

## Psychosocial functioning in Special Learning Difficulties Self – reports in a sample of Greek adolescents with SLDs

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### **Abstract:**

*This study investigated the co – existence of psychosocial syndromes in a sample of 110 adolescents who visited a psychoeducational center for evaluation or re-evaluation. Participants were asked to complete two self-complementary scales (the SDQ and SCAS scales). Variance analyses indicated the correlations between specific LD diagnoses and clinical outcomes. Although gender had a significant effect in clinical syndromes, the age did not. Girls seem to express more social and behavioral problems than boys. There were no significant clinical differences between SLD subtypes, but individuals with multiple SLDs were found to exhibit more social and anxiety problems in their everyday life than any other SLD subtype. The present study focuses on the evolution of SD and the psychological implications that accompany them, because of the consequences both on the diagnostic process and the intervention design.*

**Keywords:** SLDs, adolescence, self-reports, psychosocial functioning multidisciplinary intervention.

## I. INTRODUCTION

Due to their heterogeneous characteristics, Specific Learning Difficulties (SLD) have been at times an important reference point in the research and the clinical practice. This group of difficulties, a neurodevelopmental spectrum, are manifested by specific and persistent difficulties despite conventional instruction, intact senses, normal intelligence and proper motivation (Shaywitz, 1998).

According to DSM – V (APA, 2013), SLDs are types of Neurodevelopmental Disorders that impede the ability to learn or use specific academic skills such as reading, writing, or math calculation and mathematics' reasoning. Learning difficulties are somehow 'unexpected' even though other aspects of development seem to be fine. Early signs of learning difficulties may appear in the preschool years, but they can be reliably diagnosed only after the beginning of formal education. SLD are understood to be a chronic condition that typically persists into adulthood, albeit with cultural differences and developmental changes in the way the learning difficulties manifest (APA, 2012). There are new features in the diagnostic criteria for SLD in DSM –V (APA, 2013), which are being reflected in two major changes. Specifically, the first is that SLDs are categorized by 'specifiers' that characterize the specific manifestations of learning difficulties at the time of assessment. These include three major academic domains: reading, writing and mathematics. Secondly, there is an elimination of the IQ-achievement discrepancy requirement, which is replaced by

four criteria (A – D), all of which must be met (APA, 2013). The recommendations for diagnosing SLDs, according to DSM – V, suggest that a diagnosis could be made when all clinical information have been selected the medical history, the family and schooling background, school-based reports and observations (Cavendish, 2013).

For adolescents, the presence of a SLD poses a variety of challenges in their lives, such as low school performance, low self-esteem and possibly, a risk for emotional and behavioral problems. Behavioral or emotional problems are related to difficulties in school, or they may be a contributing factor to poor achievement in school. Despite the fact that students with SLD try to be competitive and recognize the value of hard work as a key factor of their academic success, their teachers claim that they are less motivated and competent than other students (Meltzer, Roditi, Houser, & Perlman, 2001, Grolnick & Ryan, 1990). As an outcome, students with SLD do not receive the analogous rewarding for their effort (Meltzer, Katzir-Cohen, Miller, & Roditi, 2001). Severity of behavioral and emotional problems may also be associated with the diagnosis of other neurodevelopmental syndromes, such as ADHD (Willcutt & Pennington, 2000b).

In a recent review (Sahoo, Biswas & Kumar Padhy, 2015) researchers worldwide underline the coexistence of conditions such as anxiety, emotional problems, behavioral problems and neurodevelopmental symptoms in the presence

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of learning disabilities. These associated features in each case, either derive from the SLDs due to low learning achievement, or create a vicious circle of straddling deficits enhanced by SLD presence (Sahoo, Biswas & Kumar Padhy, 2015).

According to Achenbach and Edelbrock (1978), the psychosocial functioning consists of the domains of externalizing behaviours (impulsivity, hyperactivity, aggression, conduct problems and/or antisocial features) and internalizing behaviours (withdrawal, dysphoria and anxiety) Many studies, in the past three decades, have reported that behavioral and emotional problems can significantly comorbid with SLD, in childhood and adolescence (Tomblin et al., 2000; Willcutt et al., 2000; Elksnin and Elksnin, 2004; Svetaz, Ireland and Blum, 2000; Kavale and Mostert, 2004)

Symptoms such as inattentiveness, defiant behavior, conduct disorders and lack of communication could frequently comorbid with SLD (Rowe, & Rowe, 1992; Bäckér, & Neuhäuser, 2002). Children with SLD can also display other clinical externalized behaviors such as aggression, unsociability and misconduct, to a level that causes deficits in their social and school functioning (Kavale and Mostert, 2004) In a review of relevant studies, (Johnson, 2002), it was recognized that there is a strong link between behavioral problems and learning difficulties. More specifically, it has been claimed that antisocial behavior could be a clinical condition and it was associated with underachievement in school (Elksnin and Elksnin, 2004; Svetaz, Ireland and Blum, 2000; Kavale and Mostert, 2004). There has been a connection between conduct problems and aggression from the first school years, to adolescence, which seems to be related to difficulties in school and learning, in general motor skills or to cognitive deficits (Johnson, 2002).

As it is mentioned in the literature, learning disabled adolescents show higher levels of anxiety and somatic symptoms, combined with low self-esteem (Huntington and Bender 1993). This population, according to clinical observations tends to suffer from chronic depression, anxiety and social problems much more than their peers without SLD (Sahoo, Biswas & Kumar Padhy, 2015). According to Watson (2005), there is a significant short component between depressive symptoms and anxiety, which is also suggested by the new DSM- V. Depressive symptoms and withdrawal were significant outcomes among SLD populations and it seems that there have been important emotional and psychosocial impacts (Sundheim and Voeller, 2004; Margalit, 2004; Al-Yagon and Mikulincer, 2004; Manassis and Young, 2000; Srinath, Girimaji, Gururaj, Seshadri, Subbakrishna, Bhola, & Kumar, 2005).

Youth behaviors, which are considered as normative in one developmental phase, could be characterized as pathological in another (Guttmanova, Szanyi and Cali, 2007). So, self-report measures are important for their evaluation. Self – report measures are capturing dimension – based assessment and their importance can go to psychological resources (Achenbach, 2005). It seems that girls with SLD experience more anxiety than boys, but this could be explained by the socialization and coping strategies which differ between the two genders (Sena, Lowe, & Lee, 2007; Swanson, & Howell, 1996).

Our area of interest was in the first up to late adolescence, which is considered as being a particularly stressful period. The aim of the current study was to describe the psychosocial functioning on a sample of individuals diagnosed with a SLD. More specifically, it was investigated whether and how a different subcategory of difficulties brings with it different clinical symptomatology. Alongside, it was examined whether the dimensions of age and gender affect the formation of clinical symptomatology.

## II. RESULTS

### *Data Analysis*

The data were analyzed using the Statistical Package for the Social Sciences Program, version 20.0. (SPSS 20.0). We used the Mann-Whitney test and Kruskal-Wallis tests for the comparison of two or more groups of non-normal data. The Kolmogorov- Smirnov test was used to test normality. A non-parametric Spearman correlation test was used to assess the relation between age and IQ, behavioral and emotional problems according to the measures of the two scales.

According to Spearman factor correlations, there was no effect of age in IQ scores and in clinical symptoms. The Mann –Whitney test showed that there is an effect of gender: Girls were found to express higher scores in total problems ( $p = 0.008$ ), in emotional problems ( $p = 0.000$ ), in conduct problems ( $p = 0.035$ ), in peer problems ( $p = 0.021$ ), in help assistance ( $p = 0.022$ ), in daily problems ( $p = 0.043$ ), in panic disorder ( $p = 0.008$ ) and in fear of injury ( $p = 0.025$ ).

The Kruskal Wallis test showed that there is a statistically significant effect of diagnostic category to problems relating to behavior, peer and daily problems as well as social anxiety. The Mann Whitney test, showed that children with generalized learning difficulties express more conduct problems than children who have reading difficulties, mathematic and learning difficulties. It further revealed that children with reading difficulty express more problems with peers than children with difficulty in written expression. Additionally, children with mathematic difficulty have more everyday problems than all other groups of diagnoses.

Finally, children with generalized learning difficulties expressed more social anxiety compared to other diagnostic categories. More specifically, the post-hoc analysis using the Mann-Whitney test, revealed that: children diagnosed with a learning difficulty unspecified showed fewer conduct and peer problems than children who were diagnosed with generalized learning difficulties ( $p = 0.005$ ), ( $p = 0.040$ ). Also children with a learning difficulty unspecified, show fewer everyday problems compared to children who were diagnosed with impaired mathematical skills ( $p = 0.021$ ) and fewer social anxiety compared to children diagnosed with generalized learning difficulties ( $p = 0.000$ ) and written expression difficulties ( $p = 0.000$ ).

Children diagnosed with a reading difficulty showed less social anxiety levels compared to children who were diagnosed with generalized learning difficulties ( $p = 0.001$ ) and written expression difficulties ( $p = 0.000$ ). Children diagnosed with generalized learning difficulties were found with higher overall scores compared to children who were

diagnosed with a reading difficulty ( $p = 0.026$ ) or with an unspecified learning difficulty ( $p = 0.024$ ).

### III. DISCUSSION

The present study investigated the prevalence of clinical symptoms associated with specific learning difficulties in a sample of 110 adolescents. Results indicated that types of SLD are associated with high scores in tests assessing behavioral and emotional symptoms. Regardless of the diagnosis, all individuals recorded elevated scores in the categories of clinical symptoms. According to our results, age doesn't seem to be a differential factor in terms of the symptoms detected. However there were differences between boys and girls. Adolescents with learning difficulties appear more vulnerable in terms of psychosocial functioning. Indeed, symptoms such as oppositional behavior, problems in everyday life, relationships with peers and various anxiety behaviors are evident.

Particular, children who were diagnosed with difficulties in more than one learning areas, expressed more difficulties than the others. These individuals seem to have more problems with their behavior, which affects the relationships with their peers, but also intensify the difficulties they have in their daily lives. These problems were found to co - exist with higher levels of social anxiety in this class of individuals. A presence of multiple learning disabilities, in more than one area, may exert individuals in a greater effort to manage their academic deficits, compared to children with a disability in only one area. This stressful condition can contribute to greater psychosocial deficits and higher anxiety behaviors (Whitney, Smith & Thompson, 1994; Prior et al., 1999).

Social and anxiety problems were also expressed by individuals with a specific difficulty and social conciliation was found to be the main clinically expressed condition. Both groups of individuals with SLD – specifier in reading and/or arithmetic, were detected with higher levels of antisocial behaviors and especially in terms of their bad reaction towards peers, on how well they do in their everyday life and on how socially accepted their behavior is. According to Johnsons review (2002), those types of clinical symptoms could easily co – exist with difficulties and their influence in school performance, in addition to the existence of cognitive deficits, is important. Many researchers in the field of child - adolescent psychology, have highlighted the fact that, a clinical behavior of a young person, can play such important negative role in school adaptation, even if the presence of a cognitive difficulty is not the primary problem in management (Beitchman, & Young, 1997; Prior, Smart, Sanson & Oberklaid, 1999). Contrary to the relevant literature, the values recorded in the other psychometric scales were not statistically significant and therefore were of no clinical interest. These findings may be due to the specificity of our sample.

Because of the fact that all participants were adolescents, the current study did not reveal differences in clinical conditions, according to age. These conditions may be more conspicuous among adolescents and younger children. Age could be a significant predictor in psychosocial problems, especially in anxiety. Several researchers claim that emotional and anxiety symptoms vary among different age groups in that younger

children express more physical symptoms (like reaction in anxiety) whereas older ones deal with them in a more efficient manner, probably as a result of their mature cognitive functioning (Wigfield & Eccles, 1989).

Contrary to age, gender seems to diversify the clinical reaction of individuals. Girls expressed more emotional vulnerability and more anxiety than boys. They also deal with a greater difficulty in peer groups and socially circumstances but they express more easily their help assistance as well. Gender differences have been reported in the literature, albeit based on self-report measures for anxiety and emotional symptoms. It seems that girls react in a different manner in terms of how the cope with stressful events, how they socialize with others, and in terms of how willing they are to admit their problems (Wigfield & Eccles, 1989).

According to self – report measures, it is important that scales such as SDQ and SCAS can give information's for pathological factors and also for these resources that could play a protective role. These features can help specialist to take into account further information's in order to organize a custom intervention (Olino, Klein, Lewinsohn, Rohde and Seeley, 2010).

### IV. CONCLUSION

The present study adds more findings in the field of psychosocial disadvantages of individuals with SLDs. Problems were identified mostly in all aspects of social conciliation and social expression of anxiety. This deduction is also reinforced by the cognitive – learning deficits. In conclusion, is arisen, both in this study and at respectives, the need for clinicians and researchers to focus on the study and design of guidelines and interventions for multidisciplinary approaches.

### V. LIMITATIONS

The current sample size of the study was quite small and as a result, we did not have enough representative information as regards other SLD subtypes. In addition the sample was relatively homogenous in terms of demographic characteristics, thereby limiting of our findings generalizability.

#### Future Research and Implications for Diagnosis and Intervention

The current findings enhance the existing literature in the field of comorbidity of SLDs, aiming to emphasize the importance of intervention. Further research can focus on the existence of comorbidity, not only in different types of SLD, but also in specific language impairment (SLI). Quite often in clinical practice, there is a significant percentage of clinical syndromes in young people with SLI and which can lead to generalized LD and a greater impairment in social functioning. As it is emphasized in DSM - V, for each specialist, it is important to focus on the evolution of SD and the psychological implications that accompany them, because of the consequences both on the diagnostic process and the intervention design. Modern research and guidelines for classification of learning syndromes increasingly emphasize the need for interdisciplinary and multidisciplinary intervention.

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