

GLI INSEGNANTI DI FRONTE AI TRATTI CALLOUS-UNEMOTIONAL E A GRAVI PROBLEMI DI CONDOTTA: LA NECESSITÀ DELL'EDUCAZIONE EMOTIVA

TEACHERS FACING CALLOUS-UNEMOTIONAL TRAITS AND SERIOUS CONDUCT PROBLEMS IN HIGH SCHOOL: THE CALL FOR AN EMOTIONAL EDUCATION

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Abstract

In this work, we examined the presence of callous-unemotional traits and their correlations between externalizing and internalizing problems in two schools, located in different Italian regions, relatively Veneto and Lazio. The aims are multiple and interrelated: 1) to assess the presence of CU traits in the young Italian scholastic population; 2) to evaluate their relation with the behavioural outcomes; 3) to investigate possible differences between genders and geographic locations; 4) to make teachers and educators aware of the CU traits, their learning and behavioural correlates and their consequences, to build more effective prevention and re-education programs. The sample is composed by 689 high school students, 227 males and 460 females, average age 16. The methodology that has been adopted was the Correspondence Analysis, used to investigate the relationship between the psychopathic traits, measured using the Inventory of Callous-Unemotional Traits (ICU), and the problem behaviours, categorized by the Strengths and Difficulties Questionnaire (SDQ).

In questo lavoro abbiamo verificato la presenza di tratti callous- unemotional e le loro correlazioni con comportamenti esternalizzanti ed internalizzanti in due scuole superiori di secondo grado situate in due diverse regioni, nello specifico Veneto e Lazio. Gli scopi sono molteplici e interconnessi: 1) valutare la presenza di tratti CU nella popolazione italiana di età scolare; 2) esaminare la loro relazione con outcome comportamentali; 3) investigare eventuali differenze di genere e tra locazioni geografiche; 4) rendere insegnanti e educatori consapevoli dei tratti callous-unemotional, dei loro correlati comportamentali e di apprendimento e delle loro conseguenze, per costruire programmi rieducativi e di prevenzione più efficaci. Il campione è composto da 689 studenti di scuola superiore, 227 maschi e 460 femmine. La metodologia usata per investigare la relazione tra i tratti psicopatici, misurati tramite l'Inventory Callous-Unemotional, e i comportamenti problema, categorizzati dal Strengths and Difficulties Questionnaire (SDQ), è l'analisi delle corrispondenze.

Keywords

CU traits; problem-behaviours; high school; emotional education; teacher formation.

Tratti CU; comportamenti-problema; scuola superiore; educazione emotiva; formazione degli insegnanti

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Introduction: the reasons why callous-unemotional traits are an educational issue

During the recent years it has been witnessed a noteworthy increase of literature and researches dealing with conduct disorders and related problematic behaviours in childhood and adolescence (Gritti et al., 2014; Frick et al., 2014). There are several reasons for this, among which: the will to understand their origin, how to treat them, how to manage them, and, last but not least, they have proved to be strongly related to the development of a serious criminal career. Hence, understanding them correctly, we could achieve, on the one hand, the important result to prevent adult deviant and criminal acts and, on the other hand, to contribute to the well-being of the individual. But if the studies on these disorders have increased in the field of psychology and psychiatry, less can be found of pedagogical nature (e.g. Georgiou et al., 2015). Pedagogy is strongly relevant in the management of problematic behaviours and in the education (or re-education) of individuals (Lanas & Brunila, 2019). Moreover, pedagogy considers learning as one of its principal interest, and, thus, incorporating psychological and neuroscientific findings about it, it could help in finding and creating didactical and educational strategies (e.g. Chojak, 2018). Children and adolescents spend much of their time in school and in contact with teachers and education professionals, and this is the context in which conduct (and learning) difficulties are more evident. The complications that teachers must face are multiple in nature and comprehend the duty to manage not only the individual with conduct problems, but also his/her peers and the relationships between them. Of course, not all disruptive behaviours must be considered pathological, and it does not seem inappropriate to believe that sometimes a pattern of behaviours is considered pathological just for its being different from the norm and to alleviate parents and teachers' responsibilities.

Recently, some of the problematic behaviours in schools, not marked as pathological, have been grouped under the label of "bullying", and some call for an emergency for the spreading of aggressive and violent acts between young people (Salmivalli & Kätlin, 2018). Hence, we witness, on the one hand, the increasing involvement of medical professionals, and on the other hand, the creation of many anti-bullying (and cyber-bullying) programs. Unfortunately, there is no certainty of the efficacy of these programs, and there are constantly new attempts to perfectionate and create more effective programs on the topic (Tofi & Farrington, 2011). But these ever-new difficulties require another kind of urgency: that of a collaboration between different professionals and disciplines to understand and intercept these events.

The necessity of a broader collaboration lies in the fact that, in order to better manage problem-behaviours and to build more effective learning strategies, what underlies those behaviours and peculiar learning paths must not be ignored.

Most of the behaviours deemed problematic are those defined as "externalizing". They are believed to be linked to an excess of impulsivity and a lack of control and are sometimes also expressed with aggressiveness (Achenbach et al., 2016). When these behaviours are perceived as truly unmanageable, it is not uncommon to face a diagnosis of conduct disorder, ADHD, and any comorbidities. These conduct disorders, as a matter of fact, have impulsivity as one of their main facets and they have been partially related to bullying phenomena. Nevertheless, recent studies have highlighted that there could be other explanations of aggressive and violent behaviours and that those could be the prodrome of the early phases of the psychopathy disorder. Researchers have called these "callous-unemotional traits" (CU) and the theoretical framework from which they were thought was initially derived from the concept of psychopathy in adults (Frick & Ellis, 1999). Individuals with CU traits are characterized by specific emotional reactions, such as the lack of guilt and limited displays of emotion, and, in addition, as it happens for the adult construct of psychopathy, elements of interpersonal style, such as a failure to show empathy and exploitation of others to advance personal interests are also shown. Just these preliminary definitions could elicit some reflections in teachers or in education professionals, that could be dealing with children and adolescents resistant to forms of reproach or punishment, with a reduced ability to understand any sufferings of the classmates (Yonglin, 2019). But most importantly, they would be facing pupils who do not use aggressiveness for a disproportionate

reaction, but for rational reasons. As a matter of fact, individuals with high CU traits, as it is for adult psychopathic, are more prone to the use of an instrumental aggressiveness, which is the opposite of the reactive one, typical of known conduct disorders. It means, that it is premeditated.

Moreover, an additional specifier for CD, “with limited prosocial emotions”, based on the definition of CU traits, was included in the DSM-5 (American Psychiatric Association, 2013). This inclusion highlights another important fact that teachers must be aware of: individuals with CU traits have scarce empathy (which is usually the first motivator of pro-social emotions), they show a limited tendency to altruism and manifest difficulties in helping, donating, sharing or cooperating. The presence of students with high CU traits could worsen the fact that behavioural problems can affect teacher stress, well-being, and confidence, also impacting negatively on student learning time and academic achievements (Clunies-Ross et al., 2008). In a vicious circle, these difficulties establishing and maintaining effective classroom behaviour management is one of the main reasons why teachers leave the profession and a significant factor in student disengagement.

But there is more: CU traits identify a subgroup of individuals with distinctive clinical and neurocognitive characteristics (Blair et al., 2014). Their brain works differently, from reactions to stimuli, to learning experiences. Interesting studies found out that psychopathic traits imply a different storage of negative feedbacks, to which they seem less sensitive. They show difficulties in learning from negative experiences, and this is concretized, for example, in not accepting the criticism of a parent or teacher, or in not understanding the negative reaction of a classmate following his/her bad actions (Huang et al., 2019).

CU traits have been related to serious forms of bullying (Thornton, 2013).

The low response to classical psychological treatment is one of the reasons underlying the partial insensitivity to the classical used pedagogical strategies and programs to manage problem/behaviours: token economy, reinforcement strategies, bullying programs. They should be modified and re-addressed also for these sub-group of aggressive young people (Allen et al., 2016), as recent publications explain deeply (Merete, 2019; Maratos, 2017).

In order to understand the real extent of the problem and to investigate the presence of these traits even in the very young Italian population, the tests for the detection of callous-unemotional (the Inventory Callous Unemotional- ICU), combined with the well-tested Strengths and Difficulties Questionnaire, were administered in two second grade secondary schools, one of the north, and one of central-south of Italy.

We explored the correlation between ICU and SDQ so as not to use the latter to validate the former, but rather to find confirmation of its evaluations. We hypothesized correlations between the presence of callous-unemotional traits and externalizing and internalizing problematic behaviours, differences between genders and geographical locations. We explored deeply the correlations of every single CU trait and externalizing and internalizing behaviours, in the attempt to observe if one or more traits could lead to further differences. This is the first step of a wider project which has no diagnostic purpose but wants to detect the problem and possible strategies to deal with it.

The sample is composed by 689 high school students, 227 males and 460 females, average age 16. It was diversified in terms of the level of education of parents, but representative of families in school districts.

1. Materials and methods

Conventionally, two types of problematic behaviours are found in literature: a) “externalizing” behaviours like aggressiveness, impulsivity, and control problems, and b) unregulated “internalizing” behaviours like withdrawal, anxiety, and depression. Higher levels of each behaviour types predict lower peer acceptance and greater social difficulties. As previously written, in terms of validation study of the ICU, some studies have employed the SDQ to investigate validity of the ICU. For example, Viding et al. (2009) identified a significant positive correlation

with CU traits measured by the ICU and conduct problems and significant negative correlation with prosocial behaviours in the SDQ. Those relationships were also reported in cross-sectional (Kimonis et al., 2016) and longitudinal studies (Ezpeleta et al., 2014).

Our analysis was carried out using the Correspondence Analysis, a descriptive technique that affords to define the relationship between qualitative variables, measured in nominal and ordinal terms. Correspondence Analysis is a method aimed at decomposing the Pearson chi-squared statistics by defining a system with a small number of dimensions, in which the deviations from the expected values are presented. (Bendixen 2003). The aim of the Correspondence Analysis is to reduce the number of analysed space dimensions by choosing such a low-dimensional subspace in which the chi-square distances between points are shown with the best accuracy (Greenacre et al. 1987).

The use of particular graphs allows the researcher for easy, intuitive reasoning on the relationships between the analysed categories of variables (Kilon and Dębkowska, 2013).

In this work the Correspondence Analysis is used to investigate the relationship between the psychopathic traits (callousness, uncaring and unemotional) measured using the Inventory of Callous-Unemotional (ICU) and the behavioural problems of adolescents, categorized by the Strengths and Difficulties Questionnaire (SDQ) as normal, borderline, and abnormal.

1.1 Tests taken into consideration

For this part of the research the test taken into consideration are the Inventory Callous-Unemotional (ICU) and the Strengths and Difficulties Questionnaire (SDQ).

The SDQ is a 25-item screening instrument designed to evaluate social, emotional, and behavioural functioning in youth. It encompasses 4 clinical domains plus one: a) hyperactivity-inattention; b) emotional symptoms; c) peer-relationship problems; d) conduct problems; e) prosocial behaviour. Each item is rated on a 3-point Likert scale. The psychometric properties of the SDQ have been verified in different cultural and clinical contexts and were found to be suitable (Vostanis, 2006).

The Inventory of Callous-Unemotional Traits (ICU) is a copyright protected 24-item questionnaire, each of which is rated on a four-point scale (0 = not true to 3 = very true), aimed to provide a complete assessment of callous and unemotional traits. These traits have proven to be relevant for defining a distinct subgroup group of antisocial and aggressive youth. The ICU presents three subscales: Callousness, Uncaring, and Unemotional. It has been developed to be self-administered or to be filled by persons close to the young people under evaluation (e.g. teachers, parents). In this work, we use the Youth Self- Report (Ciucci, Baroncelli et al., 2014) and we used all the three factors (3F). The number factors assessed ranges from two to three, with varying content (Benesch et al., 2014; Henry et al., 2016). We decided to look for correlations of callousness, uncaring, and unemotional factors. Some scholars suggested to use two-factor (2F) models, usually including callousness and uncaring factors, ignoring the unemotional factor (Moore et al., 2017). The reason of this omission is that unemotional features are believed as not useful for detecting psychopathic traits or externalizing problems (Yoshida et al., 2019).

We decided to keep also the evaluations of the items 2 and 10 of the ICU, even if, as underlined by Ciucci and Baroncelli (2014), they present a lower correlation in the assessment of callous-unemotional traits.

Informed consent was obtained from the subjects and their parents. The study was approved by the schools' principals and the school boards. Participation was voluntary and no incentives were given.

1.2 Methodology

Correspondence analysis is a descriptive technique that affords to define the relationship between qualitative variables, measured in nominal and ordinal scales (Beh 2004). This technique, as well as the principal component analysis and factor analysis for quantitative variables,

simplifies the interpretation of the data even if although some information is missing. The use of particular graphs allows the researcher for easy, intuitive reasoning on the relationships between the analyzed categories of variables (Kilon and Dębkowska, 2013). The correspondence analysis is a method to decompose the Pearson chi-squared statistics by defining a system with a small number of dimensions, in which the deviations from the expected values are presented (Bendixen 2003). The aim is to reduce the number of analyzed space dimensions by choosing such a low-dimensional subspace in which the chi-square distances between points are shown with the best accuracy (Greenacre et Hastie, 1987). Interpretation of the correspondence biplot allows researchers to find the diversity within the analyzed variables profiles and to highlight the data that give a major contribution to the total inertia.

Here our focus is on studying the association among the psychopathic traits on emotion recognition (callousness, uncaring and unemotional) measured using the Inventory of Callous-Unemotional Traits (ICU) and the behavioral problems of adolescents (normal, borderline and abnormal) measured using Strengths and Difficulties Questionnaire (SDQ). The method allows to detect the presence of CU traits and behavioral problems that could be related to it, to be able to build effective learning and educational plans. We propose the use of correspondence analysis to visualize not simply the association between row categories or column categories but above all the correlation between row and column profiles.

2. Results

The investigation of data is carried out applying two-way Correspondence Analysis (see also Rossi&Zanetti, 2021). The two-way contingency table (Table1) summarizes the number of students according to a particular trait of ICU (namely, no_trait, callousness, uncaring and unemotional) and the potential diagnosis of SDQ (relatively, normal, borderline and abnormal).

		SDQ		
		Normal	Borderline	Abnormal
ICU	No_trait	218	64	46
	callousness	134	60	72
	uncaring	107	44	61
	unemotional	25	13	15

Table 1 ICU/SDQ

Callous-unemotional traits are more present in males than in females.

The association between row and column variables is statistically significant, with Pearson's chi squared statistic equal to 28.071 on 6 degrees of freedom and p-value equal to $9.11e^{-05}$, and, therefore, a complete study using the Correspondence Analysis is possible. All the following figures have been built considering the asymmetric biplot (Bendixen 2003), where the row points are plotted in principal coordinates and columns in standard coordinates are drawn using a vector that joins the origin of axis to its position. Whether the angle between two rows is acute, then there is a strong association between the corresponding row and column.

A first general correlation found that individuals without CU traits have a normal result is the SDQ (figure 1).

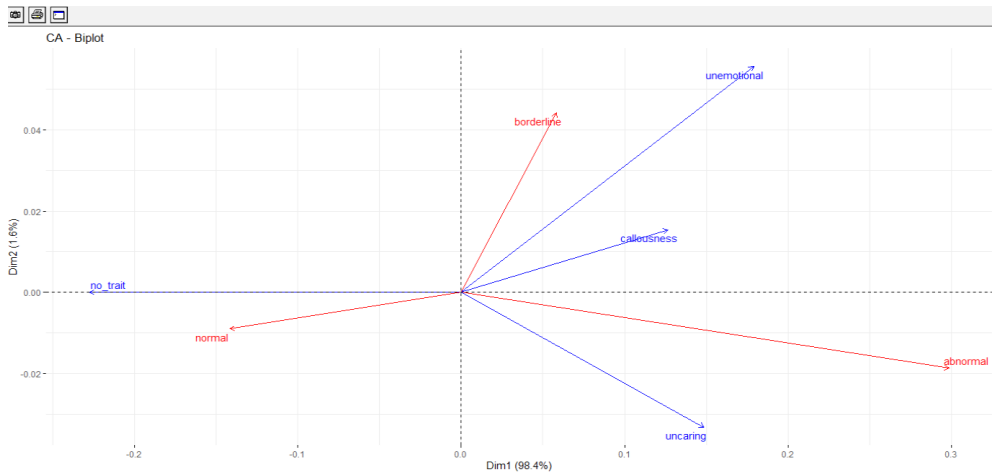


Figure 1. The asymmetric biplot

In the analysis of correlations between single CU traits and SDQ (figure 2), we found out that: a) individuals with prevalence of callousness have a normal SDQ; b) young people with the prevalence of the uncaring trait result borderline in the SDQ; c) subjects with a predominance of the uncaring dimension have an abnormal SDQ.

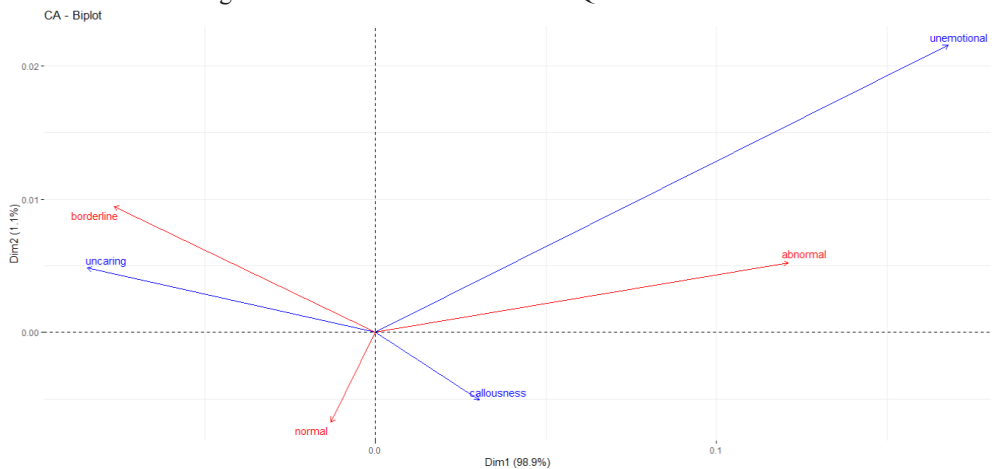


Figure 2. The asymmetric biplot using students with CU traits

The combination callousness-uncaring and the situation in which the three traits are present simultaneously are predominant. In the presence of the first combination the SDQ results normal while with the presence of the three traits the SDQ gives an abnormal score (figure 3).

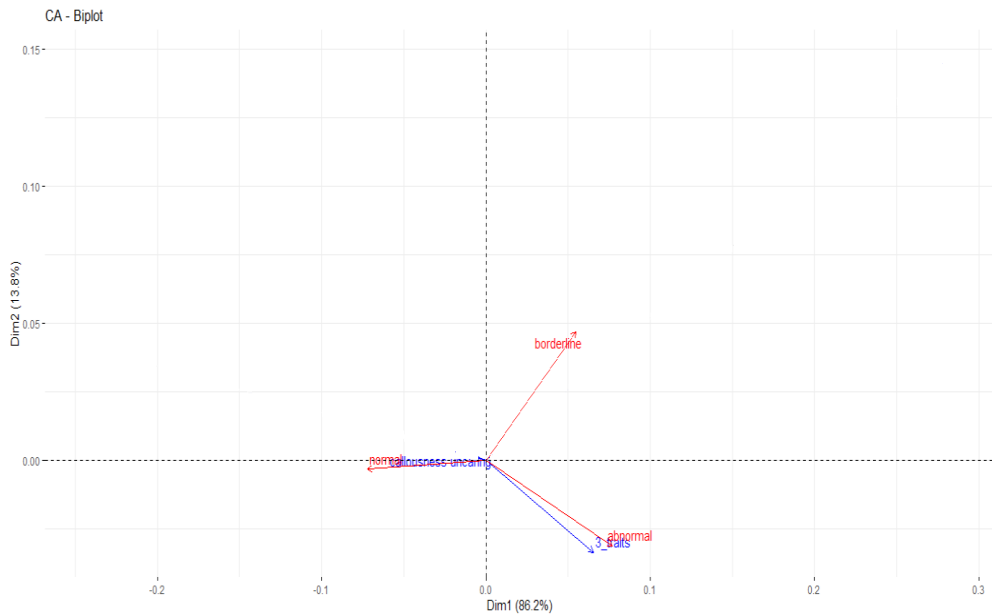


Figure 3. The asymmetric biplot using students with two or three predominant CU traits

The tables 2 and 3 show the results obtained exploring gender and geographical area of students respectively.

		SDQ		
		Total	Women	Men
ICU	callousness	Normal	Normal	Normal
	uncaring	Borderline	Borderline	Borderline
	unemotional	Abnormal	Abnormal	Abnormal

Table 2. Gender influence

		SDQ		
		Total	North	South
ICU	callousness	Normal	Normal	Normal
	uncaring	Borderline	Borderline	Borderline
	unemotional	Abnormal	Abnormal	Abnormal

Table 3. Geographical area influence

The results highlight that there is no gender influence in these correlations and, moreover, we neither found traces of geographical influence on the outcomes.

The variables that affected the correlations are those related to the familiar situation (figure 4, (divorced/separated parents or united family) and the use of drugs. The individuals with a separated family unit showed all the single traits related to borderline and abnormal SDQ results.

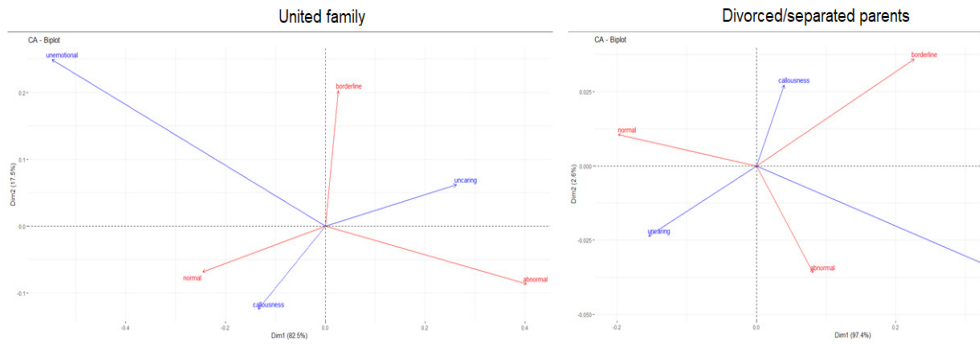


Figure 4. The asymmetric biplot of familiar situation

More precisely, individuals with the prevalence of callousness showed a borderline SDQ; those with a dominance of the uncaring and unemotional traits result abnormal. Individuals who declared to use drugs and have the presence of CU traits showed the following correlations: subjects with callousness dominance result in the abnormal dimension of the SDQ; those with a predominance of the uncaring or unemotional trait, end up in the borderline dimension. None of the trait is related to a normal score of the SDQ.

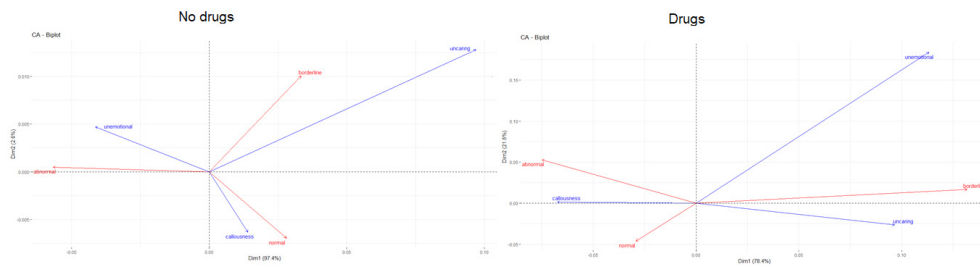


Figure 5. The asymmetric biplot of drugs 'use

We then considered the correlations between ICU traits and the externalizing and internalizing scales of the SDQ.

For what concerns the relations between the externalizing scale and CU traits, we detected that students with no relevant presence of CU traits obtain a normal SDQ. Most individuals with CU traits get an SDQ that shows externalizing problems. More in detail, taking into consideration each trait, we observed that, differently from the general correlation, the uncaring trait results in an abnormal SDQ, while the unemotional performs a borderline score (the correlations with the complete scale is callousness: normal; uncaring: borderline; unemotional: abnormal). The results show that an abnormal SDQ is associated in boys where traits of callousness and uncaring are present at the same time. In boys where the three traits are present at the same time, a borderline SDQ is associated.

In this specific investigation, we found out the presence of a gender influence. The results of the females are reversed compared to those of the males: the callousness is related to a borderline dimension, the uncaring to the abnormal, while the uncaring gives a normal SDQ score. As it was for the complete scale of the SDQ, the externalizing problems are exacerbated by the family variable and the use of drugs.

While investigating the internalizing scale, we found out that there is the presence of an abnormal SDQ score only with the co-presence of the three CU traits. The same gender differ-

ences of the externalizing scale were found in the relationship between the individual traits and the SDQ scores. Even also in this case, a broken family and the use of drugs imply that no CU trait is related to a normal SDQ.

The analysis has been carried out using the R packages.

3. Discussion

Part of our findings confirms what has been previously found in literature, namely that CU traits are also present in scholar age. They are prevalent in males and are more correlated to externalizing behaviours (e.g. Garcia et al., 2018 and the interesting findings of Raschle et al., 2018). This is not surprising since the expression of CU traits can be very similar to other conduct disorders.

The gender influence resulted relevant in the evaluation of the externalizing and internalizing scales, but not in the complete scale of the SDQ. This evidence could also reflect the precedent findings: boys and girls have different ways to manifest CU traits, like aggressiveness (Eme, 2016). There are different confirmations that those gender differences are expressed differently also in bullying acts, that are made more directly by males and more indirectly by females, even if it seems that they are balancing (Williams et al., 2017).

Other variables that showed to have influence on the manifestation of problem/behaviours related to CU traits are the familiar situation and the use of drugs (a deeper analysis of this correlations can be found, for example, in Oshri et al., 2019). We chose to insert these two variables following a literature that reported them as risk factors for a more general development of deviant and criminal careers, also characterized by violence (e.g. Kalvin et al., 2017).

There is an increasing number of studies that suggests possible parallelism between callous-unemotional traits and other emotional deficiencies that require special needs, such as those related to autism (Georgiou et al., 2019). We are dealing with young people unable to read their emotional code, with judgement difficulties, and unable to process negative feedbacks properly. It is possible to affirm that those adolescents are not able to read their emotions.

But what to do, practically, to decrease the power of the traits and increase emotional and social skills? First of all, as Clunies- Ross et al. (2008) remember, in general, the management procedures needed to reduce student misbehaviour fall into two broad categories: proactive strategies and reactive strategies (Wilks, 1996). The first are meant as those behaviours that a teacher can use in order to lessen the likelihood of a child demonstrating inappropriate behaviour, and involve altering a situation before problems escalate. These are preventive and with a positive approach to classroom management: teachers are likely to use positive responses when students demonstrate appropriate behaviours. Reactive strategies, instead, are teacher behaviours that take place after a child's inappropriate behaviour. They are essentially remedial in nature and teachers using them are likely to respond negatively to students' inappropriate behaviours, without responding positively to students' appropriate behaviours (Clunies- Ross, 2008). It has been suggested that the use of proactive strategies could eliminate a great part of behavioural problems and improve student attention to curriculum content and involvement in productive activities (Nagro et al., 2019). Moreover, to use more praise results in comments about student bad behaviour being brief, avoiding the use of lengthy reprimands, can reduce the incidence of teacher stress and burnout. It has been suggested that teachers' less than optimal use of approval and disapproval could be responsible for discouraging appropriate behaviour and particularly appropriate social behaviour, in the classroom (Beaman & Wheldall, 2000). Hence, a first step could be putting more attention to these everyday strategies.

We think, following our analysis, that a school intervention, aimed to develop emotional and social intelligence could act on the components of insensitivity, codification of emotions and the self-regulation of them, consequently representing an early intervention on conduct disorders aimed at avoiding future deviance phenomena. In accordance with the study of Schoeps (2018), the results support the revised model of emotional intelligence (Mayer et al., 2016) that considers it as the ability to solve interpersonal problems by recognizing the emotional needs of peers,

understanding the meaning of emotions and their implications for the behaviour of others, managing one's emotions and those of others in order to achieve the desired emotional states in oneself and in those around. In this sense, teenagers are more likely to appeal to aggressive behaviour when they are unable to regulate their unpleasant emotional states and resolve interpersonal conflicts. According to Di Fabio et al. (2016), emotional intelligence (EI) has gained attention as a focus of research and intervention for its promise as a set of skills that can be taught to enhance coping resources and promote well-being (Schutte et al., 2007; Martins et al., 2010; Sánchez-Álvarez et al., 2015; Fernández-Berrocal, 2016). The connections between EI and a range of positive outcomes across the academic, social, psychological and career domains among adolescents has been well-documented (Di Fabio et al., 2014). Research has also demonstrated that EI is associated with a variety of individual and social resources, such as resilience, positive self-evaluation and social support (Di Fabio and Kenny, 2012; Perera and DiGiacomo, 2015). Emotionally intelligent behaviour is reflected in the ability to think constructively and behave wisely (Hasanzadeh e Shahmohamadi, 2011). Wise and effective behaviour requires the ability to regulate and express emotions in healthy ways. EI skills synchronize the cognitive and emotional instances and are essential for an effective behaviour. They help students cope with situations of stress and conflict. Emotionally healthy students are proven to be happier, more cooperative, and, moreover, they learn more effectively (Low and Nelsons, 2005). Consequently, researchers suggest educational institutions to take their responsibility more seriously. They recommend administration of Emotional Intelligence and Learning Strategy tests as screening or diagnostic measures. It is not an easy task, but in the long term, it can bring benefits to the whole society.

However parental training could lead to effective results, too. As a matter of fact, it could be hypothesised that for the development of callous-unemotional traits the early relation with the caregiver has a fundamental role (Goulter et al., 2017; Dadds et al., 2019). This relation influences the psycho-emotional and educational development of the subject (think to the models explained by Brofenbrenner and their evolution, Merçon-Vargas, 2020). Hence, from a pedagogical perspective, it can be thus important to investigate important dynamics related to the micro, meso, and macro-system, following a bio-psycho-social model. In other words, it has been suggested that students should be addressed by the combined effort of all partners involved in the educational process: teacher, parents and students themselves (Georgiou et al., 2015). The support of family units and the enhancement of home-school cooperation are among the cornerstones, for example, of social pedagogy (Babalis et al., 2013). Evidence-based parenting programs decrease the possibility of CD and various school-based programs are also helpful in preventing the CD (Sagar et al., 2019).

To build and support these skills, there is the spreading of social and emotional learning (SEL) programs in schools. These programs could be taken as a model to adapt to the need of different schools. The aim is to help students managing negative emotions, being focused, following directions, and navigating relationships with peers and adults. The effects of these programs seem modest hence, there is the proposal to integrate some strategies into daily didactics and in interactions between teachers and students (Jones & Bouffards, 2012). Unfortunately, it seems that the research focuses more at the elementary school level, but there could be also suggested methods for high school. The programs usually are divided in three main categories: emotional processes, social/interpersonal skills, and cognitive regulation. These three domains of SEL skills are related to short- and long-term outcomes, including school achievements and behavioural adjustments. It is important to underlie that SEL programs follow a Brofenbrenner's model: even if the beginning is at school, also parents and community should be involved.

The most effective programs resulted to be those that combined four elements represented by the acronym SAFE: (1) sequenced activities that led in a coordinated and connected way to skills, (2) active forms of learning, (3) focused on developing one or more social skills, and (4) explicit about targeting specific skills (Durlak et al., 2011). For a greater effectiveness, it is also important the teacher training: teachers should be specifically formed on emotional and social

skills and conflict resolution (Reyes et al., 2012). One of the weaknesses of the programs were, in fact, a poor teacher training and the fragmentation of the activities, due to the fact that it is not perceived as a common aim. Hence, to build an integrated approach to SEL at school, it is necessary to: (1) build the program with continuity and consistency; (2) to remember that social, emotional, and academic skills are interdependent; (3) SEL skills develop in social contexts; and that (4) classrooms and schools operate as systems (Jones & Bouffards, 2012). To achieve these results, it would be important to also train the whole school staff, from the school-bus driver to the janitor and it is, obviously, necessary to invest in schools and school professionals. This kind of programs could be fundamental to intercept serious problem-behaviours and thus to reduce CU traits.

Conclusions: the need of an emotional education in schools

One of the aims of this work is to raise awareness of the presence of CU traits in the school context and to describe how these can contribute to the explanation of some behavioral outcomes of particular students. It also wants, on the basis of the presence of these data, to endorse the importance of the elaboration of didactic and educational strategies aimed at a functional development of emotion. Following the examples given, we think that a practical purpose could be based on SEL programs.

Callous-unemotional traits are an early personality variable that has been linked to the development of a serious deviant and criminal career. Moreover, it has been correlated with aggressiveness and other problematic behaviours in different contexts, above all in school (Sica et al., 2019; Thornton et al., 2013). The emotional lacks, connected with different cognitive functioning, seem to be the stronger features of the traits. In our sample, callous-unemotional traits have been detected and correlated with externalizing and internalizing behaviours. The unemotional feature has been found relevant. The traits were correlated with more serious externalizing and internalizing behaviours in presence of a family disaggregation and the use of drugs.

Nowadays, education is focused on the cognitive aspect. It is thus partial, and the emotional side is almost neglected. Emotional goals should be programmed alongside cognitive goals (e.g. Blewitt et al., 2019). England and Farkas (1986) used the term <emotional work> to describe “efforts made to understand others, to have empathy with their situation, to feel their feelings as part of one’s own”. It refers to the intention as well as the actions to improve the perception of how others (e.g. students) feel. This implies the development of “emotional understanding”, that is, “an intersubjective process requiring that one person enter into the field of experience of another and experience for his/herself the same or similar experiences experienced by another” (Denzin,1984). All cognitive activity is motivated from ‘underneath’, by basic emotional and homeostatic needs (namely, motivational drives) that explore environmental events for survival while facilitating secondary processes of learning and memory. According to Lawson (2011) emotions are the relay stations between sensory input and thinking. Negative emotions, such as anxiety, depression, anger, or frustration, can interfere with learning and can be the result of problems with learning. These difficulties can create a maladaptive and self-defeating behaviour pattern, which obstruct learning and mental / emotional growth. The impact, therefore, is not only in the social inclusion of the subject, but it is also aimed to improve the learning processes. Findings of many researches indicate that there is a significant relationship between students’ total emotional intelligence and learning strategies, both in females and males (for example Hasanzadeh and Shahmohamadi, 2011). The benefits of emotional competencies on classroom coexistence and their positive impact on bullying prevention and adolescents’ well-being have been studied over the last few decades (Schokman et al., 2014; Elipe et al., 2015; Marikutty and Joseph, 2016). Callous-unemotional traits are found also in children. What education can do, is to intervene on the environmental influences so to enhance the protective factors. The anti-bullying programs themselves should identify the authors with their roles and evaluate the presence of CU traits.

The goal of SEL programs is to foster the development of five interrelated sets of cognitive, affective and behavioural competencies: self-awareness, self-management, social awareness, relationship skills and responsible decision making. Basing on these five points it could be possible to create specific didactics activities, always remembering to use proactive strategies as much as possible. Of course, strategies should also consider the age of the students we are dealing with. In high school there could be the possibility to develop role play moments (Ris-mi et al., 2020). To increase critical thinking and responsible decision making it is advisable the introduction of philosophy since childhood (e.g. Daniel & Auriac, 2011). It is important to remember that when talking about CU traits it is better to intervene as soon as possible, since there is an impairment of normal emotional functioning that could be at least slowed down.

In order to do implement these new strategies, however, in addition to acting in classes, it is necessary to act on future teachers, as already deduced from López-González and Oriol (2016).

The results of this study, in fact, may also have powerful and important implications for teacher training and recruitment. The themes identified in it, that illustrate the differences between typical and outstanding teachers, may lead to the addition of new and specific training activities during pre-service and in-service teacher trainings. For example, trainings and role-plays that focus on helping a teacher to learn and practice with empathetic perspective to take with students, or trainings and role-plays in which a teacher learns and practices using emotion regulation skills in response to frustrating student behaviours, could be very worthwhile, as it could be for students.

In the end, we think that there is the need to revisit pedagogical practices based on static models and exploit neuroscientific knowledge, without exasperating their use, in order to generate a flexible learning process aimed at educating the person in its entirety.

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