

Irlen Syndrome: Manifestations and the Intervention Process

Mateus Barroso Sacoman*

Professor of the Department of History, Pedagogy and Biological Sciences of the Adamantina University Center (Unifai), Adamantina, São Paulo, Brazil

***Corresponding Author:** Mateus Barroso Sacoman, Professor of the Department of History, Pedagogy and Biological Sciences of the Adamantina University Center (Unifai), Adamantina, São Paulo, Brazil.

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Abstract

Irlen's syndrome affects about 15% of the population spread around the world. Even so, the debate on diagnosis, intervention and treatment context is little discussed, especially with regard to society, although there has been a great effort in recent years. The intention of this article is to disseminate studies and materials on the syndrome, analyzing the references found to determine the definitions and manifestations of the syndrome, also addressing the difficulties created by it to individuals in various fields of coexistence and explaining some methods of intervention, recording also some situations and ways, to reflect professional practice on how to deal with this whole process.

Keywords: *Irlen Syndrome; Diagnostic, Intervention and Context; Learning*

Introduction

Irlen syndrome, inherited in character, is a visuoperceptual change, originated by a mismatch in the ability to adapt to light that generates changes in the visual cortex, as well as deficits in reading, among many other difficulties, directly affecting the learning process, affecting school performance and interpersonal relationships of individuals with the syndrome.

It is extremely important to develop academic papers that address this issue, pointing out the procedures for the identification and intervention of this visuoperceptual change, as well as providing contributions to debates and discussions on the subject; thus contributing to the various professionals, be they teachers, psychopedagogues, psychologists, among others, who are related to the area of education and learning as well as the medical area, to establish the correct treatment and procedures to be developed with people, in particular: school age or not, showing signs of this syndrome, so that they can be adequately assisted, thus providing the possibility of learning and a satisfactory life.

In view of this, the purpose of this paper is to analyze the conditions that allow early diagnosis, in order to provide support for monitoring and intervention in individuals, thus neutralizing the distortions caused by the syndrome, helping to remedy learning difficulties.

In order for this action to take place, it was necessary, at first, to survey the theme and to read and analyze the bibliography proposed in the initial project and, later, to collate the references found, taking into account the leading issues for the study. elaboration of the work

aiming to establish the definitions, signs of the syndrome and the difficulties generated by it - both in school and in life in society - some intervention methods, although there are many, and to point out some situations and ways, reflecting the necessary posture to be put into practice by the professional preparing to handle this whole process.

On the other hand, the intention is also to promote and stimulate studies and interest in Irlen syndrome, which is little addressed by academic works and little discussed by civil society.

Explaining Irlen syndrome

Discovered in the USA in 1987 by Prof. Helen Irlen, seeking a better understanding of the poor performance of some children with normal or, in some cases, very high intelligence, Irlen syndrome affects 12% to 14% of the world's population, including good readers and college students, becoming proportionally more frequent when there is concomitance with attention deficits and dyslexia, from 33% to 46% of cases [1].

According to Helen Irlen, neurologically-based Irlen syndrome (I.S.) is a visuoperceptual change, caused by an imbalance in the ability to adapt to light that is associated with changes in the visual cortex as well as magnocellular system deficits*. Children are known to inherit from their parents and at least one needs to be a carrier, regardless of levels and intensities, which may vary [2].

The set of symptoms becomes more evident in situations that demand a high demand for visual attention, such as school, academic and professional activities that involve the need for a longer reading load. For Márcia Guimarães, the syndrome manifests itself through blurring during the reading process, photosensitivity, restriction of the peripheral field, as well as difficulties in adapting to contrasts, for example, figure-background. It also highlights the difficulty in maintaining visual attention and frequent headaches [3].

People with Irlen syndrome generally have great light intolerance, especially white light, fluorescent light and headlights. During the reading process, the white pages become blinding, making the reading difficult and uncomfortable. This, in turn, motivates that the brain processing of information, which arrives by sight, is distorted.

This whole set of events creates a great deal of discomfort, causing headaches, irritability, distraction while performing activities, difficulty in deep vision and ability to detect the correct distances between objects, contributing to everyday activities. Such as playing sports, climbing stairs and driving vehicles become arduous, thus developing a host of other problems with normal life such as frustration, low self-esteem, insomnia, etc.

Distortions of vision produce a sensation that everything moves around or out of focus, even if the center of vision remains in focus, and because of this, ordinary eye exams usually do not detect IS, given that the center of reading vision remains clear.

Not surprisingly, students find it difficult to do everyday tasks in the school environment, such as copying words from the blackboard to a notebook or a book, the speed of reading progression is also affected.

*Importantly, the magnocellular system, a network of large neurons that controls the motor system of the eye, is a key part of gaining information from the visual system about movement and fundamental during reading, helping the eyes to position properly over each letter, determining its order.

In school practice, according to Guimarães, symptoms such as confusion between numbers, perception of visual distortions in pages with text, reading from the bottom up and inversion of words and letters, irregular spacing and difficulties in staying in line during writing, as well as slowness and poor comprehension [4].

In the face of visual strain, visual distortions set in, making reading difficult, and we can see this fact by the tendency to constantly rub eyes, cover or shadow the paper while reading, squint and wink, shake and tilt the head, tiredness. after ten to fifteen minutes of reading, preference for twilight and tearing, itching and burning, family history of learning difficulties. Visual distortions (blur, white lines in the middle of the text, shaking or accordion words, swirling) are part of everyday life and occur whenever the student reads. Headaches and migraines are a constant in most patients (82%) [3].

In the complaints of individuals with the syndrome, the following manifestations can usually be found: problems in visuospatial resolution and depth perception, photophobia, restriction of focal range, difficulties in maintaining focus and asthenia.

According to Guimarães., *et al.* Photophobia can be identified through complaints of brightness or reflection of white paper that rival the printed text, diverting and compromising the individual's attention of the content that needs to be read [5].

As mentioned earlier, fluorescent lights are uncomfortable and irritable, just as direct-incised sunlight, car headlights, and even streetlights cause some inconvenience to I.S. owners. Along with this exposure, there are headaches.

Already the alterations of the ability of visuospatial resolution generate a sensation of blur and apparent movement of the letters that can pulsate, shake, vibrate, clump or even disappear, also impacting the attention and, consequently, the comprehension of texts.

The focus restriction, for Guimarães, restricts the visual range and significantly reduces the number of letters seized, causing a reading, a split view of the words, which requires a second effort, with a lot of effort, for coherence and comprehension [4].

The author also points out that the restriction in focal range can also cause difficulties in the organization of text in significant segments or syntactic portions. And it points out that generally good readers are able to progressively widen the field of vision, thus recognizing familiar words either as a whole or lexically, in order to identify and record the visual cues necessary for a faster and correct interpretation of the meaning of text.

Regarding the difficulties in maintaining focus attention and depth perception, Guimarães indicates that the first, due to the fact that the text the printed image is fuzzy or less sharp than usual, and without focus after a certain reading time, produces visual stress or asthenopia.

Asthenopia, which may vary in intensity, is characterized by visual discomfort associated with burning sensation and dryness of the eye, forcing an increased need to blink, causing red and watery eyes, which leads to squeezing and scratching movements, leading to also changes in the position and distance of the individual to the printed paper, disposition for sleep and making pauses for visual rest constant.

The second difficulty, which alters depth perception, has a great impact on daily activities. This perception ability gives the human being the correct three-dimensional assessment, but in this case, as it presents disturbances, activities such as driving and parking, going down and climbing stairs, going through doors and catwalks playing ball sports, movement in general, among many other situations. everyday life - in which visual anticipation for safety reasons and quick adjustment to new environments becomes extremely important - becomes more thorny and also generates emotional stress.

Even if it has different intensity levels, I.S. It requires great effort when the brain has to block all these sensations exposed so far, and develop reading or put into practice other skills that require vision so that the individual can understand and perform various activities, situate, etc.

The consequence is extra tiredness that tends to increase more and more as reading or other activities go on.

By generating all this stress load, many people with I.S. end up giving up reading, others even leave school, because of difficulty in understanding and also the difficult living in the school environment, something that will be worked on later.

Importantly, I.S. can exist simultaneously with other learning disabilities, thus requiring the pursuit of a multidisciplinary intervention, with the help of teachers, educators, psychopedagogues, psychologists, speech therapists, ophthalmologists, neurologists, among many others that contribute to solve difficulties in health and education.

Regarding the diagnosis, as mentioned above, there is usually a need for a multidisciplinary team to work together, and although the intervention process does not only require specialized professionals, it is very important that detection is made or, in case of referrals, better. analyzed by a screener specialized in the area.

According to the Brazilian Orthoptic Council, in Brazil, this certification can be obtained in Reading Dyslexia courses organized by Dr. Ricardo Guimarães Eye Hospital, in the city of Belo Horizonte, MG, which trains health and education professionals [6].

Guimarães points out that the identification of the syndrome can be made by these professionals who are qualified, through screening test or screening and the application of a worldwide standard protocol known as the Irlen Method, thus enabling the classification according to the degree of intensity of visuoperceptual difficulties.

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However, with suspicion or through a professional who identifies, the next step is the referral to a screener for the initial tests, which are usually performed in offices, where the degree, intensity and if the use is determined. overlays - the colored overlays - can contribute to the treatment and the correct color of each specific case.

According to Eliza Katayama, making a significant gain from the use of overlays in Brazil, people with I.S. they are referred to the Eye Hospital - Belo Horizonte, where they will have the opportunity to proceed with the intervention through a series of specific exams and, finally, the choice of the color of the filters that will be placed in conventional glasses or contact lenses [7].

The author also points out that the colors of the lenses are not always the same as the overlay. If the problem is mainly related to math, depth perception, computer activities, headache, light sensitivity, or night driving, color lenses are the best treatment options as they will not only work on printed pages but also in the surrounding environment during everyday life.

Intervention and context

After a brief explanation of what Irlen syndrome actually is, it is now necessary to enter into the intervention process itself and, furthermore, to analyze the whole context involving individuals with I.S. such as the school environment, the family; How can professionals act in what has been freely called the extra situation, in the sense of external and supplementary to intermediation, that is, what does not necessarily deal with the incisive intervention process, but which permeates it, generating conditions and situations appropriate to the situation.

In order to attempt an optimal resolution to the problem of distortion and light discomfort, the Irlen Method enables the detection of which specific lengths of visible light need to be annulled. People with I.S. Confirmed first go through a process of choosing various color options for the filters to be used, with the intention of being facilitating agents in the performance and visual comfort during the reading activity. Once defined, as use can be done immediately, improvement results already appear.

According to Irlen, the method addresses sensory problems related to light sensitivity, sensory overload, difficulties in sensory integration and depth perception, and symptoms of physical discomfort, as well as reading problems [8].

The lenses or filters used have faint gradations that, to our eyes, look similar. However, for the person with I.S. will cause a process of adaptation reactions that normalize their visual activity, generating greater comfort, visual quality and consequently, in the long term, quality of life.

The filters used for spectral blocking of lenses or glasses are also intended to help improve depth perception and the surrounding environment.

However, it is noteworthy that the use of colored overlays or filters will not diminish phonetic difficulties, for example, nor increase the vocabulary of the person treated. What it will do is to eliminate distortions and, therefore, the need for a group of other professionals so that, step by step, the intervention is progressive and effective.

The same document also indicates that about 96,000 children and adults worldwide use color filters and millions of children with some degree of I.S. use so-called overlays or colored overlays while reading or other activities. In addition, Aragão points out to us the need for questionnaires regarding daily activities to characterize and evaluate academic skills [9].

Screening test is done after visual acuity assessment and under updated refractive correction when required. By screening we see the benefits, by suppressing visual distortions, by interposing one or more color transparencies individually selected by the carrier of Irlen syndrome. Once the optimum transparency is determined, the wearer will use it over the text while reading or covering the computer screen while reading, for immediate benefits in visual comfort, fluency and comprehension [4].

Counteracting distortions will make it easier to recognize words read, but obviously will not allow a person to read words they do not know. For these individuals, reading has always been a synonym for difficulty, and rejection has become a built-in habit - one must consider that there may be years behind regular readers who have acquired a substantial visual vocabulary of instant recognition. Obviously, word learning will be facilitated by being no longer distorted - but learning assistance will be important and without it reading will remain a difficult and stressful activity. Likewise, the use of filters will not be the only factor necessary to improve reading performance, but in the case of Irlen syndrome the choice of treatment will mean a non-invasive, low cost and high resolution feature, allowing its users a enhancing the benefits of their academic and professional efforts, as well as facilitating the work of the multidisciplinary team that assists them [4].

Other simple actions suggested by expert professionals, which can greatly assist you in everyday life, are a 30 ° angle reading stand, avoiding bright objects or table tops, using natural light or, when impossible, light. Glowing artificial.

All this concern is logically necessary in the pursuit of a healthy life, but mainly because I.S. directly interferes with the development of the learning process, generating great difficulties and these difficulties can cause a series of obstacles to social coexistence.

Vision is undoubtedly the most important sense during the learning process; its dependence is estimated at around 80% until the twelve years old, and the impacts of neurovisual deficits are very significant. On this topic there are important tools discovered in recent

history to contribute to the diagnosis and intervention in students with reading difficulties: There are relatively simple gadgets. They consist of a visor with an eye tracking instrument and another appropriate software to process the captured data. Secondly, it has been found that filters blocking the transmission of certain light frequencies allow you to correct the eye path for better fixation and synchronization. Thus, there are effective and inexpensive therapies [10].

Therefore, these scientific findings open a new frontier by identifying and curing students whose reading difficulties were misidentified. If the incidence of these problems were residual, it would be an important advance for the few who suffer from these mismatches in eye trajectories.

What makes this discovery amazing is the high incidence of this syndrome. This is perhaps the most precariously measured data today. Still, very preliminary estimates suggest that up to 20% of the population has such a problem [10].

Thus, diagnose and take care of the manifestations generated by the I.S. It will contribute to a noticeable improvement in learning difficulties by acting as a facilitating agent in the visual processing of intervention options, along with the actions of other professionals such as psychopedagogues, speech therapists, teachers who seek to help in the intervention process. And during this set of interventional actions, interdisciplinarity is essential. Regardless of the task or intent proposed during this process, every issue of development and learning happens gradually.

Thus, it is necessary to understand and accept the differences, it is essential to take into consideration the individual issues, considering that, in addition to solving the learning difficulties, also works in the formation of human beings to live in society with their successes, limits, and difficulties, and it is necessary to respect all cultures.

The professional who is willing to diagnose the syndrome, regardless of his area, and later during the intervention, needs to be a facilitator and not a reason for difficulty.

It is essential that every action is guided by an approximation of the reality of children and young people, that is, all activities need to correspond to the daily life of the child and his family, his culture, his daily life, making what is being taught in something that will really be of use to her. Facilitating the learning process, turning it into something more enjoyable, despite all the difficulty present with the syndrome.

When we can collaborate to alleviate the suffering of children/adolescents and even adults, be it through assessments, interventions, family and school orientations, we have a feeling that our role goes beyond academic knowledge (although it is very important). It is a belief that the human being is modifiable and that, despite the difficulties, we may be surprised by its evolution. We mediate this whole process of searching for answers. Fortunately, we are not alone! Each in his own area, with In your knowledge and in this multidisciplinary way, we work together to achieve more answers to more questions that will come on our journey! [11].

The assessment tools are paramount in the search for the roots of the learning disability and, later, for the whole process of solving this disability. Psychopedagogues and various practitioners must decide which method is best for each situation within a wide range of possibilities but be aware that there are very specific times when certain assessment tools need to be used.

It is also important to understand that each professional has their theoretical and methodological matrix and that many times the options that will be put into practice may vary. Provided that the necessary care is taken throughout the process, strictly observing the theoretical indications of what is being practiced, also taking into account the ethical question, its validity will undoubtedly be real.

Already interviewing parents who found that their child had a difficulty in visual processing (Irlen syndrome), we realized that life was seen from another angle. This did not imply total problem solving, but rather an important component to be alleviated, freeing up other learning channels and aiding other multidisciplinary interventions [11].

In these multidisciplinary interventions, each professional will have a way of acting, reasoning and making decisions. In addition, there is the counterpart of the individual you are working with. The results are important indicators, but from them, we need to dive into research and theoretical inputs that can help in the correct action to be taken and often there is not only one way out. Even if fixed results are obtained, the forms of intervention and ways to follow are varied.

Therefore, it is necessary to rigorously, both in studies and implementation throughout the process to remedy the difficulties generated by the syndrome, especially with regard to school content, because the lag of this content is a big problem, among many others, of teaching. In Brazil, therefore, besides acting on IS, quality education would be necessary. But this is already a question that escapes the intention of this work.

In addition to the innovative methods developed by Helen Irlen, in recent years the Instrumental Enrichment Program (IEP), developed by Prof. Dr. Reuven Feuerstein in Israel has contributed a great deal to the treatment of the syndrome, as well as other learning disabilities [12].

In psychopedagogical care I have had significant results with the IEP. This is a new innovative pedagogical and psychological technology created by Prof. Dr. Reuven Feuerstein in Israel provides individuals with a better relationship with learning. The development of the potentialities of children, adolescents and adults is a fundamental focus in this proposal. Each must efficiently organize and transform the knowledge acquired inside or outside the school [13].

The purpose of IEP is to teach the individual to think about their own processes and thus gain autonomy. It is learning how to learn. This is why IEP has worked very well with dyslexics with Irlen syndrome. In my office experience I have seen many patients who use spectral filters and have dyslexia. The focus of the work is on developing and improving the Mental operations that hinder these people the most are: working with more than one source of information, analysis and synthesis, controlling impulsivity, mental representations, precision and accuracy in data collection, spatiotemporal orientation, among many others. And the most important of these: the feeling of competence [13].

Another important instrument for the action of professionals is centered on body movements in general, which constitute a form of language, translate something. Through them you can see several signs that may indicate some kind of difficulty. It becomes, therefore, an important tool for analysis and effective action in identifying I.S. "Learning is dramatized in the body from the pleasure experience of authorship" [13].

Therefore, when there is no pleasure during the learning process, the difficulty, such as reading texts will be visible through the gesture of the individual, natural in all human beings during an action that is performed with some difficulty or effort.

To think that individuals are constituted by the junction of body and mind, is to understand the need to work together to find solutions to solve learning difficulties. But the most efficient forms of identification and intervention of both I.S. how much of the difficulties during learning if there is no relationship of affection between the professional and the individual during the whole set of actions taken.

With regard to child development, growing and developing in an environment where there is affection is vital for their intellectual, motor, psychic, and social attainments; allowing the child more security and balance in its development in the aspects mentioned above that may suffer interference by the syndrome.

Work on the self-esteem of the individual presenting I.S. It is another essential activity, contributing to a more satisfactory intervention process that will improve the patient's quality of life, producing lasting effects, especially in relation to the achievement of various competences during the development process that will reflect later on body health and health mental.

It is extremely important to live the learning experiences throughout the follow-up of the intervention in an environment, in an affective relationship, contributing to a good development not only of the psychomotor aspects, but also the cognitive and socio-affective ones that will form the human being, a subject capable of to know their society, their rights and duties towards others, their potentials, their limits and to be able to deal better with frustrations and living with the different.

In addition to the great possibility of methods and actions during the intervention process, the professional must also be aware of the extra situation, the supplementary context to all these procedures that may hinder the search for better results, more precisely: the difficulties generated by the school environment for accurate diagnosis, post-diagnosis coexistence and family.

In fact, one can start from two fundamental points on this issue of barriers generated in the school environment involving the individual with Irlen syndrome and facing learning difficulties during the educational path, contributing to a late diagnosis.

The first point is related to the “preconceptions” established by school environment professionals and this goes beyond the teacher. Unfortunately, it is still very common to link the learning disability to the socioeconomic issues, ie, in other words, there is already a preconception that students from less well-off social groups may develop some difficulty. Or, when the student already has an apparently detected learning disability, teachers indicate that the main factor is social origin. As one of these factors may be the main cause of low esteem, unwillingness to learn, etc.

Of course, all cases need to be specifically studied and analyzed, but this “preconception” often hinders a quick and accurate diagnosis, also hindering the development of all procedures to provide satisfactory learning when the student becomes seen as “different” in the school environment.

By establishing an early diagnosis of learning disorders, a care organization and support structure are created to meet the needs and development of compensatory strategies for these individuals [14].

When a child is identified as at risk for learning disabilities at the age of five to six, the prognosis is more favorable and the rehabilitation process faster. This is related to the fact that these children have acquired much less academic content and, consequently, make less compensation than those with late diagnosis [14].

The second point is centered on popular belief, beyond the issue of the difficulties encountered in evaluating the applied subjects. This belief may lead the teacher to prevent a student from having a chance to be evaluated by psychopedagogues or other professionals in discovering the real learning disabilities. For example, associating school performance only with the student’s messing up in the classroom.

Often, the situation remains unchanged and the student, especially from families who are less able to look for a professional and follow a treatment, may not have the opportunity to be better evaluated and, consequently, have a satisfactory learning process.

Finally, it is important to be extremely careful about such in-depth assessments based on “acheism” or “preconceptions” as they may amputate the opportunity for worthy intervention or often aggravate the situation. Labeling is not the way, satisfactory interventions can only be made through accurate diagnoses.

Learning is a process by which behavior changes as a result of experience. And for learning to happen, there must be basic integrations of psychodynamic functions (psycho-emotional aspects), the peripheral nervous system (channels for symbolic learning), and the central nervous system (information storage, elaboration, and processing). If one or more functions are compromised, children, adolescents or adults perform less well than expected in academic performance and are therefore commonly labeled as people with learning disabilities [15].

But today, when health and education professionals have at their disposal the knowledge generated by neurosciences, it is no longer possible to make such a generalization. After all, accurate interventions can only be performed if, from the observed symptoms, correct diagnoses are made. First, therefore, we need to recognize the differences between disorder, disorder and difficulty, which is based not only on the affected brain region and impaired function, but also on the problems that result from each condition [15].

Also included in the context of diagnosis, the family is the guiding axis in the early years of the child. Although many begin early in day care centers and schools, the daily life of children, together with the culture they experience as a whole, can contribute positively or negatively to development in the coming years, not only in terms of learning, content but also as a human being and citizen.

A family that goes through a series of difficulties such as: poor financial situation, lack of harmony in the parents living together, lack of affection and attention, use of narcotics by parents or family members, among others, contributes negatively, adding a series of problems and difficulties to the child's development, if there is no proper monitoring by professionals or the family itself can not solve the difficulties and even identify them.

The foregoing scenario can be catastrophic in a family whose family member has Irlen syndrome and has not yet been diagnosed, assuming that the child or adolescent is not prepared to cope with the various difficulties that develop without proper treatment. to reflect on learning and even coexistence in society, resulting in the drop in school performance and friendship relations and bonds.

Children who are influenced by family problems may carry with them poor self-image, low self-esteem, lack of empathy (depending on age), lack of affection and respect for others and the laws of social interaction, i.e. It goes far beyond reflection on learning issues, which are undoubtedly important.

The family is essential for the development of the individual, regardless of their background. It is in the family environment that the individual has his first contacts with the outside world and learns the first values and habits. Such coexistence is fundamental for the child to enter the school environment without disciplinary relationship problems, among others. For a child to learn, it is necessary to respect various integrities, such as perceptual-motor, perceptual and cognitive development and neurobiological maturation, as well as numerous psychosocial aspects such as: opportunity for experiences, exploration of objects and toys, medical care, cultural level, etc [16].

If on the negative aspects of problems in the out-of-school context the difficulties become arduous, on the positive aspects - if you can call them that - the contribution to a satisfactory intervention is great, generating a healthy development in all aspects of the individual's life, even with the difficulties imposed by the syndrome.

It is important for children to have the opportunity to grow up in a harmonious family - and that is not to say that there is no conflict, because they exist and must be resolved to the best of their ability - that they have the opportunity to live in society with the situations of the child. everyday life of their culture.

It is also crucial that there is a chance to explore new possibilities, "new worlds"; together with an environment, school and social, which aims at the aggrandizement of the individual as a whole, both in the question of learning and in the formation of a citizen, including here respect for the laws of social life and respect for others.

This above context must be permeated by the following key point: what is being taught must be of practical importance in the child's life or be part of the child's culture, which can have practical value, increasing interest in learning, not just the subjects of the parameters. but a number of other activities.

Ideally, parents should provide security and attention to their children so that the child can better accept the frustrations that will occur in many other circumstances in life. However, the reality is that, in many cases, in the face of this new circumstance, there is an

emotional disorganization, in which anxiety and anguish also take over the parents and generate feelings in them that further impair the moment of difficulty experienced by the child. If one mother cries, the other puts herself in an authoritarian way, or if the grandfather starts playing the role of father, we understand that these are genuine reactions to a difficult time for family members as well. However, what cannot be overlooked is the effect of tears and these attitudes on the family as a whole [17].

Finally, in order to provide greater support for diagnosis and intervention of Irlen syndrome for practitioners, it is necessary to draw some distinctions and similarities with dyslexia.

In I.S., according to Guimarães, unlike dyslexia, some alterations are absent, namely: difficulty in speech and writing acquisition, auditory perception, inverted writing, incorrect pronunciation, mirrored writing and deficits in the comprehension of verbal orders. In these cases, the intervention implemented or supervised by speech therapists is essential.

Regarding the components of the attention deficit hyperactivity, prolixity, impulsivity, lack of personal or group self-control, agitation and physical hyperactivity components, they are not present in the roots of the syndrome, requiring, if recommended, a drug intervention that can be done by neurologists, for example.

The author also points out that, in comorbidity or in isolation, these disorders cause several similar manifestations and, precisely for this reason, it is recommended by professionals and authors in the area to track I.S. in children who have reading difficulties, photosensitivity and sustained attention to prolonged visual efforts, as an efficient way to avoid misconceptions in diagnosing dyslexia, Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder, or to try to minimize medication in individuals whose agitation and inattention are due to visual stress and the difficulties generated to adjust to the light intensity conditions of a classroom, for example, caused by the syndrome.

According to Asefeso, the syndrome can be found in variable and complex conditions and often coexists with other learning disabilities, such as dyslexia [18].

Irlen syndrome has as its main symptoms visual discomfort manifested by tearing, eye itching, photophobia, difficulties in sustaining visual attention, headache and loss of sharpness in reading with a sensation of movement of words due to a distortion of neuroperceptual origin. Isolated or in association, these symptoms always compromise performance, causing significant academic and professional losses. Although they may be severe, they have rapid rehabilitation when treated, unlike dyslexia, which will always require constant interdisciplinary support, at least until a minimum qualification in lectoscript is reached [19].

However, it is possible to find common traits among I.S. and dyslexia as: confusion between numbers, perception of visual distortions in text pages, reading words from the bottom up, etc. Also, physical symptoms like tiredness and headaches are common. Similarly, as in many other learning disabilities, low self-esteem, depression, frustration, reading disabilities, etc. are common. Therefore, it is necessary to act carefully under the presentation of these aspects so that the reasons are found and diagnosed quickly, without prejudice to the individual.

Conclusion

It seems to be simple and easy to define what should be the performance of professionals prepared to deal with Irlen syndrome, acting in the diagnosis or intervention, as well as the search to facilitate the learning process of the individual, however, is not.

All follow-up needs to be an activity that encompasses a number of other aspects than standard intervention procedures. In this case, professionals such as psychologists, psychopedagogues, doctors, among others, can act in the guidance of the teacher, if the individual is of school or academic age, and people who live daily with a student who has the I.S.

It is also important to emphasize the need for a joint work (including to identify if the teacher has dealt with the student or group difficulties correctly), as well as to intervene directly, working with this individual, but always integrated with the teacher and other professionals who will make up the intervention group.

This joint work, if done well, yields better results. The specific knowledge of each professional contributes to solving the difficulties. However, the responsibility cannot be directly directed to just one professional, there needs to be a division. And above all, it is important to organize and care for learning relationships so that a favorable environment is generated for student development.

Finally, care must be taken - in the simplest sense of the word: caring - with this student, in order to overcome the full range of difficulties generated by the I.S. may he face in his daily life; Demonstrate the importance of the child to the entire learning process, including the importance of the child in the classroom for teacher and friends.

It is essential that there is affection. Rather than complimenting, it is about improving self-recognition, making you a person of high self-esteem; with actions directed to simple everyday gestures, as well as educational activities. These actions can and should also be implemented by family members.

Another point to be reported is the need for a conversation with parents, knowing how the family lives, how is their daily life and how is the treatment given to the student. But it is essential not to “suffocate” the child with all the “extra” care. Therefore, the need for the student to feel part of the group, to know that he has importance and that everyone needs each other, harmonizing the coexistence in society, working with differences, individualities and conflicts.

Finally, the process of diagnosis and intervention of Irlen syndrome is not simple, no doubt, but guided by the points discussed so far it is possible to develop effective work so that children and adults can have the opportunity to learn and live without obstacles.

Disclosure of Conflict of Interest

The author declares there is no financial interest or conflict of interest.

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