



Emotional Intelligence and Social Abilities are a Priority in Asperger's Adolescents

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

Objective: To analyze the influence of Emotional Intelligence and Social Abilities development as interventions in an Asperger's adolescent, to facilitate his interpersonal relationships.

Materials and Method: Qualitative and ethnographic methodology with intervention in different settings like personal, family and scholar; one Asperger's adolescent, his mother, his teachers and school authorities informed through deep semi-structured interviews, with a 5 year follow up. Participants signed an informed consent and the qualitative analysis was according to de Souza Minayo.

Results: Two categories emerged: 1. Emotional impact in his parents due to lack of empathy in their son. 2. Language problems that impair his communication with peers and teachers.

Conclusion: Interventions favored identification and thinking of self and others' emotions, regulate negative behaviors, increase of assertive and better interpersonal relationships.

Keywords: *Asperger syndrome; emotional intelligence; social abilities; adolescent; qualitative research; autism spectrum disorders.*

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1. INTRODUCTION

In order to understand and to attend emotions it is important to visualize their components, i.e., neurophysiology, motor and cognitive considering that desynchronized among intellectual, affective, social, physical and motor development leading to inappropriate responses to emotions might occur. Each dimension can acquire special relevance for a specific emotion, the same person, the companions, and the situation that accompany that emotion [1-7].

Emotions are reactions to information we receive in our relationships with the surroundings; their intensity is related to the subjective evaluations we made regarding the received information and our well-being. In these evaluations, an array of previous knowledge, personal beliefs, perception of provocative surrounding, hurt or well-being sensations participate. An emotion depends of what is important for us, i.e., if an emotion is very intense it might provoke intellectual disabilities or emotional impairment (phobia, stress, depression, risky behavior) [4-6]. Those persons bearing impairments of the autistic spectrum, like Asperger's syndrome (AS), face language, social and cognition problems; according to DSM-5 there is a general agreement that children with a general development impairment are identified by the delay in their daily functioning, and for their deficient emotions manifestation that overwhelms their interpersonal relationships [8-11].

An Asperger's adolescent bears several risk factors in his interpersonal relationships, and the deficient interpretation of his emotions and those of others, despite that they might have an intelligence quotient above the average, and they excel in fields like informatics programming and science that could be enhanced by accompaniment [12-15]. They show no cognitive retardation, neither in their abilities to be careful nor curiosity for their surroundings; they might keep social relationships impaired, as well as restricted or unusual behaviors and activities, even though they are frequently verbal, the communication is loaded by a lack of empathy which opens the opportunity to intervene in order to diminish their limitations [9,10,15]. These adolescents tend to obsession for facts trivial to others, they like comics, cartoons with mystical and mighty characters, and they search for things according to what they want as if it was obligatory without worrying by the interests of others; beside their way of doing formal and academic in the speech, they are straight forward

in their comments and they say what they think being cruel in their expressions, they do not understand sarcasm nor the double meaning of words, and they do not identify if others have bad intentions, being in social disadvantage and vulnerability to be abused [6,9,10].

Many Asperger's children are very active by which they are erroneously diagnosed with hyperactivity disorder and attention deficit disorder; the lack of appropriate diagnosis and early accompaniment could tag them as impaired, having problems in their interpersonal relationships that might affect their mental health [9,10,12,15]. The difficulties to initiate and keep social relationships might lead to anxiety or depression during adolescence, since friendship as well as courtship might be truncated at this stage, and they start adulthood with deficiencies due to a lack of identification of their emotions and those of others; it is also observable symptoms of obsessive-compulsive disorder [6,16]. The aim of the study was to know the influence of developing emotional intelligence (EI) and social abilities (SA) as intervention strategy on one Asperger's adolescent, involving his closest family members and school authorities to improve interpersonal relationships in different settings. Parents' job in the growing of Asperger's children and adolescents is not an easy task; it is even harder in the current contexts where stress, hurries and pressure favor a low control and identification of primary emotions handling, which lead to intolerance, discrimination, and school violence in the interpersonal relationships. Then it is imperative to love and commit for them to assume those responsibilities through development emotional intelligence and social abilities.

Health education in schools practiced by nurses gives the opportunity to detect complex situations among students, like the one of this research, and forward them to multidisciplinary programs (i.e., program to prevent addictions and bullying in adolescents) where nurses, psychologists, sociologists, along with parents could contribute for Asperger's adolescent to develop emotional intelligence and social abilities, that will favor his/her interpersonal relationships and assertive behaviors.

2. METHODS

2.1 Study Design

The study is a qualitative research based in a clinical case [17,18,19], about an Asperger's

adolescent identified from a secondary school at the municipality Nezahualcoyotl, in the state of Mexico, after a team from the National Autonomous University of Mexico (UNAM) visited from to educate students on a program to prevent addictions and bullying in adolescents, requested by the principal. The method used are qualitative and ethnographic methodology with intervention.

2.2 Participants

Male adolescent, 14 years-old diagnosed with Asperger's syndrome at 12 years-old, that was in the third grade of secondary school and followed up to first grade high school. Regarding his family, divorced parents, both working and the mother accepted to participate; a sister 13 years-old, participated also. In school, the academic coordinator, psychologist, at secondary and high school; as well as the principal and teacher, sociologist, participated.

In this intervention the researcher realized that the Asperger's adolescent was continuously harassed by his peers due to his condition, he was unable to fit in the group, he did not understand their behaviors, and so on; so, it was necessary to talk with his mother, along with the coordinator and the principal of the school regarding an intervention protocol to deal with the situation, which was accepted by all of them.

2.3 Instrument

The intervention protocol involved an educative program with immersion tools to favor mental health in adolescents [6], which included a 3-hour session per week along 1 year with semi-structured interviews, about his experience in school, with family and friends; as well as cognitive-behavior counseling, videos prepared by experts from the university with contents of daily situations that are not so clear for an Asperger's adolescent, such as friendship, comradeship, courtship, daily coexistence at home and in school, and in social settings that involve risk or protection factors in the interpersonal relationships among adolescents.

2.4 Intervention

After watching the videos, an analysis session to identify the problems, self and others' emotions, the passive behaviors enacted by the poor decisions making, as well as silence to a not desired situation, negative talks or inappropriate

acts and assertive with respect to self and other's rights identifying and handling emotions, his capacity to negotiate, to reconcile and decisions making, among others were conducted. In each session a homework on thinking about the tasks done was suggested, which was discussed the following session along with a dynamics on creativity/enacting a second story where the adolescent, his family and teachers contributed to allow a better situation by using social abilities related to the program, such as those observable behaviors, thoughts and emotions that help us to interact properly with others, and to promote that others respect our rights in order to reach our goals [18]. To evaluate this second story involved identification and handling self and others' emotions, diminished attitudes, passive and negative behaviors, as well as increase in assertive behaviors directed as a rational style according to the program, which expressed feelings, needs, rights and own opinions but with respect the same for others. This style is related to a pro-social, confident and affirmative style, that included 48 sessions to improve communications skills, listening, empathy, solidarity, respect, reconcile, negotiation, problem solving, self and others emotions identification and its adequate facing, interpersonal relationships between peers, family members and school authorities.

After implementing the immersion tool, the next step was to use an ethnographic holistic method that consisted in detailed descriptions of situations, events, persons, interactions and behaviors observable in adolescents' real context that incorporate his experiences, attitudes, beliefs, thoughts and insights as they were actually expressed in each session [19]. It is important to mention that the sense that participants used for their acts, ideas, the surroundings was through recordings of speeches on the created situations per session in the different settings of the adolescent, i.e., home, school, then a transcription was done and it was shown to each participant to fulfill the data. Data collection was through semi-structured interviews [20] and direct observation in home and school settings which allowed detailed recordings, as well as reviews of audio and video tapes. In addition, intense field work, review of materials and audio/video recordings, and qualitative contents analysis was according to de Souza Minayo [21], the theoretical basis according to DSM 5 [9], EI premises of Goleman [16] and the EI and social abilities in adolescents as described by Tapia-Pancardo et al. [6].

3. RESULTS

Male adolescent, 14 years-old diagnosed with Asperger's syndrome, at 12 years-old, secondary school. Regarding his family, divorced parents, mother accepted to participate, a sister 13 years-old, participated also. In school, the academic coordinator, psychologist, at secondary and high school; as well as the principal and teacher, sociologist, participated, is exposed in the following findings, after transcription, reading and re-reading speeches and materials analysis identifying similarities and differences, two empirical categories emerged with sub-categories, as shown in (Table 1).

4. DISCUSSION

An undiagnosed Asperger's individual could transit his childhood and adolescence with negative tags that favor many problems, hindering the scope of his tasks such as the identity search, vocation, sense of belonging, low self-esteem, sexual identity, and emancipation being vulnerable to risk conducts like drugs consumption, scholar violence, and conduct disorder becoming an outlaw that could end in prison or dead [4-6,22]. So, it is very important to communicate and facilitate recognition of emotions and their expression in persons.

First emerging category: The emotional impact on parents due to limitless lack of empathy of their son, i.e., it is exposed in the following speech by the mother of an Asperger's adolescent ('Andres'):

[...] In one occasion Andres (10 years old) threw his superhero toys through a window reaching a third story level, he went out the window cold-blooded to retrieve his toys and back, where I caught and reprehend him;

*Andres did not identify the risk and looked passively at me, I was shocked, afraid and anguish and said to him: If you do it again I will beat you, this phrase triggered a violent response and Andres faced me in a combat posture, which left me doubly shocked and deeply hurt by his reaction... **Andres's Mother.***

Because those behaviors frighten mother, she looked for help visiting therapists and psychologists who diagnosed adaptation problems during puberty-adolescence, as well as limitations at home or school. Her speech clarifies the lack of abilities for verbal language in Andres' interpersonal relationships, and the impact to surface his emotions as intense and primitive ones like yelling, kicking, throwing things, without foreseeing the consequences [6,16,23,24].

According to mother, a psychotherapist identified that Andres' behavior was not age-related and recommended to attend a child psychiatrist, which after several sessions and examinations to discard a lesion diagnosed Asperger [25-27]. Based on DSM 5 [9], it is clear that Asperger's individuals face difficulties in perceiving and expressing emotions, such that mother's anguish was not properly interpreted by the boy, then when he was threaten he textually identified the possibility to be hurt by his mom, and he defended himself showing no empathy and giving negative appearance, challenge and violence. For these persons words have an unequivocal meaning, even that during the interview mother refers never had beaten her son and also mentioned that Andres practiced martial arts since he was 5 years-old. These conditions motivated his reaction with a combat posture facing the said menace, appearing as a challenging and violent response; however, for

Table 1. Emerging categories

Categories	Subcategories
1. Emotional impact on parents due to limitless and lack of empathy from their son.	1.1 Reconstruction of relatives' perceptions about the Asperger adolescent's behavior with the help of the program.
2. Language problems that interfere communication with peers and teachers.	2.1 Negative emotions generated in interpersonal relationships of Asperger's adolescent. 2.2 Reconstruction of self-perception. 2.3 Reconstruction of teachers' perceptions about attitudes and behaviors of Asperger's adolescent. 2.4 Tolerance and acceptance from peers of Asperger's adolescent.

Source: Interviews of participants informants, 2017-2018

an Asperger's child his reaction was completely normal and expected according to his training, and it did not mean that connotation [9,28,29]. Furthermore, ignoring that their son bears Asperger's made very complex for parents to explain his attitudes and behaviors, then it is very important an early diagnostic to start companionship to the individual as well as his(her) parents, which will diminish the chance for Asperger's to be harassed in school throughout the years, or that they will develop risky behaviors.

Sub-category 1.1: Reconstruction of perceptions about Asperger's adolescent behavior on their relatives supported by the program, as is described by the following speeches:

*[...] It was very shocking for me the Asperger's diagnostics, but through therapy and workshop it was also very gratifying to understand why Andres acted that way, and knowing that it was not a lack of affection neither hatred any family member. Andres perceived danger by the words I mentioned and reacted to the menace in the same magnitude and I realized that he could not feel what I felt, which made me understand him and accompany him day after day. In another day, his father reprimanded Andres's sister because she did not clean her room and mentioned to her that he will beat her for not doing so, immediately Andres was very angry to his father, I noticed and intercepted him asking: What are you going to do? he answered: I will protect my sister, he is not going to beat her. I tranquilized him explaining that no beats are permitted in our family, that his father was just frustrated that the girl did not obey him then I asked Andres: When have you seen that you and your sister were beaten? He answered: never, then as you see nothing is going to happen to your sister, he relaxed and entered his room. The fact that we understood what he felt helped us to accompany him... **Andres's Mother.***

Caltenco et al. [30], highlight that respectful and empathic communication with adolescents is imperative inside family to avoid rupture, which will put them in risk to take undesirable behaviors, as is described:

[...] It has been a radical change at home after the Asperger's diagnostics, and after the received counseling we speak clearly,

*model behaviors, and I make an effort no to be involved in Andres' responses which sometimes are very hard. I support my daughter for not taking Andres' words literally, since they hurt us, made us sad; however, I also received thanatological counseling to accept that process, and now know that his words are not meant to hurt us but to express what he thinks at the moment. I compared the mourn situation when people lose something very important and they suffer, the pain is manifested through not thought phrases accompanied of weeping, yelling and occasional hits, but thanatological counseling helps understand that those phrases are not meant for you, and they are not true; however, they are the maximized expression of the emotion felt by the individual. A similar situation happens with my Asperger's son, in those moments he felt a big and important thing and he expresses it in the same way. When Andres calms down and his risk sensation diminishes, we talk and I explain what the problem was and invite him to think and to identify his feelings, what he had done to others; these constant examples made him able to better identify his feelings and what he provokes with his comments. Then, after thinking he apologizes and he modified his way to talk, a very slow but dynamic process; so, the help we received has been very important. For me is a priority to be aware of my children, what they think, what they feel and what they expect from themselves... **Andres's Mother.***

In the program, Asperger's condition was explained with detail to each participant, and the importance to speak clearly at home and in school, without metaphors, identifying participants' emotions, not yelling, that could generate rupture in communication. This is due to the fact that facing a menace, the Asperger's adolescent might decide escape from home and then being vulnerable to street risks, i.e., he is unable to detect bad intents from others; even though, it is very important that Asperger's knows and observe limits [9,16,23,25-27,30,31].

Assertiveness has positive consequences, among them is the easier communication that minimizes the chance that others misunderstood the messages, it helps to keep sane interpersonal relationships, increases satisfaction and reduces conflicts due to coexistence, favoring positive emotions in self and others [31-33].

Second emerging category: Language problems that impair communication with peers and teachers, causing negative emotions in Asperger's adolescent as well as in others.

Sub-category 2.1: Negative emotions generated in Asperger's adolescent interpersonal relationships, as described in the following speeches:

*[...] In secondary and high schools Andres had no friends, his relationships with peers were superficial and it was very difficult for him to talk to them, he was very nervous; when he had to expose a topic he spoke very fast and incomprehensible, his peers laughed at him and he became angry and shouted and left the classroom. As a consequence, teachers made reports regarding Andres' behavior and asked me to attend the principal's office regarding his conduct, while his peers said he was uncontrolled and rare... **Andres's Mother.***

Interpersonal relationships are very important, but in adolescence they are a breakthrough that requires acceptance and belonging among peers; then difficulty to achieve that goal is a major risk factor since adolescents self-esteem is affected, it generates negative emotions and pushes them to risk behaviors [5,6]. So, Asperger's individuals attend school where they are at risk due to the absence of companionship, and since teachers are not informed about student's condition, they might speak in a non-comprehensible way that will block assertive communication, as described:

*[...] Today teacher told us that we are lazy, we do not deliver homework, then he is going to apply a very difficult exam to see who is studying, and all we are going to fail. Mother, I was very upset because teacher wants me to fail, next time he says that I will go to Principal's office to charge him, I wanted to hit him but I left the classroom and went to the restroom to calm down. ...**Andres.***

To foment upgrading and assertiveness in teachers and students are imperative, since heterogeneity in classrooms needs educators that communicate clearly, they feel respected and perceive that others feel glad in their company which provoke positive self and others' emotions [6,16,34-36].

Subcategory 2.2: Reconstruction in self-perception, which emerges from the following speeches:

*[...] Sometimes my peers made me feel very angry when they referred that I was sick, the freak; when I got close to them, they said move up the team is complete. That made me upset, at home told mother and she asked me: what do you feel son?, ask your heart, then I realized that I was very sad, that their words/attitudes hurt me and she explained to me that adolescents are not prepared to understand the different, and that I am different, that they do not reject Andres but what they do not understand of Andres instead; once I asked a girl to become my girlfriend: I was very anxious and desperate and felt that I frightened her, she stopped to be my companion...during my life it has been very helpful that most of my teachers are my friends, they pay attention and listen to me, and during the breaks I talk to them even though I know that I have no friends my age but also know that my mom and my sister are my friends. from sessions I have learnt step by step that some techniques help me, despite I have some problems with my reactions and handling of rage but they have diminished. ...**Andres.***

In adolescence identity as a main task for development is defined, emancipation is assayed, and self-assertion is reinforced; in this step child behaviors and values are questioned and a self and new world initiates to buildup. To achieve those goals, adolescents need family, scholar and society companionship, then all persons involved are committed for to properly inform them since that step is a learning one and they should take advantage of it [5,31,32,36], as shown:

*[...] In the workshop I easily represented my stories, I like to reproduce voices, to act and perform characters, to remember dialogues; this helps me a lot, when I have to expose a topic I think am acting to avoid stress, in dance classes I feel very happy and learn quickly the different steps and teacher asks me to teach my peers, even though they do not treat me very often I feel very important during those moments. My therapist and my mom tell that I am very talented for musical instruments, and indeed I am! that is why I enjoy my dance classes; the same is true for physical activities, teacher congratulates me: I think I will become a physical education teacher. ... **Andres.***

[...] I am trying to use everything we have worked, I approach my peers in the

classroom and I do not care if they don't want to talk to me; I approach my teachers and they accept me, I also have friends in secondary since I am the only high school student that interacts with them due to our relationships in the soccer workshop, we share a lot even though I don't understand their jokes. I tell mom or the coordinator to help me understand the meaning, and they explain if I have to move away or what to answer without being angry, I did not have trouble with anybody this semester. ..
Andres.

Subcategory 2.3: Reconstruction of teachers' perceptions on attitudes and behaviors of Asperger adolescent.

[...] At the workshop a list of recommendations for teachers to get informed about Asperger and to guide Andres in the classroom, was given. It highlighted companionship in the classroom and that teacher reinforced Andres to repeat his precise indications to confirm that the message was understood properly; if necessary, teacher explained again. Andres should sit in the front to have eye contact, teacher helped in his speeches in the group knowing the difficulties, but giving him the chance to leave the classroom if the emotions overwhelmed him, as part of the psychological strategies of 'time out', to reach emotion control without having an outburst of anger and getting back to finish his activities. These interventions helped us a lot through secondary and high school.
Principal and teacher of high school

According to DSM 5 [9], Asperger's individual language is modified, it could be very formal or impaired in meaning and interpretation for being so textual; this is coincident with the speech of Andres before the classroom and his powerlessness when receive peers' teasing, showing the impact due to lack of abilities for verbal communication in the interpersonal relationships, as well as being unable to express emotions which surface as intense and primitive like a child that yells, kicks, throw things, without foreseeing the consequences. Then his teacher and peers, knowing nothing about Asperger's showed repudiation instead of comprehension and they labeled him as rare, intolerant and undisciplined [6,9,16,35].

[...] When Andres gets into the office overwhelmed, anxious or even upset to tell

me what had happened to him in the classroom, what his peers tell or do to him, I gave him counseling not to be involved in their comments. I identify his low risk perception and low ability to answer their comments; at the same time, I rescue his acquired tools from the program and home, it is very interesting that he listens carefully and follows my suggestions. He visits me several times a week, even to show me his school records and achievements...
Coordinator of secondary and high schools.

[...] The first time I saw Andres very upset because his peers bullied him when he presented a topic, I was impressed of his reactions: kicked the garbage can, and he left the classroom in a hurry, I made a report with the school prefect but he informed me that he knew about Andres Asperger's and his reactions for to have time to calm down; after the time, the prefect talked to Andres about his behavior. Next day, Andres's mom talked to me and explained his condition, after the talk my opinion about Andres changed completely and searched for more information on Asperger, I had never heard about it. I liked to attend the workshop...
Teacher.

Sub-category 2.4: Tolerance and acceptance by Asperger's adolescent peers.

[...] After the prevention program started in school, I was invited to participate with authorities and teachers. I am very grateful with the school Principal and Coordinator, because communication improved; Andres now talks to his peers about Asperger, and they are supporting him, they are aware of his ways of doing and do not reject him, his secondary school peers accept him better. ...
Andres's Mother.

Continuous companionship to Asperger's adolescent from relatives, teachers, authorities and peers, explaining his surroundings and interpersonal relationships supports him to have a better communication, to properly interpret the context, to think and handle his emotions; so, his responses will be more assertive, which is coincident with the speeches that show daily interventions to be given to these persons, since by himself it will be difficult to identify if a putative menace is real or not [6,9,16,34,37].

According to Goleman [16], DSM-5 [9] and Tapia Pancardo et al. [6], models are necessary to exemplify what behavior is focused on them, what is a general comment, what is related to a specific group, what is risky, that become a 24 h task. Every setting is adequate to make an explanation and to show the diversity of settings and circumstances; which is long life task for an Asperger's person, as well as those that co-exist with them [6,34].

Family setting is very important, even though it is only a part of the different contexts where an adolescent develops, and it is precisely this step in life when belonging to a group or having a girlfriend is determining, a difficult condition for an Asperger's adolescent [5,6,32,33], as shown in the speech:

*[...]Since we were kids my brother and I were very close, sometimes it is difficult because if he gets upset he says very cruel words, as a response I get upset also and do not want to talk to him; but now, the program made me understand what is happening with his thinking, I am his best friend which will be along our lives... **Andres's sister***

Parents' job in the growing of Asperger's children and adolescents, as well as teachers' companionship in school is not an easy task; it is even harder in the current contexts where stress, hurries and pressure favor a low control and identification of primary emotions handling, which lead to intolerance, discrimination, and school violence in the interpersonal relationships. Then it is imperative to love and commit for them to assume those responsibilities through development and being the model of emotional intelligence and social abilities [26,34,35,38-42].

During speeches it is highlighted the transit from adolescence to maturity process that helps support abstract thinking and judgements, as well as guidance and constant assays with IE and SA in this Asperger's adolescent for to achieve emotions identification and handling, by better interpreting them and step by step impulsiveness will be limited in his interpersonal relationships; it is said that a real family companionship, medication, psychotherapy and sufficient information to school authorities and teachers, Asperger's persons will diminish the risk for bullying, discrimination, isolation and drug consumption in their goal to be accepted to belong in a group of peers [29,30,35,39].

Recommendation for parents to visit teachers, inviting them to participate in the program helped

teachers' perception about Andres' attitudes and behaviors, lowering negative emotions and affecting his self-esteem, showing student's better academic performance.

Every time more Asperger's children and adolescents are incorporated in schools, then realizing that intervention strategies such as EI and SA, are very useful tools for their fair transit in schools.

5. CONCLUSION

This intervention strategy program (EI and SA) in an Asperger's adolescent, his relatives, and closer contexts evidenced how emotions and assertive communication during interpersonal relationships were positive. The program favored emotions identification and handling, as well as increase in assertive behaviors with lowering risk behaviors; it highlights that everyone involved in subject's interpersonal relationships are very important in the process, such that EI and SA development are an imperative need in the Asperger's adolescent closer circle, to prevent that they become part of health public problems like addictions and school violence. This a day after day work, it is as dynamic as will and needed as love.

Results of this study clearly show that is necessary to teach them how to relate to others, assaying attitude and behavior according with identified emotions in the different settings; the search for equilibrium, and the more assertive response that guarantee self-respect and to others. Each modeled event should be congruent to feel, think and do, and to have better interpersonal relationships as well as professional companionship is a key to limit problem situations.

This investigation provide an interesting analysis on the influence of Emotional Intelligence and Social Abilities development, as interventions on a 14 years-old Asperger's adolescent to facilitate his interpersonal relationships.

CONSENT AND ETHICAL APPROVAL

Sources for ethical issues were the Nuremberg Code, the Declaration of Helsinki, and the Belmont Inform. A signed letter of informed consent was obtained from each participant, and the protocol was authorized by the different schools involved, as well as from UNAM. Approval for to publish the research was granted

by all participants; the informed consent explained the goal of the intervention, what their role will be throughout time, as well as the freedom to continue or to abandon the project, at the end a copy of the document was given to each participant.

STUDY LIMITATIONS

Regrettably intolerance is a variable that appears in different scholar settings as observed in speeches, Andres' peers in high school were not kind to accept him, which made a priority the frequent assays to develop EI and SA in him; due to peers' rejection and marginalization they were not considered for the program, and it was rationalized as counterproductive, but working with teachers favored companionship in school settings. Getting Asperger's adolescent participants may be quite be challenge, it is advisable to add a few more participants to get a more valid result.

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COMPETING INTERESTS

Author has declared that no competing interests exist.

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