t	P
Ansia totale (Bambino)	.189 (18.9%)	-.595	-8.075	<.001
Ansia da separazione (Bambino)	.220 (3.1%)	.260	3.529	<.001
MT Comprensione	.237 (1.7%)	.132	2.444	.015

Path analysis

Per indagare la relazione e l'intensità dell'effetto esercitato da variabili relative all'alunno, al genitore e all'insegnante sul rendimento scolastico e sull'autostima scolastica abbiamo condotto una path analysis, considerando come variabili dipendenti l'autostima scolastica dello studente e il suo rendimento scolastico.

Abbiamo condotto una regressione lineare multivariata con metodo Stepwise, considerando l'Autostima Scolastica e il Rendimento Scolastico come variabili dipendenti; le variabili genere ed età, QBS-totale, Ansia totale e un punteggio composito formato dalla somma dei punteggi ottenuti nelle prove di apprendimento e al test Cattell come variabili indipendenti (Skills e QI).

Questo modello spiega il 42,3% della varianza dell'autostima scolastica e il 41,5% della varianza del rendimento scolastico (si veda Tab. 7).

Tab. 7 – Variabili correlate al Rendimento e all'Autostima Scolastica

Variabile	η^2 parziale (% varianza spiegata)		Beta		t		P	
	Rendimento	Auto- stima Scola- stica	Rendi- mento	Auto- stima Scola- stica	Rendi- mento	Auto- stima Scola- stica	Rendi- mento	Auto- stima Scola- stica
QBS totale	.131 (13%)	.239 (24%)	.188	.116	3.978	6.185	< .001	< .001
Skills e QI	.262 (26%)	.161 (16%)	.543	.141	7.987	5.226	< .001	< .001
Ansia Totale	.392 (39%)	.006 (0%)	-.001	-.004	-.111	-2.187	.912	.030

In seguito, abbiamo condotto tre analisi di regressione lineare con metodo Stepwise considerando come variabili dipendenti il benessere scolastico dell'alunno (QBS B/R Totale), le competenze (Skills e QI) e l'ansia (Ansia Totale); come variabili indipendenti in un caso le sottoscale dei questionari QBS-G, APQ e SCARED-G e nell'altro le sottoscale del QBS-I.

Per quanto riguarda le variabili genitoriali, la percezione dei genitori circa l'ansia (SCARED-G), il benessere scolastico dello studente (QBS-G) e lo stile educativo adottato dagli stessi genitori (APQ) spiega il 18% della varianza relativa alle competenze scolastiche dell'alunno (Skills e QI); il 17% della varianza del benessere scolastico percepito dall'alunno

(QBS B/R totale); il 12% della varianza dell'ansia percepita dallo studente.

Nello specifico le variabili genitoriali che risultano significativamente associate alle variabili dello studente sono la sottoscala SCARED Totale del questionario SCARED-G e le sottoscale Valutazione Apprendimenti e QBS-totale del questionario QBS-G (si veda la Figura 1).

Per quanto riguarda gli insegnanti, la percezione degli stessi circa il benessere scolastico degli studenti (QBS-I) spiega il 17% della varianza di Skills e QI dell'alunno; il 7% della varianza relativa al benessere scolastico e dell'ansia percepiti dall'alunno. Nello specifico, le sottoscale del questionario QBS-I che risultano significativamente associate alle variabili dello studente sono QBS-I totale, Consapevolezza Alunno e Valutazione Apprendimenti (si veda la Figura 1).

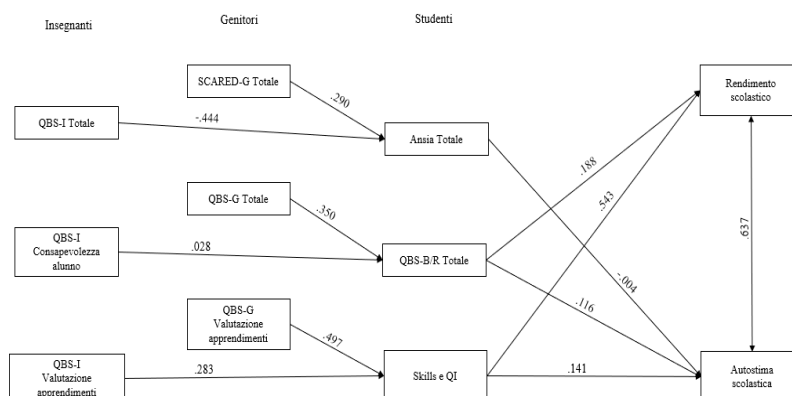


Figura 1 – Path analysis Autostima Scolastica e Rendimento Scolastico

Discussione

Crescita dell'autostima e del benessere

Il primo insieme di analisi aveva lo scopo di indagare le differenze tra i soggetti rispetto al livello di autostima, ansia e benessere scolastico in base al proprio sesso biologico e alla classe frequentata.

Circa le differenze in base al sesso, si osserva, come ipotizzato, che i maschi presentano livelli di autostima significativamente più alti rispetto alle ragazze, soprattutto in relazione alla dimensione corporea. In effetti, i cambiamenti fisici che la pubertà porta con sé non rivestono la stessa importanza per maschi e femmine; se le ragazze tendono a basare il con-

cetto di sé sulle valutazioni del proprio corpo e delle proprie attrattive fisiche, i ragazzi tendono a privilegiarne l'autoefficacia (Lerner, Orlos e Knapp, 1976).

A conferma dell'ipotesi formulata, il nostro studio ha evidenziato come le femmine tendano a presentare livelli di ansia più elevati rispetto ai coetanei maschi; in particolare, sembrerebbero sperimentare un numero maggiore di sintomi relativi al disturbo di panico e all'ansia generalizzata. Infine, rispetto ai maschi, le ragazze riportano un vissuto emotivo maggiormente negativo a fronte delle richieste scolastiche, caratterizzato da ansia, vergogna e senso di colpa. Al contrario, i ragazzi dichiarano di intrattenere migliori rapporti con i compagni di classe.

Confrontando gli studenti della scuola primaria con quelli della scuola secondaria di 1° grado, si osserva che solamente la dimensione corporea dell'autostima sembrerebbe risentire dell'effetto dell'età, andando incontro a una diminuzione significativa. In effetti, se i bambini piccoli basano la propria immagine corporea sulle proprie capacità fisiche (Keller, Ford e Meacham, 1978), con l'avvento dell'adolescenza il concetto di sé tenderà a fondarsi sempre di più sull'aspetto esteriore e sull'attrattività (Pope, McHale e Craighead, 1988). Per quanto concerne l'ansia sperimentata dagli alunni, dall'analisi dei dati sembrerebbe che con il tempo i sintomi relativi all'ansia generalizzata tendano ad aumentare, al contrario di quelli relativi all'ansia da separazione, che invece diminuiscono. Infine, in linea con lo studio di Tobia e Marzocchi (2015), è evidente come il benessere totale degli studenti tenda a diminuire in modo significativo nel passaggio dalla scuola primaria alla scuola secondaria di 1° grado. In particolare, i ragazzi della scuola secondaria si dichiarano meno soddisfatti dei propri risultati scolastici e sembrano intrattenere rapporti peggiori con i propri insegnanti.

Il nostro studio si pone a completamento di linee di ricerche precedenti che non hanno tenuto in considerazione l'autostima nei loro progetti. Rispetto ad altri studi (ad esempio: Tobia, Greco, Steca e Marzocchi, 2018), nei quali i predittori principali del benessere scolastico sono risultati essere le competenze scolastiche del bambino e i suoi voti in pagella, nella presente ricerca queste variabili hanno mostrato di avere un ruolo marginale rispetto all'autostima e all'ansia.

Relazioni fra autostima, benessere e prestazione

La path analysis condotta ci ha permesso di mettere in evidenza le relazioni esistenti tra autostima scolastica, rendimento e benessere degli studenti.

Il benessere, in particolare, sembrerebbe rivestire un ruolo fondamentale sia per quanto riguarda il rendimento che l'autostima scolastica. Nello specifico, tra le variabili associate al benessere che sono risultate essere rilevanti ci sono la soddisfazione dello studente circa i propri risultati scolastici e la percezione che il proprio impegno sia riconosciuto sia dai genitori che dagli insegnanti. A questo proposito, la ricerca ha messo in evidenza come gli studenti che percepiscono la presenza di supporto da parte di un insegnante tendono a mostrare un numero inferiore di sintomi depressivi e un aumento dei livelli di autostima (Fredriksen e Rhodes, 2004). Rispetto al benessere dell'alunno, inoltre, si osserva la presenza di una relazione negativa tra il suo livello di autostima scolastica e il rapporto che egli intrattiene con i propri insegnanti. Una possibile spiegazione di questa relazione potrebbe essere che più l'alunno si sente aiutato dagli insegnanti, meno si sente competente dal punto di vista scolastico.

Così come il benessere scolastico, anche le competenze degli alunni valutate mediante una serie di prove relative agli apprendimenti scolastici risultano essere associate sia al rendimento che all'autostima scolastica degli stessi, in linea con quanto affermato da altre recenti ricerche (Cvencek et al., 2018).

Inoltre, emerge una correlazione inversa tra ansia e autostima scolastica; all'aumentare dell'ansia diminuirebbe l'autostima scolastica dell'alunno. Potrebbe essere utile condurre studi longitudinali che permettano di comprendere meglio la direzione tra ansia e autostima scolastica.

Infine, in linea con la letteratura presentata e con la nostra ipotesi iniziale, non solo è stata confermata la presenza di una relazione tra autostima scolastica e rendimento degli alunni, ma è emersa l'esistenza di una influenza bidirezionale tra queste due variabili.

Questo studio ci ha permesso di osservare che la valutazione degli apprendimenti dello studente da parte di insegnanti e genitori risulta significativamente associata alle competenze e al QI degli alunni. Questo dato è rilevante non solo perché dimostra che genitori e insegnanti tendono ad avere una percezione accurata delle potenzialità e dei limiti del bambino, ma anche perché la percezione che l'insegnante ha dell'alunno e delle sue competenze ha un'influenza cruciale sul rendimento scolastico dello stesso. Infatti, a seconda di quello che si aspetta dall'alunno, l'insegnante tenderà a interagire con lui in un modo tale che faciliterà l'avverarsi delle proprie aspettative iniziali (Rosenthal e Jacobson, 1968). La qualità della relazione che lo studente instaura con il proprio insegnante risulta avere un ruolo fondamentale nell'influenzare il suo rendimento scolastico. In particolare, la relazione con l'insegnante risulta critica nel determinare l'atteggiamento con cui l'alunno si avvicina alla scuola e affronta le diverse attività e sembrerebbe avere un'influenza cruciale sulla motivazio-

ne, il benessere psicosociale e il successo scolastico dello studente (Kre-driksen e Rhodes, 2004). Inoltre, Samdal e i suoi collaboratori (1998) hanno messo in evidenza che avere insegnanti supportivi, sentirsi al sicuro e fare esperienza di comportamenti equi e corretti in ambito scolastico sono alcuni dei fattori associati a livelli elevati di soddisfazione dell'alunno.

Conclusioni

Il presente studio si è proposto di indagare eventuali variazioni nei livelli di autostima, ansia e benessere scolastico in un campione di studenti di 8-13 anni, a seconda del sesso biologico e della classe frequentata. Nello specifico, i maschi riportano livelli di autostima significativamente più alti rispetto a quelli delle femmine, le quali tendono a presentare livelli di ansia più elevati e un vissuto emotivo maggiormente negativo a fronte delle richieste scolastiche. Prendendo in considerazione la classe frequentata, invece, abbiamo osservato una diminuzione dell'autostima corporea nel passaggio dalla scuola primaria alla scuola secondaria di 1° grado. Inoltre, coerentemente con i dati presenti in letteratura, è emerso che i ragazzi più grandi riportano livelli di benessere scolastico più bassi. I nostri risultati evidenziano l'importanza di prestare particolare attenzione al periodo di transizione dalla scuola primaria alla scuola secondaria di 1° grado, che può configurarsi come un fattore di rischio per il benessere degli alunni (Tobia e Marzocchi, 2015). In letteratura sono presenti numerose evidenze dell'esistenza di una stretta relazione tra il rendimento scolastico del bambino e la sua autostima; il presente studio ha confermato non solo la relazione tra queste due variabili, soprattutto per quanto riguarda la dimensione dell'autostima scolastica, ma ha anche mostrato l'esistenza di un'influenza reciproca tra esse. Inoltre, sia l'autostima scolastica che il rendimento risultano essere il prodotto dell'interazione di una moltitudine di variabili; secondo i nostri dati, le variabili relative agli studenti che sono significativamente associate a questi due aspetti sono l'ansia dell'alunno, il suo benessere scolastico e le sue competenze, valutate mediante una serie di prove relative agli apprendimenti scolastici.

Alla luce di quanto emerso, la presente ricerca potrebbe rivelarsi utile per la messa a punto di programmi volti a favorire il successo scolastico dello studente e a promuovere la sua autostima e il suo benessere scolastico con il coinvolgimento degli adulti di riferimento.

Limiti e prospettive future

Tra i limiti della nostra ricerca, è da tenere in considerazione il fatto che si tratta di uno studio cross-sectional, nel quale non è stato possibile indagare l'evoluzione dei costrutti attraverso uno studio longitudinale, in cui il campione è rappresentativo di una specifica regione del nord-ovest d'Italia. Inoltre, sono stati utilizzati numerosi strumenti e questo potrebbe aver causato l'affaticamento dei soggetti nel corso della somministrazione, portando ad un calo della loro concentrazione e attenzione al compito.

Data la complessità, potrebbe essere utile replicare lo studio con un altro campione; questo non solo ne aumenterebbe la validità, ma renderebbe anche più chiara la relazione di causalità tra le variabili considerate.

Infine, potrebbe essere interessante indagare in modo specifico la relazione tra autostima scolastica dell'alunno e qualità del rapporto con l'insegnante e condurre uno studio longitudinale per individuare i predittori del rendimento scolastico e dell'autostima scolastica.

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Expectations in psychotherapy: A narrative review

Lorenzo Antichi*, Arianna Cacciamani**, Camilla Chelini[°],
Marco Morelli^{oo}, Stefano Piacentini[^], Laura Gemma Pirillo^{^^}

* Health Science Department, University of Florence
e-mail: lorenzo.antichi@hotmail.it;

** Via Di Santomoro n°66/a, 51100, Pistoia (PT), Italia
^o CONVOI s.c.s ONLUS,

Via Giotto n°22, 50019, Sesto Fiorentino (Fi), Italia

^{oo} Via Francesco Cilea n°23, 51100, Pistoia (PT), Italia

[^] Via Ponzio Cominio, n°11, 00175, Roma (Rm), Italia

^{^^} Via Alfeo Ciro Rosati, n°37, 59100, Prato (PO), Italia

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Abstract

Expectations can influence the outcome and the process of psychotherapy. Hence, this article aims to overview the types of expectations, i.e., outcome, treatment and change. Both patients' and therapists' expectations are considered. Furthermore, determinants of expectations and moderators/mediators of expectations-outcome relationship are described. We provided theories that try to explain the influence of expectations and their relationship with the psychotherapy process. Various instruments for measuring expectations and practical advice to manage expectations in psychotherapy will be discussed. Clinicians should become increasingly aware of their own and clients' expectations. Future studies should investigate the impact of every kind of expectation and its moderation/mediation role with other psychotherapy processes.

Keywords: outcome expectations, treatment expectations, change expectations, expectation measures, psychotherapy process outcome research

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Introduction

Expectations belong to the human being. For instance, expectations influence the perception of events and the evaluation of social objects (e.g., Asch, 1946; Farina & Ring, 1965). Regarding psychotherapy research, expectations were little considered, until the early 1980s (Weinberger & Eig, 1999). However, they have been studied more frequently in the following years. Hence, this article aims to overview the various expectations and how they are related to the psychotherapy outcome and process, regardless of any theoretical approach.

Since there is no single definition of expectations in psychotherapy, we define expectations as beliefs about something that will be. Based on this definition, there may be expectations about how the outcome and treatment will be and expectations about being able to change during psychotherapy. Nonetheless, the patient may have expectations about how the therapist will be, just as the therapist may share the same expectations about the patient. Some authors include expectations among the common factors, i.e., transversal factors to all psychotherapy approaches, regardless of the theoretical framework (Gelo et al., 2015). For instance, Lutz et al. (2021) conceptualize expectations as a dispositional factor like the motivation of change. Conversely, other authors consider expectations as a psychotherapy process, together with common factors, extra-therapeutic factors and specific techniques (e.g., Lambert, 2013)

Expectations affect the outcome (Arnkoff et al., 2002; Constantino et al., 2018; Snyder et al., 2000). For instance, patients reported less anxious and depressive symptoms when participating in a group where positive expectations were fostered than patients in a control group (i.e., no information was given; Thomas et al., 2021). Although Lambert (1992) affirmed that expectations would explain 15% of the psychotherapy outcome variance, some authors criticized this estimate. Specifically, it would not be based on statistical analyzes. In addition, expectations would have been defined as a single construct that overlapped with treatment credibility (e.g., Greenberg et al., 2006). Indeed, Ilardi and Craighead (1994) showed that common factors explained 40% of the outcome variance, while Wampold (2001) showed that specific factors explained only 8% of the outcome variance. However, the common factors do not coincide with the expectations. Therefore, it is impossible to establish whether this large percentage accounted by common factors reflects a more significant explained variance by expectations, compared to Lambert (1992)'s estimates.

Outcome Expectations

Outcome Expectations (OEs) are beliefs about the consequences of participating in a treatment (Constantino et al., 2011). Since OEs are the most studied among the various types of expectations, there are more results to overview. OEs positively affect the intention to seek treatment (Constantino et al., 2016) and the psychotherapy outcome ($d = .24$; Constantino et al., 2011; $d = .36$; Constantino et al., 2018). From a statistical point of view, Arnkoff et al. (2002)'s review showed that studies conducted before 1980 identified a curvilinear relationship between OEs and psychotherapy outcome, i.e., the most favorable outcomes were associated with OEs that were neither too positive nor too negative (e.g., Noble et al., 2001). Instead, most studies from 1980-1999 reported that a positive linear association existed, although few studies showed a negative (Lax et al., 1992) or nonsignificant association (Başoğlu et al., 1994; Noble et al., 2001). Moreover, OEs predict the rate of change of symptoms, such as public-speaking anxiety (Price & Anderson, 2012). Nevertheless, OEs are not just about psychotherapy but also medical treatments in general. For example, after administering an “analgesic” placebo, subjects reported experiencing less pain and higher levels of endogenous opioids than those who did not receive it (Amanzio et al., 2011).

OEs can change across psychotherapy. Višlā et al. (2021) showed that OEs increase linearly from pre to post-treatment. Regarding couple psychotherapy, although clients with avoidant attachment had more pessimistic OEs, these expectancies could change over the treatment (Muetzel-feld et al., 2020). Other studies identify differences in OEs at different stages of therapy. For instance, while positive OEs at the beginning and negative OEs in the middle of treatment predicted a better outcome (Thiruchselvam et al., 2019), Višlā et al. (2019) found that OEs became more positive during psychotherapy, even though previous depressive episodes predicted more pessimistic OEs.

It must be said that OEs are distinct from motivation, i.e., the willingness to change or participate in psychotherapy, and from preferences, which refers to the positive attitude that a patient has towards a treatment (Arnkoff et al., 2002). Finally, although OEs and credibility (i.e., the belief about how well a treatment works and it is suitable for the client) are kept separate in the literature, the two concepts may overlap (Greenberg et al., 2006). Credibility is a set of beliefs that develops after having an experience so that OEs would be antecedent to credibility (Constantino et al., 2011). However, there is still a debate regarding the purity of these two constructs.

Since OEs affect the outcome, it is crucial to understand the determinants of these expectations, such as demographic characteristics, psychological status, prior experiences, and feedback. For example, being older and female predicts more positive OEs, while symptom severity, comorbidity and lower well-being are associated with more negative OEs (Connolly Gibbons et al., 2003; Constantino et al., 2014; Tsai et al., 2014). In fact, Višlā et al. (2021) found that higher depression levels at the beginning of psychotherapy were associated with worse OEs. Positive prior experiences predict good OEs for psychotherapy and art therapies (Constantino et al., 2016; Millard et al., 2021). Similarly, feedbacks from media, friends and family members influence OEs, such as prior experiences, opinions or attitudes (Morrison et al., 2021). Moreover, traits like fear of receiving compassion and self-compassion are associated with negative OEs (Merritt & Purdon, 2021). Finally, avoidant attachment is associated with more pessimistic OEs (Muetzelfeld et al., 2020).

Nevertheless, it seems that there is a positive association between alliance quality and OEs (Connolly Gibbons et al., 2003; Constantino et al., 2005). For instance, the greater the patient's OEs are in previous sessions, the better the alliance perceived by the therapist is in subsequent sessions (Constantino et al., 2020). Moreover, Constantino et al. (2021) have done a meta-analysis showing how alliance levels mediated the OEs-outcome relationship. For instance, therapeutic alliance as a mediator of OEs - outcome relationship has been found for patients suffering from major depressive disorder (Meyer et al., 2002) or with mixed diagnoses (Constantino et al., 2021; Joyce et al., 2003). Furthermore, a better alliance can promote OEs about reducing depressive symptoms (Kahn, 2020).

The therapist also has their own OEs (Bartholomew et al., 2019): greater OEs for the therapist predict a better alliance with the patient (Meyer et al., 2002). Positive therapists' OEs are associated with better patients' outcomes, explaining 7.3% of the variance (Connor & Callahan, 2015). Nevertheless, Coyne et al. (2021) showed that therapists underestimated patients' momentary OEs throughout the therapy. However, therapists tracked shifts in OEs accurately, becoming more aligned over time.

Treatment Expectations

There are many expectations about the treatment, i.e., what will happen in psychotherapy, such as therapist's behavior, therapeutic activities and so on. Patients may expect that therapists will give them advice on what to do to solve their harmful problems or that they will lie down in a

bed as Freud usually did with his clients. For example, Weitkamp et al. (2017) found through a qualitative analysis of recurrent treatment expectations that adolescents suffering from mood disorders considered psychotherapy as a difficult process to know themselves better. However, Seligman et al. (2008) showed that 50% of patients had inaccurate treatment expectations that were not typical for a specific psychotherapy approach. Expectations regarded more atheoretical psychotherapies, such as giving advice or helping to talk of the problems.

Treatment expectations are related to the psychotherapy outcome. Regarding the review by Arnkoff et al. (2002), most studies show how good treatment expectations are positively associated with therapy outcome, while a minority identify mixed or non-significant effects. Clients who expected to work intensively (Patterson et al., 2008) or play an active role (Schneider & Klauer, 2001) in therapy showed a better outcome than those who did not have these expectations. Negative treatment expectations reduce also treatment-seeking behaviors (Gonzalez et al., 2005). Moreover, the confirmation and disconfirmation of expectations are not uniquely linked to the outcome. For instance, patients had better outcomes when negative expectations about being manipulated were disconfirmed (Westra et al., 2010).

If therapists give information about treatment, they contribute to forming patients' treatment expectations. Also, Deane et al. (1992) have shown that expectations were more accurate if patients saw a ten-minute video about psychotherapy before the intervention. However, drop-outs are more frequent if therapists disattend treatment expectations given at the beginning of therapy (Davis & Addis, 2002).

In addition, treatment expectations about therapy length influence the attendance level. For instance, patients' pretreatment expectations about duration were positively associated with the number of sessions that clients attended (Callahan et al., 2014). Similarly, patients who expected a shorter duration of therapy were less satisfied (Mueller & Pekarik, 2000) and dropped-out more likely (Schneider & Klauer, 2001) if the psychotherapy lasted longer. Generally, severity symptoms predict expectations about length. Constance et al. (2008) found that patients with less severe disorders expected a shorter duration than those with moderate or severe symptoms.

Patient characteristics can be determinants of treatment expectation. For example, patients with good interpersonal functioning have low expectations about contributing to psychotherapy, which predicts a better outcome (Joyce et al., 2000). However, other studies (e.g., Kaplan, 2000) have shown that high expectations of contributing to the intervention were positively associated with the outcome. Regarding attachment sty-

le, Zilcha-Mano et al. (2021) showed that if expectations were measured explicitly (e.g., using self-reports), patients with anxious attachment did not have lower positive treatment expectations. However, positive expectations were less accessible if measured implicitly (e.g., lexical decision task). Nevertheless, treatment expectations are different between races. For instance, African Americans expected more frequently than Whites a male heterosexual therapist of the same religion with an assertive style (Charles et al., 2021). Instead, Asian patients expected higher directiveness, confrontation, self-disclosure, empathy, expertise, and tolerance levels by the therapist (Fowler et al., 2011). White clients usually expect a therapist of the same race with good interpersonal skills that motivates them (Charles et al., 2021; Fowler et al., 2011; Weitkamp et al., 2017).

Treatment expectations are also positively associated with the therapeutic alliance (Joyce & Piper, 1998). Specifically, patients' expectations about therapists' commitment, responsibility, genuineness and expertise are associated with the alliance level (Patterson et al., 2014). Moreover, alliance levels are lower when patients' treatment expectations are disregarded (Frankl et al., 2014). In addition, patients may have treatment expectations about the alliance that predict alliance levels and symptoms change during psychotherapy (Barber et al., 2014). Symptom severity seems to moderate treatment expectations-alliance relationship. In fact, more pessimistic expectations about alliance formation were more likely in patients with higher depressive symptoms (Lebowitz et al., 2021).

Finally, patients and therapists can have different or similar treatment expectations. The congruence between patient and therapist expectations predicts a better outcome (Joyce et al., 2000) and a better alliance (Al-Darmaki & Kivlighan, 1993). Nevertheless, patients and therapists may have different expectations regarding the mechanisms of change. For example, patients consider changing their emotions and cognitions more important than therapists usually do (Tzur Bitan & Abayed, 2019). Similarly, the opportunity to speak of the problems is one of the most important mechanisms of change for patients (Tzur Bitan & Lazar, 2019). This incongruence between expectations can last over time. For instance, Tzur Bitan et al. (2021) showed that before the first session, therapists thought that the therapeutic relationship was the principal component of the psychotherapy process, while patients expected to be the techniques for cognitive control. Moreover, patients maintained these expectations about cognitive control after three months of therapy.

Expectations of Change

The expectation of change in psychotherapy is considered a crucial factor. Indeed, Grenavage and Norcross (1990) classified the expectation of being able to change as a change mechanism of psychotherapy. Specifically, having positive expectations of changing predicts a better outcome (Snyder et al., 2000) and a greater adherence to therapeutic techniques, such as exposure (Bootzin & Lick, 1979; Chambless et al., 1997; Newman & Fisher, 2010). Similarly, expecting helpful changes is associated with positive outcomes in art therapies (Millard et al., 2021). Moreover, symptom improvements are more significant if patients believe they are responsible for the change than patients who think it depends on a placebo drug (Lieberman, 1978).

Furthermore, homework compliance seems to mediate change expectancy and outcome. Specifically, greater change expectancy is associated with greater homework compliance, which is related to symptomatologic improvement (Westra et al., 2007). Finally, expect to change is associated with help-seeking, i.e., contacting a psychotherapist to begin psychotherapy (Elliot et al., 2014). Unfortunately, literature about expectations of change is scant. Table 1 shows the association between expectations, outcome, determinants, and psychotherapy processes.

Tab. 1 – *Associations Between Types of Expectations, Outcome, Determinants, and Psychotherapy Processes*

Type	Outcome	Determinants	Processes
Outcome Expectations (OEs)	Positive association Influence on the rate of change	Age, sex, symptom severity, comorbidity, well-being level, prior experiences, feedbacks, personality traits, attachment style	Positive association with alliance; alliance mediates OEs-outcome relationship
Treatment Expectations	Positive association Influence on the drop-out rate	Race, interpersonal functioning, attachment style, symptom severity	Positive association with alliance; symptom severity moderates treatment expectations-alliance relationship
Expectations of Change	Positive association Influence on the adherence level	No study available	Homework compliance mediates change expectations-outcome relationship

Note. Based on the literature, this table shows the associations between types of expectations, outcome, determinants, and psychotherapy processes.

Theories of Influence

Some theories try to explain why expectations are influential. Frank (1961) believed that a *demoralized* client has negative expectations about the outcome and/or therapeutic activities, which negatively affects the outcome. In fact, a demoralized patient will be less involved in therapy. Conversely, involvement will be greater when a patient is *remolarized*.

According to the Goal Theory (Austin, 1996), a goal is a desired state or outcome. Specifically, commitment will be more significant if a goal is important or evaluated as feasible. Hence, when patients believe that therapy is a feasible and effective strategy to achieve a goal (e.g., reduce symptomatology), their commitment and involvement might be greater. These would explain the better outcome and why there is an association between OEs and therapeutic alliance (Constantino et al., 2005; Joyce et al., 2003).

Furthermore, Regulatory Focus Theory (Higgins, 1997) states that individuals adopt different strategies to achieve a positive goal (i.e., promotion focus) or to avoid a negative outcome (i.e., prevention focus). In the first case, a patient suffering from depression would say, “I want to stay better,” while in the second case, a client might affirm, “I don’t want to be sad.” Park et al. (2019) found that promotion focus predicted more positive OEs than preventive focus. Since promotion focus is associated with positive mental health variables (i.e., self-esteem, optimism, lower neuroticism; Gorman et al., 2012) and treatment engagement (Katz et al., 2016), there might be a link between the desire to achieve a positive outcome and the expectation that psychotherapy is effective (Park et al., 2019). Hence, promotion focus regulation could be associated with commitment, mental health status and OEs. However, though Dakof et al. (2001) found an association between expectations and engagement for clients suffering from substance disorders, Ransley et al. (2019) did not find it for mothers in parent-infant psychotherapy.

Moreover, the Patient-Treatment Fit (i.e., how much a client thinks that treatment is suitable for his needs and characteristics) could also explain the influence of expectations. For instance, patients with a reasonable degree of Treatment Fit were more likely to continue treatment (Elkin et al., 1999). On the other hand, when the patient’s expectations for treatment were disconfirmed, the patient was more likely to drop-out (Clinton, 1996). Hence, Goal Theory and Patient-Treatment Fit could explain how expectations about efficacy and suitability of therapy influence the patient’s behavior, which is linked to the outcome.

Measures

This section describes the main instruments that measure general expectations or the specific ones described above. Regarding the expectations in general, the *Milwaukee Psychotherapy Expectations Questionnaire* (MPEQ; Norberg et al., 2011) measures clients' expectations about therapy's components and effects. Finally, although the *Expectation for Treatment Scale* (ETS; Barth et al., 2019) has been validated with patients under acupuncture, future studies could adapt it for psychotherapy. ETS measures expectations about coping ability, vitality, physical health and reduction of patient complaints.

About specific expectations, the *Credibility / Expectancy Questionnaire* (CEQ; Devilly & Borkovec, 2000) is an updated version of Borkovec and Nau (1972)'s self-report and it measures OEs and credibility. Besides the fact that CEQ is one of the most utilized in psychotherapy research, it is also one of the few self-reports that can also be used to assess therapists' expectations. Furthermore, the *Patient Prognostic Expectancy Inventory* (PPEI; Martin & Sterne, 1975) measures OEs, even if the questions refer to hospital treatment, whereas the *Expectations About Counseling* (EAC; Tinsley et al., 1980), and its short form (Tinsley & Westcot, 1990) measure both treatment expectations and OEs. Instead, the *Psychotherapy Expectancy Inventory-Revised* (PEI-R; Bleyen et al., 2001) measures clients' treatment expectations about their behaviors and the therapists' behaviors. Regarding couple psychotherapy, the *Expectation and Preference Scales for Couple Therapy* (EPSCT) assesses clients' OEs and role expectations for the Self and the Partner (Friedlander et al., 2019). Finally, *Patients' Therapy Expectation and Evaluation* (PATHEV; Schulte, 2008) measures the hope of being able to change (or the expectation that the treatment is effective), treatment suitability and fear of change.

Discussion

This manuscript aimed to give a general overview of expectations, creating links between other psychotherapy processes. Expectations affect the outcome (Thomas et al., 2021). Specifically, clients' outcome, treatment and change expectations explain a part of the variance of the psychotherapy outcome (Arnkoff et al., 2002; Constantino et al., 2018; Snyder et al., 2000). Also, therapists' expectations are associated with patients' outcomes (Connor & Callahan, 2015). Moreover, the outcome is also affected by the congruence between therapist-patient expectations (Bartholomew et al., 2019; Joyce et al., 2000). Specifically, disconfirmation of expectations can be either positive or negative (Davis & Addis,

2002; Westra et al., 2010). For instance, there is a therapeutic gain if the belief to be manipulated is disconfirmed. In addition, expectations change during the treatment and the therapist can trigger this modification (Višlā et al., 2021).

There are determinants of expectations such as demographic characteristics (e.g., age, gender, race), symptom level, attachment style, interpersonal functioning, personality traits (e.g., fear of compassion), past experiences and feedbacks (Charles et al., 2021; Merritt & Purdon, 2021; Millard et al., 2021; Morrison et al., 2021; Muetzelfeld et al., 2020; Višlā et al., 2021). Therapists should consider these elements when assessing expectations. Nevertheless, there are moderators or mediators between expectations-outcomes relationships, such as alliance level, symptom level, or compliance (Constantino et al., 2020; Višlā et al., 2021; Westra et al., 2007). For instance, the alliance level mediates the expectation-outcome relationship (Constantino et al., 2021). There are also expectations about the alliance that predict alliance levels during psychotherapy (Barber et al., 2014). Hence, we could hypothesize that alliance and expectations influence each other and their relationship is moderated by other variables, such as patients' characteristics or therapists' expectations.

Why expectations affect commitment might be explained by Goal Theory, Regulatory Focus Theory and Patient-Treatment Fit (Austin, 1996; Elkin et al., 1999; Higgins, 1997). The engagement level will be greater when a goal is important and expected to be feasible. Furthermore, patients should be more engaged in therapy if the goal is a desirable state of greater well-being (Park et al., 2019). When patients seek help and begin a treatment that is judged as fitted with symptoms or problems, their outcome, treatment and change expectations might be better, fostering commitment and alliance levels.

Hence, clinicians should become increasingly aware of their own and clients' expectations. Questionnaires might be helpful for the assessment of expectations, such as MPEQ, CEQ, EAC, EPSCT, PATHEV (Bleyen et al., 2001; Devilly & Borkovec, 2000; Friedlander et al., 2019; Norberg et al., 2011; Schulte, 2008). The clinical interview is an alternative way to assess expectations. Possible questions could be "*what results do you expect?*", "*What do you expect or think psychotherapy is?*", "*What do you think about the activities that we will do?*" or "*Do you think that you can change?*". The psychotherapist should also understand what patients seek from psychotherapy and which interventions they consider suitable.

After the evaluation phase, Swift and Derthick (2013) suggest different ways to address clients' expectations. First, a convincing rationale should be presented, explaining the causes of problems and how psychotherapy techniques help. Therapists should foster positive expectations

toward treatment and outcome, favoring a sense of hope to succeed. Moreover, therapists have to show that they are experienced and trustworthy (i.e., genuine, warm, empathetic). Finally, therapists should evaluate expectations at the beginning and during psychotherapy to assess discrepancies that might predict drop-out.

If distorted expectations that could hinder psychotherapy (e.g., the therapist is omnipotent, psychotherapy can be effective in 3-4 sessions, the therapist manipulates people's lives) emerge, the therapist should try to change them. It is not necessary to change the expectations from the first session. However, the modification should be a gradual process where the therapist demonstrates step-by-step that the distorted expectations are not consistent with the "*reality of psychotherapy*" (i.e., the characteristic of the psychotherapeutic approach).

In conclusion, this article overviewed the types and effects of expectations in psychotherapy. However, little is known about therapists' expectations. Hence, future studies should investigate the effect of various types of therapists' expectations. Furthermore, researchers should conduct mediation/moderation studies to understand the relationship between expectations and elements of the psychotherapy process, regardless of the theoretical approach. Specifically, patients' and therapists' characteristics should be further investigated. Finally, new studies should test the theories that explain why expectations influence the outcome and psychotherapy process, creating a meta-theory of change.

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**Intelligenza emotiva di tratto e burnout professionale
negli insegnanti di scuola primaria.
Una rassegna sistematica della letteratura**

**Trait emotional intelligence and burnout in primary school teachers.
A systematic review**

Giacomo Mancini*, Nicole Righi*, Elena Trombini°, Roberta Biolcati*

* Dipartimento di Scienze dell'Educazione
Alma Mater Studiorum Università di Bologna
e-mail: giacomo.mancini7@unibo.it,
e-mail: r.biolcati@unibo.it;
° Dipartimento di Psicologia
Alma Mater Studiorum Università di Bologna
e-mail: elena.trombini@unibo.it.

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Riassunto

La presente rassegna si propone di esaminare le pubblicazioni scientifiche internazionali che hanno indagato il rapporto tra l'Intelligenza Emotiva (intesa secondo il modello dei tratti e valutata attraverso questionari *self-report*), e il burnout professionale (caratterizzato da esaurimento emotivo, sentimenti di de-personalizzazione e ridotta autoefficacia) negli insegnanti di scuola primaria. Le recenti ricerche in questo campo, che non sono ancora state sufficientemente sistematizzate, sottolineano infatti l'importanza delle competenze emotive per facilitare e migliorare sia la prestazione lavorativa dei docenti, sia i processi di insegnamento-apprendimento. Alti livelli di Intelligenza Emotiva negli insegnanti sono correlati da un lato a una riduzione dello stress e dell'affaticamento emotivo, e dall'altro ad una maggiore soddisfazione personale nello svolgimento del proprio lavoro; inoltre, sono associati a migliori rapporti con tutti i protagonisti dell'ambiente educativo, con conseguenti effetti positivi sulla qualità della relazione con gli alunni e delle acquisizioni dei saperi.

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Parole chiave: intelligenza emotiva, burnout professionale, insegnanti, scuola primaria, benessere psicologico

Abstract

This review aims to examine the international scientific publications that have investigated the relationship between Emotional Intelligence (defined according to the trait model and assessed via self-report questionnaires), and professional burnout (emotional exhaustion, depersonalization and reduced self-efficacy) in primary school teachers. Recent research in this area, which has not yet been sufficiently systematized, emphasizes the importance of emotional competencies to facilitate and improve both teachers' job performance and teaching-learning processes. High levels of Emotional Intelligence in teachers are correlated with a reduction in stress and emotional fatigue and with greater personal satisfaction in carrying out their work; moreover, they are associated with better relationships with all the actors in the educational setting, with consequent positive effects on the quality of relationships with pupils and the knowledge acquisition.

Keywords: emotional intelligence, burnout, teachers, primary school, psychological well-being

Introduzione

La scuola primaria costituisce uno degli ambienti di vita più importanti per gli individui in età evolutiva sotto il profilo esperienziale, relazionale, cognitivo ed emotivo. In tale contesto, il benessere scolastico, che rappresenta la componente essenziale per costruire e interiorizzare le conoscenze a partire dai processi di apprendimento, è fortemente correlato alla qualità della relazione tra insegnante e alunno (Brophy-Herb et al., 2007). Pertanto, avere a cuore il benessere del bambino significa anche promuovere la salute di chi si occupa di lui. Il benessere professionale e psicologico degli insegnanti, infatti, è alla base della loro capacità di supportare adeguatamente gli studenti (Oberle et al., 2020) e di fungere per questi ultimi da figure di riferimento e di identificazione. Tuttavia, nel contesto socio-culturale attuale, sempre più spesso tale benessere è messo a rischio da numerose cause di pressione, che afferiscono sia alla sfera propriamente professionale e istituzionale, sia alle trasformazioni sociali e culturali in essere. Innanzitutto, nella realtà contemporanea, il ruolo e le funzioni degli insegnanti di scuola primaria sono profonda-

mente mutati, e il compito dei docenti è diventato molto più complesso in quanto non consiste più soltanto nella mera trasmissione di conoscenze. Oggi, gli insegnanti sono chiamati ad assumersi la responsabilità della gestione del rapporto educativo nella sua interezza e ad instaurare relazioni positive con i propri alunni per poterli coinvolgere pienamente nell'apprendimento sia dei tradizionali contenuti disciplinari, sia delle competenze interpersonali (Hughes et al., 2008), come le abilità sociali ed emotive, indispensabili per orientarsi e adattarsi all'ambiente. Tra i fattori di pressione legati all'istituzione scolastica vi sono poi gli eccessivi carichi di lavoro, il salario insoddisfacente, le difficoltà nella gestione delle classi sempre più numerose e dalla composizione eterogenea, la mancanza di supporto da parte dei colleghi, le relazioni difficoltose con le famiglie (Santavirta et al., 2007). Allo stesso tempo, le sollecitazioni che derivano dai mutamenti della configurazione sociale e la necessità di offrire una didattica inclusiva richiedono agli insegnanti di attingere continuamente alla propria sfera socio-affettiva per gestire relazioni multiformi sia con gli alunni (stranieri, con disturbi specifici dell'apprendimento o bisogni educativi speciali, ecc.), sia con le nuove realtà familiari (composite, omogenitoriali, multietniche, ecc.). Pertanto, gli insegnanti più vulnerabili (individualmente più fragili, scarsamente formati, a fine carriera, ecc.) possono arrivare a sentirsi sopraffatti dal proprio lavoro, a perdere motivazione, fino a provare disinteresse nei confronti di alunni, genitori e colleghi, e insoddisfazione verso il proprio operato.

Quando questi sentimenti di stanchezza, indifferenza e malcontento sono consistenti e persistono nel tempo possono essere declinati come tre sintomi caratteristici della sindrome del burnout professionale, secondo il modello di Maslach e Jackson (1981): (1) esaurimento emotivo, caratterizzato da una sensazione di profonda stanchezza emotiva e fisica dovuta a un impiego eccessivo delle proprie risorse emotive; (2) depersonalizzazione, contraddistinta da sentimenti di estremo distacco nei confronti degli altri espresso con un atteggiamento freddo, cinico, indifferente; (3) ridotta efficacia personale, rappresentata da sentimenti di insoddisfazione nei confronti del proprio lavoro legati a una generale sensazione di incompetenza (Guglielmi & Fraccaroli, 2016). Tali dimensioni sono state indagate attraverso la costruzione di uno strumento, il Maslach Burnout Inventory (MBI; Maslach et al., 1996) inizialmente volto a misurare i livelli di stress dei lavoratori in ambito sanitario ed esteso recentemente anche alle professioni educative. Dall'MBI, infatti, sono poi derivati altri questionari, tra i quali il Maslach Burnout Inventory – General Survey (MBI-GS; Shafueli et al., 1996) per tutte le altre occupazioni e il Maslach Burnout Inventory – Educators Survey (MBI-ES; Ryu et al., 2003), uno strumento specificamente pensato per coloro che operano nel campo

dell'istruzione. Come è noto, il burnout è una sindrome provocata dallo stress cronico e le sue conseguenze includono diminuzione della produttività e assenteismo, con un calo della soddisfazione lavorativa, una riduzione dell'impegno e ricadute negative sulle relazioni con i colleghi e gli utenti. Oltre alla sfera lavorativa, il burnout influenza negativamente anche la condizione psicofisica dell'individuo, intaccando la qualità della vita: esso è responsabile, infatti, dello sviluppo di disturbi psicosomatici e di sintomi che alterano la salute mentale, come ansia e depressione (Maslach et al., 2001). Negli insegnanti una condizione di burnout professionale si può tradurre in gravi difficoltà a gestire le proprie emozioni in classe, influenzando negativamente la qualità dell'educazione, con conseguente perdita di coinvolgimento e motivazione da parte degli studenti (McLean et al., 2017).

Secondo la teoria *Job demands-resources*, sviluppata da Demerouti e collaboratori (2001) al fine di analizzare il fenomeno dello stress lavorativo, tutte queste conseguenze sarebbero legate al disequilibrio tra la carenza di risorse a disposizione dell'individuo e la quantità di richieste provenienti dall'ambiente lavorativo. Queste ultime, che all'interno del modello vengono denominate *job demands*, sono spesso percepite dalla persona come impossibili da soddisfare. Ad esse si contrappongono le caratteristiche del lavoro che fungono da risorse e da fattori di protezione per la salute, dette appunto *job resources*. Dunque, accanto ai fattori di rischio, i cosiddetti *stressor* individuali e ambientali che possono facilitare la comparsa della sindrome del burnout, giocano un ruolo fondamentale anche i fattori protettivi. Tra questi, in ambito psicologico, spicca l'intelligenza emotiva (IE) un costrutto composito, sviluppato a partire dagli anni Novanta, che comprende una vasta gamma di differenze individuali nel modo che le persone hanno di percepire, comunicare, regolare e comprendere le proprie e altrui emozioni (Hughes & Evans, 2018), e in cui convergono sia le caratteristiche di adattabilità dell'intelligenza, sia le esperienze soggettive basate sulle emozioni. Facilitando la regolazione emozionale nell'individuo, l'IE riduce l'impatto degli stressor: per esempio, gli individui dotati di più elevati livelli di IE percepirebbero le situazioni emotivamente stressanti come sfide piuttosto che come minacce (Mérida-López & Extremera, 2017). Trasversalmente alle diverse professioni, diversi studi mostrano che alti livelli di IE, indipendentemente dal modello di riferimento, correlano negativamente con il burnout e che individui con alti livelli di IE hanno maggiore controllo sul proprio lavoro e ne sono maggiormente soddisfatti (Gallagher & Vella-Brodrick, 2008), si sentono più competenti ed efficienti (Weng et al., 2011; Lee & Ok, 2012), sono più empatici e migliorano la qualità delle proprie relazioni (Chan, 2006; Kaur et al., 2013; Gleason et al., 2020). Per quanto attiene

al contesto scolastico, Puertas Molero e colleghi (2019) sottolineano l'importanza delle competenze emotive per facilitare e migliorare sia la performance lavorativa dei docenti, sia il processo di insegnamento-apprendimento, in quanto l'IE negli insegnanti è un fattore in grado di ridurre lo stress e l'affaticamento emotivo ed è associato a maggiore soddisfazione personale nel lavoro e a migliori relazioni sociali con tutti i protagonisti dell'ambiente educativo.

Negli ultimi anni, sono stati concepiti e tradotti in termini operativi diversi quadri teorici e modelli esplicativi di IE che si differenziano principalmente sulla base degli strumenti di misura adottati, o sul coinvolgimento di abilità specifiche, piuttosto che su un'integrazione più globale delle componenti (Petrides, 2010). La distinzione principale, ormai ampiamente condivisa dalla comunità scientifica internazionale, riguarda da un lato l'IE di abilità legata a misurazioni basate sulla performance, e dall'altro i modelli di tratto e quelli misti supportati dai dati raccolti attraverso strumenti di autovalutazione (self-report). Salovey e Mayer (1990) furono i primi a definire l'IE come l'abilità di monitorare le emozioni proprie e altrui, di distinguerle tra loro e di usare tale informazione per guidare il proprio pensiero e le proprie azioni. Secondo questo modello, l'IE è rilevabile misurando la performance dell'individuo attraverso strumenti come il Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 2003), non esenti da limiti a livello psicometrico (Petrides, 2009). Successivamente, Bar-On ha teorizzato un modello misto in cui l'IE è costituita da un insieme interconnesso di competenze e facoltà, emotive e sociali, che determinano il livello di efficacia con cui l'individuo si esprime, comprende se stesso e gli altri e si relaziona. In questo modello, l'IE viene misurata attraverso uno strumento di autovalutazione, il Bar-On Emotional Quotient Inventory (EQ-i; Bar-on, 2006), nei confronti del quale alcuni autori (es. Conte, 2005) hanno avanzato delle critiche: nonostante l'adeguata attendibilità, lo strumento non godrebbe di una validità sufficiente per valutare le dimensioni di personalità.

A differenza delle due precedenti concezioni, l'IE di tratto, o autoefficacia emotiva, teorizzata da Petrides e Furnham (2007), è definita come una costellazione di auto-percezioni correlate alle emozioni e collocate ai livelli inferiori delle tassonomie gerarchiche di personalità. In quanto insieme di disposizioni comportamentali legate (e in parte sovrapposte) alla personalità, l'IE di tratto non risulta correlata alle abilità cognitive distinguendosi, pertanto, dal modello di abilità (Petrides et al., 2008; Petrides, 2010). Inoltre, l'IE di tratto è "l'unica definizione operativa a riconoscere la soggettività caratteristica dell'esperienza emotiva" (Petrides, 2010, p. 137) che comprende attitudini personali come l'empatia e

l'assertività, disposizioni come la competenza sociale e l'ottimismo. Conseguentemente, essa gioca un ruolo rilevante negli *emotional jobs* (Tuxford & Bradley, 2015) vale a dire in quelle professioni, come l'insegnamento, caratterizzate dall'esposizione a situazioni e scambi interpersonali emotivamente impegnativi, che richiedono uno sforzo costante nel gestire e regolare gli stati affettivi propri e altrui. Il modello dell'IE di tratto è stato operazionalizzato attraverso uno strumento di auto-valutazione, il Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2009).

Nonostante le numerose ricerche che hanno indagato l'associazione tra IE e burnout nei contesti educativi, la letteratura manca di una sistematizzazione volta ad approfondire la relazione specifica tra burnout e IE di tratto. Inoltre, gli studi precedenti hanno interessato trasversalmente i docenti afferenti ai diversi livelli di istruzione, senza focalizzarsi su un distinto grado di scuola come la primaria, che rappresenta una tappa fondamentale del primo ciclo di istruzione. Infatti, è con l'ingresso alla scuola primaria, la cui finalità è il conseguimento delle conoscenze e delle abilità indispensabili per sviluppare le competenze culturali di base nella prospettiva del pieno sviluppo della persona, che il bambino stabilisce il rapporto fondamentale con la scuola e lo studio. Nel passaggio dalla scuola dell'infanzia (ancora molto inserita all'orbita del contesto familiare) alla scuola primaria il bambino si separa più nettamente dalle figure genitoriali, scopre il gruppo dei compagni e, cercando una propria collocazione di ruolo attraverso il confronto con gli altri e con le regole condivise, costruisce e consolida l'immagine di sé. Inoltre, attraverso le conoscenze e i linguaggi caratteristici di ciascuna disciplina, la scuola primaria pone le premesse per lo sviluppo del pensiero riflessivo e critico necessario per diventare cittadini consapevoli e responsabili, sviluppando le dimensioni cognitive, emotive, affettive, sociali, corporee, etiche e religiose e favorendo negli alunni l'acquisizione dei saperi irrinunciabili. Per tutte queste ragioni, sui docenti del primo grado dell'istruzione obbligatoria, in quanto figure cruciali coinvolte nella relazione educativa, ricadono numerose ed elevate aspettative provenienti non solo dalle famiglie degli alunni, ma dall'intera comunità sociale. Tali attese costituiscono un aggravio di tensione nel lavoro quotidiano ed esercitano inevitabilmente una pressione sul senso di responsabilità degli insegnanti che, come si è detto, in sinergia con altri fattori stressanti, può portare a un progressivo logoramento professionale. Negli ultimi anni, infatti, è sensibilmente aumentata la richiesta di aiuto psicologico (per esempio attraverso l'accesso agli sportelli di ascolto attivati nelle scuole) da parte degli insegnanti di scuola primaria, e ciò rende tanto più necessaria la definizione di obiettivi e strategie di intervento da attuare in tali casi. Pertan-

to, la presente rassegna si propone di esaminare i contributi scientifici che interessano gli aspetti peculiari, le criticità e i contesti operativi connessi all'IE di tratto (valutata attraverso questionari self-report) e al suo coinvolgimento nei contesti educativi come fattore protettivo del benessere degli insegnanti di scuola primaria, con particolare riferimento all'ambito del burnout professionale.

Metodo

Ricerca della letteratura

L'obiettivo della revisione è quello di analizzare la relazione tra burnout professionale e IE di tratto autovalutata negli insegnanti di scuola primaria. La ricerca degli articoli è stata realizzata nei mesi di aprile e maggio 2021 attraverso le banche dati SCOPUS, PubMed e Web of Science (WOS). L'analisi è stata condotta individuando articoli pubblicati in lingua inglese negli ultimi dieci anni, compresi tra il 2011 e il 2021. Le parole chiave "burnout", "trait emotional intelligence" e "teacher" sono state utilizzate in varie combinazioni, con l'operatore booleano "and". In aggiunta, è stata effettuata una ricerca manuale sul motore di ricerca Google Scholar al fine di rendere la revisione più completa.

Criteri di inclusione ed esclusione

Gli studi selezionati, 7 in totale, sono stati inclusi nella revisione perché incontravano tutti i criteri di seguito descritti. Il primo criterio per l'inclusione ha previsto la selezione di studi empirici, così che gli studi esclusivamente teorici e le revisioni non venissero considerati. In secondo luogo, sono state selezionate solo le ricerche che hanno approfondito la relazione tra burnout e IE di tratto. Relativamente a quest'ultima variabile, sono stati presi in analisi esclusivamente i lavori che hanno utilizzato il Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2009), la Schutte Emotional Intelligence Scale (SEIS; Schutte et al., 1998) e la Trait Meta Mood Scale (TMMS; Salovey et al., 1995), tutti strumenti di misurazione self-report che consentono di valutare l'IE di tratto nella sua forma estesa e i cui risultati possono essere interpretati attraverso la prospettiva teorica formulata da Petrides (2009). Infine, il terzo criterio di eleggibilità ha imposto di esaminare soltanto gli studi condotti su un campione totale (o almeno parziale) di insegnanti di scuola primaria.

Estrazione dei dati

Dalla ricerca iniziale sono stati ottenuti 70 articoli: 11 da Scopus, 3 da PubMed, 26 da WOS, mentre 30 sono stati rinvenuti su Google Scholar. La rimozione dei duplicati, degli studi ai quali non è stato possibile accedere e degli articoli in lingua diversa dall'inglese ha portato ad ottenere 52 contributi scientifici. Attraverso la lettura di titolo e abstract, sono stati ulteriormente eliminati gli studi non empirici, quelli di argomento non pertinente e quelli non peer reviewed, fino ad ottenere 41 studi eleggibili. Infine, l'ulteriore eliminazione di 34 studi è stata legata a tre possibili cause: (1) all'interno del campione non erano presenti insegnanti di scuola primaria; (2) lo studio considerava solo una delle due variabili tra burnout e IE; (3) l'IE veniva misurata con strumenti diversi dai tre questionari oggetto del nostro studio (TEIQue, SEIS e TMMS).

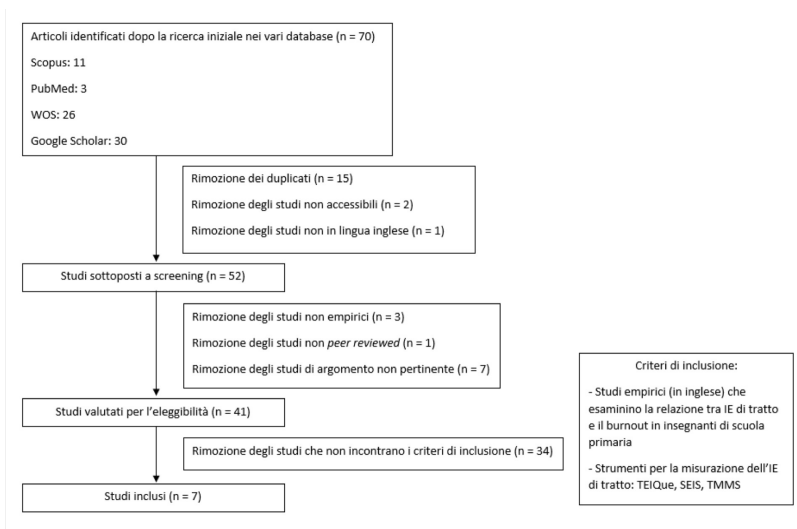


Figura 1 – Diagramma di flusso del processo di selezione degli studi

Al termine del processo di selezione (Figura 1) sono stati esclusi complessivamente 63 studi, ottenendo quindi 7 articoli che hanno soddisfatto tutti i criteri di inclusione. Tali articoli sono stati studiati integralmente e confrontati tra loro per analizzare le relazioni tra IE di tratto e burnout negli insegnanti di scuola primaria sulla base dei dati presentati. Per realizzare la revisione sono state seguite le indicazioni riportate nelle linee guida per le revisioni sistematiche PRISMA (Moher et al., 2015).

Risultati

La Tabella 1 mostra i dati estratti da ognuno degli studi inclusi nella presente revisione, organizzati in ordine cronologico dal più al meno recente. All'interno della tabella si possono consultare: autori dello studio; anno di pubblicazione; paese in cui è stato condotto lo studio; titolo; informazioni relative ai partecipanti (campione); strumenti di misurazione; breve sintesi dei risultati relativi all'associazione tra IE di tratto e burnout.

Tra gli studi inseriti in questa revisione, Mancini, Mameli, Biolcati (*in press*), Janković, Marjanović, Dimitrijević (2020) e Fiorilli, Benevene, De Stasio, Buonomo, Romano, Pepe e Addimando (2019) hanno misurato l'IE di tratto attraverso il Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF; Petrides, 2009), versione breve del TEIQue. Questo strumento è formato da due item per ognuna delle 15 sottoscale organizzate in quattro fattori: emotività, autocontrollo, socievolezza e benessere. Schoeps, Tamarit, Peris-Hernández e Montoya-Castilla (2021) e Augusto-Landa, López-Zafra, Berrios-Martos e Pulido-Martos (2012) hanno utilizzato il Trait Meta Mood Scale-24 (TMMS-24; Salovey et al., 1995) per rilevare l'IE di tratto negli insegnanti. Questo strumento a 24 item (versione ridotta del TMMS) rileva: attenzione ai sentimenti, chiarezza emotiva e riparazione emotiva. Cohen e Abedallah (2015) e Colomeischi (2015), invece, hanno utilizzato la Schutte Emotional Intelligence Scale (SEIS; Schutte et al., 1998), una scala a 33 item che Cohen et al. (2015) hanno suddiviso in tre sottoscale: valutazione ed espressione delle emozioni, regolazione delle emozioni e utilizzo delle emozioni.

Nella maggior parte dei casi i livelli di burnout degli insegnanti sono stati rilevati attraverso il Maslach Burnout Inventory (MBI; Maslach et al., 1996) e suoi adattamenti. Diversamente dagli altri, Fiorilli e collaboratori (2019) hanno utilizzato la versione italiana del Copenhagen Burnout Inventory (CBI; Fiorilli et al., 2015) mentre Schoeps e colleghi (2021) hanno utilizzato lo Spanish Burnout Inventory (SBI; Gil-Monte, 2011). Come l'MBI, che è diviso in tre sottoscale (esaurimento emotivo, depersonalizzazione e ridotta efficacia personale), anche il CBI presenta tre dimensioni: burnout legato alla vita personale, burnout associato all'ambito lavorativo e burnout associato al contatto con l'utenza (Avanzi et al., 2013). A differenza degli altri strumenti per la rilevazione del burnout negli insegnanti, lo SBI è una scala a 20 item suddivisa in quattro sottoscale: entusiasmo verso il lavoro, esaurimento psicologico, indolenza e senso di colpa (Figueiredo-Ferraz et al., 2013). Gli studi qui descritti hanno esaminato la relazione tra IE di tratto e burnout negli insegnanti di scuola primaria seguendo disegni di ricerca di tipo trasversale.

Tabella 1 - Sintesi degli studi inseriti nella revisione sistematica

Autori (anno)	Paese	Titolo	Campione	Strumenti IE/B	Risultati
Mancini et al. (in press)	Italia	Burnout in Italian primary teachers: the predictive effects of trait Emotional Intelligence, anxiety trait and job instability	137 insegnanti (scuola primaria) 94.2% F 28-66 aa ($M = 47.17$, $DS = 8.88$) 1-41 aa di esperienza ($M = 20.15$, $DS = 10.51$)	TEIQue-SF; MBI (versione italiana)	Correlazione negativa tra: IET ed esaurimento emotivo ($r = -0.33^{**}$); IET e ridotta efficacia personale ($r = -0.38^{**}$). IET predice negativamente l'esaurimento emotivo ($\beta = -0.18^*$) e la ridotta efficacia personale ($\beta = -0.23^{**}$).
Schoeps et al. (2021)	Spagna	Impact of Emotional Intelligence on Burnout among Spanish Teachers: A Mediation Study	200 insegnanti (8.38% scuola dell'infanzia, 28.8% scuola primaria, 56.02% scuola secondaria, 6.81% consulenti scolastici) 73.5% F 22-64 aa ($M = 44.97$, $DS = 9.31$) 79.49% 3-30 aa di esperienza	TMMS-24 (versione spagnola); SBI	Correlazione positiva tra: IET ed entusiasmo verso il lavoro (r varia tra 0.21^{**} e 0.41^{**}). Correlazione negativa tra: chiarezza e riparazione emozionale con indolenza ed esaurimento psicologico (r varia tra -0.18^* e -0.27^*). Affetto positivo media la relazione tra IET ed entusiasmo verso il lavoro. Affetto negativo media la relazione tra IET e dimensioni

					negative del B (indolenza, esaurimento psicologico e senso di colpa).
Janković et al. (2020)	Serbia	The Role of Trait Emotional Intelligence in Teaching: Can It Moderate the Effects of Student Disruptive Behavior on Teachers' Burnout?	70 insegnanti (scuola primaria) 81.43% F 24-59 aa ($M = 41.78$) 6 mesi-44 aa di esperienza ($M = 14.04$)	TEIQue-SF; MBI-ES	Correlazione negativa tra: IET ed esaurimento emotivo ($r = -0.38^{**}$); IET e depersonalizzazione ($r = -0.36^{**}$). Correlazione positiva tra IET e realizzazione personale ($r = 0.49^{**}$).
Fiorilli et al. (2019)	Italia	Teachers' Burnout: The Role of Trait Emotional Intelligence and Social Support	318 insegnanti (13.1% scuola dell'infanzia, 71.2% scuola primaria) 94.7% F 27-65 aa ($M = 47.1$, $DS = 8.55$) 1-41 aa di esperienza ($M = 28.1$, $DS = 11.1$)	TEIQue-SF (versione italiana); CBI	Correlazione negativa tra: IET e B (r varia tra -0.196^{**} e -0.461^{**}). In particolare, l'autrice sottolinea le seguenti correlazioni negative tra: benessere e burnout lavoro-correlato ($r = -0.46^{**}$); benessere e burnout legato a variabili personali ($r = -0.44^{**}$); burnout legato agli studenti e socievolezza ($r = -0.34^{**}$); burnout legato agli studenti ed autocontrollo ($r = -0.35^{**}$). Effetto negativo totale (diretto e indiretto) dell'IE di tratto

					sui livelli di B dell'insegnante ($\beta = -0.634^{***}$).
Adina-Colomeischi (2015)	Romania	Teachers' Burnout in Relation with Their Emotional Intelligence and Personality Traits	575 insegnanti (scuola primaria, scuola secondaria, università) 65.2% F M aa = 38 M aa di esperienza = 15	SEIS; The teacher burnout scale (adattamento dell'MBI)	Correlazione negativa tra: IEt e esaurimento ($r = -0.19^{**}$); IEt e depersonalizzazione ($r = -0.22^{**}$); IEt e ridotta realizzazione personale ($r = -0.27^{**}$).
Cohen et al. (2015)	Israele	The mediating role of burnout on the relationship of emotional intelligence and self-efficacy with OCB and performance	221 insegnanti (scuola primaria) 83.7% F 80% meno di 40 aa	SEIS; MBI-9	Correlazione negativa tra dimensioni dell'IEt e dimensioni del B (r varia tra -0.37^{***} e -0.62^{***}). Il B ha un forte effetto mediatore tra IEt e autoefficacia da un lato e prestazioni in-ruolo e OCBI dall'altro. Il B ha comunque un effetto mediatore tra IEt e autoefficacia da un lato e OCBO dall'altro, ma non così fortemente come per le prestazioni in-ruolo e l'OCBI.
	Spagna	Analyzing the relations among perceived emotional in-	251 insegnanti (scuola pri-	TMMS-24 (versione spa-	Correlazione positiva tra: di-

Augusto-Landa et al. (2012)	telligence, affect balance and burnout	maria) 64.5% F 22-60 aa ($M = 39$; $DS =$ 11.25)	gnola); MBI	mensioni dell'IEt e realizzazione personale (r varia tra 0.13* e 0.23**); attenzione alle emozioni ed esaurimento emotivo ($r = 0.23^{**}$). Correlazione negativa tra realizzazione personale e esaurimento emotivo ($r = -0.18^{**}$); depersonalizzazione ($r = -0.56^{**}$). Affetto positivo media completamente l'effetto della riparazione e parzialmente l'effetto dell'attenzione sul B.
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Legenda: F (femmine); aa (anni); M (media); DS (deviazione standard); r (coefficiente di correlazione); β (coefficiente di regressione); * ($p < 0.05$); ** ($p < 0.01$); *** ($p < 0.001$); IEt (Intelligenza Emotiva di tratto); B (Burnout); CBI (*Copenhagen Burnout Inventory*); MBI (*Maslach Burnout Inventory*); MBI-ES (*Maslach Burnout Inventory-Educators Survey*); MBI-9 (*Maslach Burnout Inventory-9 item*); SBI (*Spanish Burnout Inventory*); SEIS (*Schutte Emotional Intelligence Scale*); TEIQue-SF (*Trait Emotional Intelligence Questionnaire-Short Form*); TMMS-24 (*Trait Meta-Mood Scale-24 item*).

Discussione

La relazione tra IE e burnout negli insegnanti è stata precedentemente esaminata in svariati studi che negli ultimi anni sono stati raccolti in due importanti revisioni sistematiche (Mérida-López e Extremera, 2017 e Puertas Molero et al., 2019). L'obiettivo della presente rassegna è di approfondire il rapporto tra uno specifico modello di IE (l'IE di tratto) e il burnout professionale con particolare attenzione agli insegnanti di scuola primaria, una categoria di docenti che è stata parzialmente trascurata dalla ricerca in favore di studi più orientati ai colleghi afferenti ai gradi superiori di scuola (considerati più a rischio in quanto impegnati a confrontarsi con l'adolescenza dei propri allievi), o di indagini rivolte genericamente a tutti gli insegnanti, senza le opportune distinzioni relative al ruolo e al contesto professionale di appartenenza. L'analisi sistematica di 7 articoli pubblicati su riviste internazionali negli ultimi dieci anni, tra il 2011 e il 2021, ha consentito di delineare l'attuale stato dell'arte su questa materia.

Da una visione di insieme, gli studi esaminati nella presente revisione confermano che l'azione dell'IE di tratto può aiutare a proteggere l'insegnante dall'insorgenza del burnout (Colomeischi, 2015; Augusto-Landa et al., 2012; A. Cohen & Abedallah, 2015; Fiorilli et al., 2019; Janković et al., 2020). In particolare, una elevata IE di tratto predice in modo consistente il senso di efficacia personale, suggerendo quindi un ruolo protettivo dagli effetti negativi prodotti da una scarsa autoefficacia (Mancini et al., in press). Emerge, inoltre, che insegnanti con elevati punteggi in riparazione emotiva (processo che consente di ripristinare uno stato affettivo positivo ego-sintonico) sono in grado di regolare adeguatamente le proprie emozioni, mentre coloro che ottengono punteggi più alti in chiarezza del tono dell'umore (accurata percezione del proprio stato d'animo) manifestano una migliore comprensione delle proprie e altrui reazioni emotive: ciò può comportare un'ulteriore protezione dalle conseguenze del burnout (Schoeps et al., 2021).

L'IE di tratto degli insegnanti fornisce loro risorse personali quali autostima, ottimismo e capacità di regolare le proprie risposte emozionali (Cohen & Abedallah, 2015; Fiorilli et al., 2019; Janković et al., 2020); tre studi concordano sul fatto che insegnanti con una IE di tratto più sviluppata sarebbero quindi agevolati nel fronteggiare situazioni impegnative ed emotivamente stressanti sia sul lavoro sia nella vita privata.

Gli studi analizzati individuano, poi, alcune variabili-chiave coinvolte nella relazione tra IE di tratto e il burnout: il supporto sociale percepito (Fiorilli et al., 2019), l'instabilità lavorativa (Mancini et al., in press) e l'equilibrio affettivo (Augusto-Landa et al., 2012; Schoeps et al., 2021).

A sostegno di quanto riportato da Mérida-López et al. (2017) riguardo a come il supporto sociale percepito agisca da mediatore tra IE e burnout, lo studio di Fiorilli et al. (2019) ha mostrato che gli insegnanti con un'alta IE di tratto percepiscono efficacemente il supporto sociale proveniente da fonti sia interne sia esterne all'ambiente lavorativo e che, all'aumento del supporto percepito, corrisponde una diminuzione del burnout sperimentato dagli insegnanti stessi. I dati di Mancini et. al (*in press*), invece, evidenziano che l'instabilità lavorativa è in grado di predire la ridotta efficacia personale; gli autori riprendono quindi il lavoro di Del Valle e collaboratori (2007) per argomentare come la precarietà lavorativa negli insegnanti sia collegata alla percezione di minore sostegno sociale e ad una visione più negativa delle proprie condizioni lavorative.

L'equilibrio affettivo è un altro dei meccanismi coinvolti nella relazione tra IE di tratto e burnout. A questo proposito, Augusto-Landa et al. (2012) e Schoeps et al. (2021) riportano che l'affetto positivo riveste il ruolo di mediatore all'interno di tale relazione. In particolare, l'affetto positivo media la relazione tra le dimensioni dell'IE di tratto, totalmente per la chiarezza del tono dell'umore, e parzialmente per la riparazione emotiva e l'entusiasmo verso il lavoro. Si può quindi dedurre che chiarezza e riparazione, attraverso l'affettività positiva, abbiano un effetto protettivo indiretto rispetto al burnout negli insegnanti (Schoeps et al., 2021). Questo significa che gli insegnanti più competenti nella chiara comprensione dei propri sentimenti e più predisposti a contrastare le emozioni negative sono maggiormente motivati nel proprio lavoro, poiché in grado di evocare stati affettivi piacevoli anche quando si trovano in situazioni frustranti (Vergara et al., 2015).

In contrapposizione all'affettività positiva, quella negativa non solo agisce da mediatore tra IE di tratto e burnout, ma contrasta gli effetti positivi dell'IE di tratto fino anche ad annullarli. Questo sosterebbe l'idea che, nonostante l'individuo percepisca accuratamente il proprio tono dell'umore e sappia mettere in atto un'adeguata strategia di riparazione emotiva, potrebbe comunque non essere in grado di prevenire il burnout nel caso in cui si trovi a sperimentare persistenti sentimenti spiacevoli (Schoeps et al., 2021). L'ipotesi che l'IE di tratto non sia sempre sufficiente a proteggere dall'insorgenza del burnout è stata ripresa anche da Janković e colleghi (2020). Il loro studio riporta l'assenza di un effetto moderatore dell'IE di tratto tra il comportamento esplosivo degli scolari e il burnout, suggerendo che una risorsa interna alla persona quale è l'IE di tratto, per quanto sviluppata, non sempre riesce a contrastare gravi fattori di rischio esterni. Questi risultati sottolineano quindi la necessità di

agire anche a livello organizzativo con misure di prevenzione volte ad attenuare i fattori ambientali avversi, al fine di proteggere in modo più efficace il benessere degli insegnanti.

Da una lettura trasversale degli studi analizzati in questa rassegna sorge una riflessione che riguarda la difficoltà di comparazione tra i diversi sistemi scolastici dei paesi da cui gli studi stessi provengono: la dicitura “scuola primaria”, valida in Italia, è solo in parte equiparabile per tipologia di offerta formativa, iter didattici, modalità organizzative e ruolo degli insegnanti agli altri paesi esaminati. Da un quadro comparativo emerge, per un verso, una certa omogeneità dei modelli organizzativi scolastici, almeno in Europa, che fanno riferimento all’istruzione primaria obbligatoria. D’altro canto, si rilevano anche strutture, percorsi e pratiche educative non sempre del tutto assimilabili, ancorché ispirate da criteri curriculari affini. Anche per quanto riguarda, più in specifico, gli indicatori relativi alla figura professionale del docente, esistono a livello europeo una multiformità di modelli contrattuali che sono tra loro difficilmente confrontabili, in quanto si deve tenere conto non solo della diversa articolazione dei calendari scolastici, ma anche di tutti gli altri compiti che vanno al di là delle ore di insegnamento frontale, comprese le attività funzionali di carattere burocratico-amministrativo, di organizzazione e pianificazione della didattica, di valutazione degli alunni, i rapporti scuola-famiglia, oltre naturalmente agli aspetti legati alla retribuzione salariale che segnano differenze significative tra i svariati paesi.

Una ulteriore considerazione, trasversale a tutte le indagini, attiene agli strumenti di misura impiegati nella misurazione dell’IE di tratto e del burnout. A causa di una carenza di studi che utilizzassero il TEIQue, il questionario elettivo per valutare quantitativamente l’IE di tratto ideato da Petrides (2009), è stato necessario confrontare risultati ottenuti da strumenti di misurazione diversi per rilevare l’IE di tratto, come la TMMS e la SREIS che, pur essendo anch’essi self-report e basandosi sullo stesso impianto teorico del modello di tratto, sono composti da sotto-dimensioni tra loro in parte non sovrapponibili.

Allo stesso modo, anche il burnout è stato misurato con strumenti parzialmente diversi, rendendo più complesso il lavoro di confronto dei risultati. Tuttavia, 4 studi su 7 hanno impiegato il Maslach Burnout Inventory, il questionario più diffuso a livello internazionale per misurare il burnout, nella sua forma integrale, abbreviata (a 9 item), o adattata (come il MBI-ES, una versione dell’MBI originale specificamente pensata per gli insegnanti e gli operatori dei servizi educativi). Tali misure di rilevazione non sono concettualmente così distanti fra loro da rendere le diverse dimensioni incluse non sovrapponibili o confrontabili. A proposito degli altri tre strumenti omologhi utilizzati, va detto che il Maslach

Burnout Inventory sviluppato da Maslach e Jackson intercetta come dimensione centrale del burnout l'esaurimento emotivo (la prima reazione allo stress dovuta al sovraccarico lavorativo) una componente che è considerata essenziale sia nella struttura fattoriale del Copenhagen Burnout Inventory, sia del corrispettivo spagnolo SBI (Spanish Burnout Inventory), e che viene declinata come "capacità di affrontare lo stress legato al lavoro" nella sottoscala del Teacher Burnout Scale.

Conclusioni

La presente rassegna evidenzia come gli studi esaminati, presi nel loro complesso, depongano tutti a favore dell'influenza positiva che una buona IE di tratto individuale può avere nei confronti dell'insorgenza del burnout professionale negli insegnanti di scuola primaria.

La revisione, ovviamente, non è priva di limiti. Una prima criticità riguarda la fase di ricerca della letteratura: poiché il numero di risultati ottenuti grazie a Google Scholar è apparso molto maggiore rispetto a quello dei risultati offerti dalle banche dati consultate, è stato arbitrariamente stabilito di considerare soltanto i primi 30 risultati offerti. Dal momento che Google Scholar propone gli esiti in ordine diverso ogni volta che si effettua la ricerca, con tanto di inserimento di nuovi articoli o eliminazione di studi precedentemente comparsi tra i primi 30, un primo limite è legato al fatto che la ricerca effettuata non è riproducibile in maniera esatta.

In secondo luogo, è necessario considerare che sono stati selezionati esclusivamente gli articoli scritti in lingua inglese e, per quanto questi possano costituire la maggioranza della produzione scientifica sull'argomento, restano escluse informazioni altrettanto rilevanti che potrebbero derivare da contributi redatti in altre lingue.

Inoltre, tutti gli studi inclusi nella revisione contengono bias di selezione in quanto gli insegnanti arruolati nelle diverse indagini rappresentano campioni non randomizzati. Pertanto, la popolazione esaminata potrebbe non essere rappresentativa della popolazione bersaglio e i risultati non essere totalmente generalizzabili.

Infine, gli studi presentati nella presente rassegna sono di tipo trasversale e alcuni degli autori riportano questa caratteristica come un limite (Augusto-Landa et al., 2012; Fiorilli et al., 2019; Schoeps et al., 2021). Si sottolinea, quindi, la necessità di avviare disegni di ricerca di tipo longitudinale che analizzino le variabili in grado di influenzare l'IE di tratto attraverso ripetute osservazioni in un lungo intervallo di tempo.

Un'ulteriore indicazione per la ricerca futura riguarda la possibilità di indagare l'effetto preventivo sul burnout dei programmi di training dell'IE specificamente pensati per i docenti di scuola primaria, sia nel breve che nel lungo periodo. A questo proposito, diversi studi hanno già riportato risultati incoraggianti mostrando che è possibile promuovere e migliorare l'IE attraverso percorsi di formazione rivolti agli insegnanti (Mancini & Trombini, 2017). È stato evidenziato che tali interventi permettono di sviluppare e potenziare l'IE come tecnica esperienziale di gestione dello stress con un impatto positivo sia sulla pratica di insegnamento, a sostegno dei processi di apprendimento e di una istruzione di qualità, sia sulle relazioni degli insegnanti con gli studenti e con i colleghi (Slaski & Cartwright, 2002; Vesely et al., 2014; Dolev & Leshem, 2016; Dolev & Leshem, 2017). Tuttavia, la ricerca su questo argomento è ancora giovane e necessita di ulteriori approfondimenti.

Naturalmente, poiché nei contesti educativi, che sono organizzazioni complesse, i soli fattori individuali (come l'IE di tratto) non sempre sono in grado di contrastare le cause di rischio esterne, come è emerso anche dallo studio di Janković e collaboratori (2020), future ricerche sarebbero necessarie per approfondire il ruolo delle variabili istituzionali e organizzative nello sviluppo del burnout negli insegnanti. Tali variabili, legate al contesto e alle dinamiche gruppali specifiche dell'ambiente scolastico, interagendo con le caratteristiche soggettive degli insegnanti (tra cui l'IE di tratto), potrebbero svolgere un ruolo altrettanto considerevole come fattori di rischio o protezione.

Per favorire il benessere delle future generazioni e assicurare loro un'educazione di qualità è necessario innanzitutto pensare al benessere di chi l'istruzione la fornisce: gli insegnanti. È ampiamente dimostrato che la professione docente, come altre professioni in cui l'individuo è continuamente sollecitato dal contatto interpersonale, possa diventare, in assenza di risorse personali e/o ambientali sufficienti, estremamente faticosa e frustrante, quando non anche fonte di esaurimento emotivo. Tale fenomeno non interessa soltanto i docenti che si relazionano ad allievi preadolescenti e adolescenti, come a volte erroneamente si crede, nella convinzione pregiudiziale che il lavoro con i bambini sia meno impegnativo e stressante, ma è sempre più diffuso anche tra gli insegnanti di scuola primaria. Questi ultimi, infatti, si trovano oggi più che in passato a confrontarsi con una pluralità di fattori complessi (socio-culturali, organizzativi, pedagogico-didattici, relazionali e affettivi) che caratterizzano questa fase fondamentale del percorso di istruzione, a cui si aggiunge la responsabilità di costruire, mantenere e orientare un rapporto educativo con alunni che necessitano sempre più di formazione alla relazione, all'affettività e al benessere, di accoglienza interculturale e di inclusione,

di una didattica scolastica attiva e cooperativa, di tutela, attenzione specifica e ascolto empatico. Pertanto, la gravosa responsabilità di preparare le nuove generazioni a un futuro che oggi si presenta come incerto e non del tutto definito, può essere fonte di preoccupazione e ansia elevate negli insegnanti, e alimentare timori di fallimento.

L'IE di tratto rappresenta una disposizione individuale capace di proteggere gli insegnanti di scuola primaria dal burnout professionale. Dunque, in una società sempre più complessa e richiestiva come quella contemporanea, risulta di fondamentale importanza sostenere gli insegnanti, attraverso adeguati programmi di training, ad accrescere la propria IE di tratto, con l'obiettivo di migliorare il loro benessere individuale e quello degli alunni che sono stati loro affidati.

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