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THERAPISTS' PERCEPTIONS: ADDED VALUES OF DMT AND CBT FOR CHILDREN WITH ADs'

NAOMI WEITZ¹, NICOLAE ADRIAN OPRE^{2*}

ABSTRACT. Anxiety disorders (ADs) are common among children. Many types of psychological treatments exist, including: Cognitive Behavioral Therapy (CBT), psychodynamic treatments, Play therapy and expressive arts therapies such as Dance Movement Therapy (DMT). DMT and CBT are based on distinct theoretical assumptions and therefore are inherently different. Nonetheless, in the last decade, these approaches are becoming closer. The aim of the present study was to examine therapists' perceptions of the added value of each therapy approach (DMT/CBT) to the other, when treating children with ADs. The study utilized a quantitative design. The sample included 99 therapists in three groups: DMT-only (n = 35), CBT-only (n = 42), and combined DMT+CBT (n = 22). As hypothesized, the findings indicated that DMT+CBT therapists and therapists who use only one type of the treatment (DMT-only/CBT-only) perceive a higher added value of their treatment's principles compared to therapists who use only the other type of treatment. All therapists perceive a high added value of CBT to DMT, whereas the added value of DMT to CBT is perceived significantly higher by DMT+CBT therapists and DMT-only therapists in comparison to CBT-only therapists. The novelty lies in the therapists' perceiving the combination of both treatments as possible in treating children with ADs. The combination of both therapies implies that they have connections and common principles. Concurrently,

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the differences between them create a combined treatment in which each approach complements the other and therefore provides and facilitates a broader response for children with ADs.

Key words: DMT, CBT, anxiety disorders, children, therapist's perceptions

BACKGROUND

The term 'perceptions' describe the cognitive component of attitudes which relates to the individual's conceptions, thoughts, knowledge, and beliefs regarding an object, processes or practices (Baron & Byrne, 2000). As today's research on treatment approaches among children with ADs is expanding, studies should examine the therapists' point of view, as they are a significant part of the therapeutic process.

Anxiety disorders in children

Anxiety disorders (ADs) are common in children and cause meaningful difficulties in family relationships, school, and social functioning (Essau, Conradt, & Petermann, 2000; Higa-McMillan, Francis, Rith-Najarian, & Chorpita, 2016). ADs in childhood also predict ADs and depression in adulthood (Pine, Cohen, Gurley, Brook, & Ma, 1998; Yonkers, Bruce, Dyck, & Keller, 2003). In addition to emotional distress, physical symptoms and complaints also characterize ADs (Ramsawh. Chavira, & Stein, 2010). Despite their high prevalence (ranging from 2.4% to 17%; Costello, Mustillo, Erkanli, Keepler, & Angold, 2003), ADs in childhood are under-diagnosed and therefore, often are not treated properly (Chavira, Stein, Bailey, & Stein, 2004). Improvement in treatment outcomes among children with ADs can lead to important positive implications for their functioning and development of mental health in the short-term and the long-term. In the literature, over 30 different psychological treatments for children and adolescents with ADs exist. Most of the treatment approaches that are well-established and adjusted for children and adolescence with ADs are consistent with CBT (Higa-McMillan, Francis, Rith-Najarian & Chorpita, 2016).

Cognitive Behavioral Therapy (CBT)

CBT is a common therapeutic approach that is applied to a wide variety of psychological problems, and serves as a reliable treatment for Anxiety Disorders (Hofmann & Smits, 2008). The aim of CBT is to change observed and measurable behaviors, mainly by influencing thinking processes that shape behavior. It is based on the assumption that cognitive change leads to behavioral change in both the present and the future. Usually, CBT focuses on a specific well-defined target and is limited in time. The therapy is directed by a written protocol detailing the stages of diagnosis, defining the problem and stages of therapy, and is evaluated by validated measuring tools. The therapist's attitude is characterized by a psycho-educational approach, aiming to create a collaborative work atmosphere. Between the therapy sessions, the client is encouraged to practice "homework" and the therapy ends with instructions how to relapse prevention (Beck, 2011; Dobson & Dozois, 2001). CBT focuses on the reduction of anxiety by modification of thinking patterns and behaviors, instead of probing into the sources of the anxiety which characterizes the dynamic therapies (Barlow, 2001). In several metaanalyses of research, numerous studies were found demonstrating the effectiveness of CBT in treating ADs (e.g., Butler, Chapman, Forman, & Beck, 2006; Hofman et al, 2012; Higa-McMillan, Francis, Rith-Najarian, & Chorpita, 2016), in a variety of modalities of ADs treatment (such as individual, group, and parent-child, In-Albon & Schneider, 2007). CBT was found effective as Pharmacotherapy in treating anxiety (Walkub et al., 2008). Results of studies that examined the Longitudinal effectiveness of CBT in children with ADs revealed that the impact lasts for years after its completion and most children no longer suffer from the anxiety (Kendall et al., 2004). It also was found to be effective for all ages, including preschool (Hirshfeld-Becker et al., 2010). Nevertheless, CBT is not effective for about 40% of ADs patients (James, James, Cowdrey, Soler, & Choke, 2013), and therefore there is a need to find alternative or combined treatments.

Dance Movement Therapy (DMT)

Dance movement therapy (DMT) is included amongst the arts therapies, which are based on practices and theories that connect between arts, creativity, and therapy. The goal of DMT is to promote the integration between body and mind among individuals and groups, by using movement therapeutically (Chaiklin & Wengrower, 2015). The body is the primary tool to encourage children to express themselves, and the therapist and the parent (if present) use their bodies as well to reflect and adjust themselves spontaneously to the child. There are numerous and varied interventions using change in facial expressions, muscle tension, body forms, and use of touch, breath, and voice.

In addition, the therapeutic environment is appropriate for children; it is rich with sensory stimuli, music, and rhythm, use of space, relaxation, imagination, and practice with organized and spontaneous movement, play, and dance. As such, it provides the child with a secure feeling, contributes to understanding the role of initial relations, and the understanding of the meaningful role of the nonverbal interventions as the primary means of communication and relationships development (Tortora, 2015). Meta-analyses conducted by Ritter and Low (1996) and Kouch et al. (2014) concluded that DMT reduces anxiety and therefore is effective. However, most of the research is qualitative, due to the nature of creative arts therapy. DMT is an academically young and blooming discipline with a need to identify effective movement interventions and active factors of movement and dance related to health improvements (Wiedenhofer, Hofinger, Wagner, & Koch, 2017).

Combining treatment approaches

A variety of studies refer to the spectrum of therapies that combine CBT and expressive arts therapies. These range from combinations in the research of a specific area, such a use of a hybrid cognitive behavioral and art based protocol (CB-ART) for treating pain and symptoms accompanying coping with chronic illness (Czamanski-Cohen et al., 2014), through the description of psychodrama-based CBT groups

(Treadwell, Dartnell, Travaglini, Staats, & Devinney, 2016), and Cognitive behavioral therapy using expressive arts therapy in the Israeli educational system (Sharon, 2018). The specific combination between DMT and CBT has not yet been investigated in general, and amongst children with ADs in particular. In the research literature, this combination of treatments appears only indirectly, such as in the combination between mindfulness and movement therapy (Beardall & Surrey, 2013), or in the ECBT (Embodied-CBT; a model that integrates CBT, neuroscience, and embodied cognition, Pietrzak, Lphr, Jahn, & Hauke, 2017). It may be concluded that DMT and CBT are generally considered as separate treatments. Studies of DMT and CBT refer mainly to theoretical dilemmas and therapeutic processes, but rarely focus on the internal processes of the therapists themselves. The therapist's perceptions towards their therapeutic approach or combining therapy approaches has gained little attention in research.

Therefore, the aim of the current research is to study the therapists' perceptions regarding the added values of DMT and CBT to each other, in order to enhance the combined effect of DMT+CBT treatment among children with ADs ,based on their practical experience.

RESEARCH QUESTIONS AND HYPOTHESES

The research question that was addressed is: In what ways may principles of CBT advance DMT treatment, and principles of DMT advance CBT treatment, in order to enhance the combined effect of DMT+CBT treatment among children with ADs', According to therapists' perceptions?

The hypothesis was that a difference exists between therapists such that therapists who combine both treatments (DMT+CBT) and therapists who use only one type of treatment (CBT or DMT) will rank the added value of the principles of their own treatment (CBT or DMT) higher than therapists who use only the other type of treatment (DMT or CBT).

METHODS

Design

The scientific investigation is based on a Quantitative research approach (Creswell & Creswell 2018). The participants were selected using a non-probable purposive sampling procedure, i.e., they were selected based on the researcher's knowledge of their treatment approach, qualifications, expertise, and experience, and in line with the purpose of the study. The sample included 99 Israeli therapists who completed an online questionnaire.

Participants

The sample of participants included 99 therapists in three groups: DMT- only (n = 35), CBT-only (n = 42), and DMT + CBT (n = 22). The DMT-only and the DMT+CBT groups were solely female while the CBT-only group was 85.7% female. Participants' mean age was 48.33 (SD = 7.38) (no significant age differences between groups). All the therapists live and work in Israel and have a similar background. Most of the therapists work (88%) or have worked (91%) with children with ADs. On average, the therapists treat about three types of ADs (M = 3.14, SD = 2.07), with the most frequent type being Generalized Anxiety Disorder (64%). On average, the therapists work in one or two workplaces, with a majority mentioning the Ministry of Education (66%).

Instruments

The research instrument was a new questionnaire that was constructed, developed, and validated for the current study: Therapists' Attitudes towards Treatment of Anxiety Disorders among Children (Based on the findings of interviews conducted in a qualitative research, weitz, 2018). The questionnaire included two scales with statements that describe the possible added values in treating children with ADs: (1) the added value of CBT to DMT (nine items, e.g., "CBT provides a defined

structure for the therapeutic process"), and (2) the added value of DMT to CBT (six items, e.g., "DMT enables a meaningful experience of creation which advances coping and change "). Participants were asked to rank their level of agreement with the items on a Likert scale, from 1 (do not agree at all) to 5 (strongly agree). There was an additional option to respond "I don't know". Mean scores (1-5) were calculated for each item and the percent of respondents that checked "I don't know" was calculated separately.

All scale reliability coefficients (Cronbach's α) were high (between $\alpha = .87$ and $\alpha = .95$, n = .99). In addition, the corrected item-total correlations were higher than 0.40 (indicating that each item measured the same realm of content as the entire scale) and that deletion of any item would diminish the reliability of the category.

Data analyses

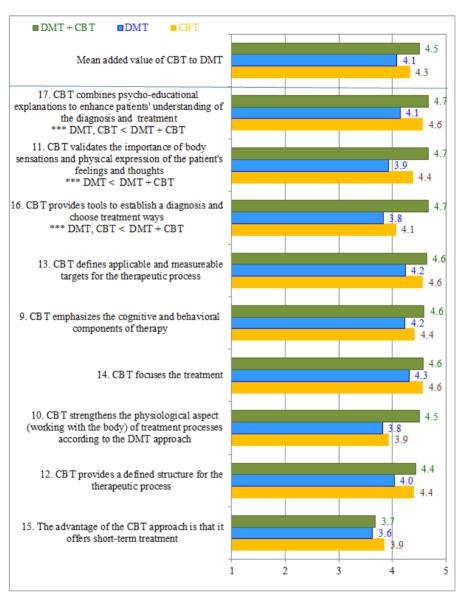
In addition to reliability coefficients (Cronbach's α), the statistical analyses included an Analysis of Variance (ANOVA) between groups (type of treatment) with post-hoc comparisons using Scheffe's test, as the groups were relatively small and unequal in size.

RESULTS

The Added value of CBT to DMT

The differences in therapists' perceptions of the added value of CBT to DMT by type of treatment are presented in Figure 1.

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*** p < .001

Figure 1. Therapists' perceptions of the added value of CBT to DMT, by type of treatment (presented in descending order according to DMT+CBT therapists' ranks)

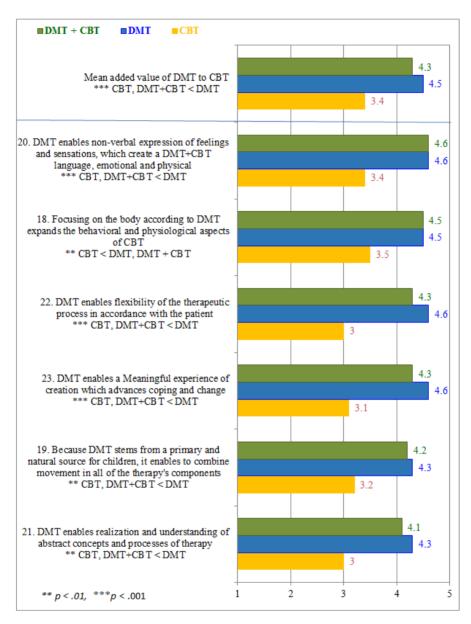
On average, participants strongly agreed (M = 4.28, SD = .68) with the nine items describing CBT principles and the advantages that may advance DMT treatment. Although the difference in the mean levels of agreement is not significant, on average, for each item the DMT-only therapists agreed less with these items than CBT-only therapists and CBT+DMT therapists.

The highest levels of agreement (according to the DMT+CBT therapists) were found with three items: "CBT combines psychoeducational explanations to enhance patients' understanding of the diagnosis and treatment" (item 17); "CBT validates the importance of body sensations and physical expression of the patient's feelings and thoughts" (item 11); and, "CBT provides tools (such as: questionnaires, case formulation, etc.) to establish a diagnosis and choose treatment ways" (item 16). For all three items, the differences between therapists by type of treatment were found significant (p < .001). All participants also strongly agreed that, "CBT defines applicable and measureable targets for the therapeutic process" (item 13), "CBT emphasizes the cognitive and behavioral components of therapy" (item 9), "CBT focuses the treatment" (item 14). Among all three groups, the lowest level of agreement was with item 15: "The advantage of the CBT approach is that it offers short-term treatment."

The Added value of DMT to CBT

The differences in therapists' perceptions of the added value of DMT to CBT, by type of treatment, are presented in Figure 2.

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** p < .01, *** p < .001

Figure 2. Therapists' perceptions of the added value of DMT to CBT, by type of treatment (in descending order by ranking)

On average, all therapists agreed with the six items describing the added value of DMT principles. DMT therapists (M = 4.47, SD = .72) and DMT + CBT (M = 4.50, SD = .51) agreed significantly (F(2,66) = 9.97, p < .001) more than CBT-only therapists (M = 4.32, SD = .71). The DMT+CBT and DMT-only therapists agreed that "DMT enables non-verbal expression of feelings and sensations, which create a DMT+CBT language, emotional and physical" (item 20), and, "Focusing on the body according to DMT expands the behavioral and physiological aspects of CBT" (item 18). In addition, they agreed that "DMT enables flexibility of the therapeutic process in accordance with the patient" (item 22), "DMT enables a Meaningful experience of creation which advances coping and change" (item 23), "Because DMT stems from a primary and natural source for children, it enables to combine movement in all of the therapy's components" (item 19), and "DMT enables realization and understanding of abstract concepts and processes of therapy" (item 21).

Summary of the results

Figures 1 and 2 reveal that the therapists' perceptions regarding the added value of CBT to DMT are relatively similar, but regarding the added value of DMT to CBT – DMT+CBT and DMT-only therapists agreed significantly more than CBT-only therapists with statements describing the added values of DMT to CBT. Therefore, the hypothesis was confirmed: A difference was found between therapists, according to their type of treatment, regarding the added value of their treatment to the other treatment. Therapists who combine both types of treatment and therapists who use only one type of treatment (CBT or DMT) ranked the added value of the principles of their own treatment (CBT or DMT) higher than the therapists who use only the other type of treatment (DMT or CBT).

DISCUSSION

The current study set out to identify therapists' perceptions of how the principles of CBT may advance DMT treatment and vice versa, in order to enhance the combined effect of DMT+CBT treatment among children with ADs. The findings indicate, no significant difference was found in the perceptions of the added value of CBT to DMT by therapists according to their type of treatment. However, the added value of DMT to CBT is perceived higher by DMT+CBT therapists and DMT-only therapists in comparison to CBT-only therapists. These finding may indicate that both treatments have an added value to each other, but DMT is yet less unknown to therapists who do not use it (i.e., CBT-only therapists).

The added value of CBT to DMT

According to the findings, DMT+CBT therapists and CBT-only therapists agreed significantly more than DMT-only therapists that "CBT combines psycho-educational explanations to enhance patients' understanding of the diagnosis and treatment" (item 17), "validates the importance of body sensations and physical expression of the patient's feelings and thoughts" (item 11), and "provides tools to establish a diagnosis and choose treatment ways" (item 16). These three items represent unique aspects of the added value of CBT to DMT, They relate to basic therapeutic components based on the basic and known principles of CBT. They are recognized especially by therapists who are well acquainted with CBT (they learned CBT and work as CBT therapists), because they connect theory and practice.

In comparison, the obvious principles of CBT (emphasizing the cognitive and behavioral components of therapy, focusing on the treatment, and therefore offering short-term treatment, providing defined structure, applicable and measureable targets and strengthening the physiological aspect of treatment processes according to DMT) seem to reflect characteristics of CBT that were researched, and were found effective and recognized by the professional community of therapists in general, and those who treat ADs in particular (Kendal, 2011). The original finding in this study is that DMT-only therapists, who did not learn CBT in depth, see the treatment's characteristics as important and necessary for treating children with ADs. The three CBT principles are not as well-known, to DMT therapists since they did not learn them, and as such, differences were found between the groups. For nearly every item, DMT+CBT therapists ranked the added value of each approach more

highly. It may be that the practical experience of this group with the combined treatment led to the more positive evaluation of the added value of CBT more than the CBT-only therapists.

Item 11, "validates the importance of body sensations and physical expression of the patient's feelings and thoughts", is important as it seemingly strengthens the characteristics of DMT, and it would be expected that DMT-only therapists would rank their level of agreement as higher. However, this is exactly where there was a gap, with DMT-only therapists considering the approaches as separate and different, having difficulty finding common components. In contrast, the DMT+CBT therapists successfully see how CBT can support aspects of DMT, an attitude that contributes to the theoretical and practical validation of their work.

The added value of DMT to CBT

According to the findings, DMT+CBT and DMT-only therapists agree (significantly more than CBT-only therapists) with all the items that depict the added value of DMT to CBT. This added value is reflected primarily in the addition of a measure of: creative experience and the ability to allow nonverbal expression using the body. These are especially important when the treatment is being conducted among children in general (Tortora, 2015), and children with ADs in particular, with their accompanying physiological symptoms (Ramsawh, Chavira, & Stein, 2010). Relating to these aspects is necessary, yet may not be sufficient, and may need to be complemented with CBT. DMT has been found effective in treating ADs largely using qualitative studies (Kouch et al., 2014), and CBT has been found effective primarily using quantitative studies (Butler et al., 2006; Hofman et al., 2012). Although the evidencebased for CBT is much well document and is present among the recommended treatment for anxiety disorders in children (Higa-McMillan, Francis, Rith-Najarian & Chorpita, 2016), This double confirmation of effectiveness, which rests on the components of each approach and the therapists' perception of the added value of each approach, validates the combined treatment.

In contrast to the expected results, according to each therapist would strongly agree with the added value of their own approach as compared to the other approach – in the current study it was found that although CBT-only therapists are less familiar with DMT, they agree to a certain extent that DMT has unique advantages and therefore, may help children with ADs that do not benefit from CBT-only therapy (James, James, Cowdrey, Soler, & Choke, 2013).

Practical application and future research directions

In order for the combined treatment to be effective, even when being used by therapists for whom CBT is not their primary treatment, the basic principles of CBT treatment have to be taught and integrated into the treatment. This can be accomplished by emphasizing the following three unique principles (along with the other basic principles) that should be incorporated in any training program or professional development for therapists interested in integrating CBT into their work among children with AD's: Combining psycho-educational explanations; providing tools to establish a diagnosis and choose treatment ways, through focusing on body sensations and physical expression of the patient's feelings and thoughts;

It is not sufficient that DMT therapists recognize the added value of CBT to their treatment work, as is evident from the current study's results. Rather, they should be trained in a comprehensive and professional manner and accompanied by practice. They should also be encouraged to conduct self-study, to advance the combined treatment with children with ADs at the professional level and to increase its effectiveness, which via feedback, can contribute to recognition of DMT and validate its professional value.

However, there is a need to build a Special training course for CBT therapists that will familiarize them with the principles of DMT and recognize its advantages and potential added value to their work. It is important that such training include creative experience and the ability to allow nonverbal expression using the body. It should also include: actual experiences in learning, demonstrations and simulations, presentation and analysis of case studies and discussion of appropriate conditions for integrating those two approaches so that the treatment of children with anxiety disorders will be effective with long-term results.

This study examined therapists' attitudes only in relation to the added value of each approach. Therefore, an additional study should explore their perceptions of the nature and effectiveness of the actual implementation of the combined treatment. Similarly, it is recommended to evaluate parents' attitudes regarding their children's treatment experiences and outcomes (as told by the children) comparing the three treatment groups as in the current study. Future research should establish the contribution of DMT+CBT principles to treating children with ADs.

The challenge that remains for researchers who wish to formulate a theory of treatment using DMT for treating children with ADs, is to describe in writing the therapists' work, the therapy process, the therapists' behavior, and integration between them. The DMT therapeutic experience is difficult to express and describe clearly and conceptually . Formulation of a theory may be the first step to conceptualize DMT and advance its integration with additional treatments such as CBT.

CONCLUSIONS

The participating therapists' perceptions are relatively similar regarding the added value of CBT to DMT, whereas the added value of DMT is perceived higher by DMT+CBT and DMT only therapists that CBT-only therapists. Thus, it seems that although ADs are characterized by both physical and behavioral symptoms, CBT-only therapists do not acknowledge the need to combine DMT in treatment.

Although the literature relates to each of these approaches as separate, it seems that in the field, there are therapists who work with both approaches and combine them. In addition, these combing therapists perceive a high added value of each approach to the other, and in their work they create new knowledge and competencies that relates to the integration of these approaches.

Because CBT provides validity to DMT principals (the importance of body sensations and physical expression of the patient's feelings and thoughts) and DMT expands the behavioral and physiological aspects of CBT – there are possible connections and common principles these two approaches share. Concurrently, the differences between these approaches

create a combined treatment in which each approach complements the other. While CBT, on the one hand, emphasize the cognitive aspects of therapy, provides a defined structure, and offers applicable and measureable targets and tools – on the other hand, DMT enables a meaningful experience of creation and non-verbal expression. Therefore, the combined treatment provides and facilitates a broader response for children in general and children with ADs in particular.

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THE EFFECT OF INTEGRATIVE BEHAVIORAL THERAPY VERSUS EMOTION-FOCUSED THERAPY FOR COUPLES: A META-ANALYSIS

SEBASTIAN PINTEA^{1*}, ROXANA POP², EVA KALLAY³

ABSTRACT. The negative effects of a dysfunctional couple's relationship influence the partners to look for a form of therapy that can help them improve their relationship. The present paper integrates the research data for two of the most studied couple therapies: Integrative Behavioral Couple Therapy and Emotion-Focused Therapy. The study compares the two therapies and integrates in a meta-analysis the outcomes of 15 studies (N=373 couples). Results show a high effect for both forms of therapy, with no significant differences between them. The moderating role of the type of outcome, the couples' characteristics, and the sample's demographic characteristics, were explored, the results proving that the investigated couple therapies have the same strong effect, irrespective of all those factors.

Keywords: Marriage, couple therapy, attachment, communication, well-being

Marriage is one of the most important forms of relationship in adult life, marital satisfaction significantly impacting the couple's level of happiness (Dakin & Wampler, 2008; Glenn & Weaver, 1981). Research indicates that overall, it has a positive effect on the life of individuals

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(Kiecolt-Glaser & Newton, 2001), on average, married individuals enjoying significantly better mental and physical health than unmarried persons (Kiecolt-Glaser & Newton, 2001; Umberson, 1992). For instance, morbidity and mortality in married couples across different chronic health conditions (e.g., cancer, cardiovascular problems, surgical interventions) is significantly lower than in unmarried couples (Goodwin, Hunt, Key, & Samet, 1987; Goodwin, 1997; Gordon & Rosenthal, 1995). Furthermore, literature abounds in information indicating that the quality of a couple's relationship has significant short and long-term effects (e.g., Kiecolt-Glaser & Newton, 2001; Harway, 2005). For instance, low levels of trust between the members of the couple, marital stress and conflict, criticism, lack of congruence within the couple all have a negative impact on the health of the partners (Randall & Bodenmann, 2009), Moreover, a dysfunctional relationship has a negative impact on the development of the children within the family, marital dissatisfaction presenting strong positive correlations with depression, withdrawal, academic problems and dysfunctional behaviors in the children. Thus, seeing that the quality of the relationship in a couple may have both positive and negative effect, it becomes very important to keep a relationship functional as long as possible. Couple therapy has long been considered a possible solution to such problems (Gottman & Notarius, 2002).

Several reviews and meta-analyses indicate that couple therapy has a statistically and clinically significant, but moderate effect when working with couples confronting difficulties or having a dysfunctional relationship. In 2003, Shadish and Baldwin conducted a review of 6 meta-analyses in which they analyzed the effect of couple therapy comparing distressed couples receiving or not receiving therapy. The results indicated an effect size of d= .84, meaning that most of the couples receiving therapy benefited from the intervention, compared to the couples from the waiting list or those who did not get any kind of intervention. Shadish and Baldwin's (2003) study yielded no significant differences in effect size due to theoretic specificity, and at the six months follow-up effects remained significant. In other words, regardless the type of theoretic approach, couple therapy is beneficial for improving the level of functionality in distressed couples. In 2005 the same authors conducted a meta-analysis investigating the effect of Behavior Couple

Therapy (BCT). After analyzing 30 studies in this domain, Shadish and Baldwin (2005) found that BCT produced a significant effect size of d= 0.59. Even if the 2005 study obtained smaller effects than that indicated by the 2003 investigation, it showed that most couples improved their marital relationships compared to those in the control group. In the same time, Shadish and Baldwins's (2005) study offered data regarding the variables that moderate the effect of BCT. Their results indicate that the effect of therapy remains the same regardless the clinical length of the therapy, or the way the dependent variable was measured.

In order to enhance the effects of BCT, Jacobson and Christensen (1996) developed a new approach, the Integrative Behavioral Couple Therapy (IBCT) which has its origins in Traditional Behavior Couple Therapy (TBCT). IBCT integrates different strategies that lead to behavioral changes with strategies that focus on the acceptance of behaviors that cannot be changed. During assessment, conducting an in-depth analysis, the IBCT therapist intends to understand the behaviors through the antecedents and consequences of the problems encountered in the couple, identifying the vulnerabilities of the partners (anxiety, sensitivity to control, etc.).

The efficacy of IBCT investigated in several clinically controlled studies. Wimberly's (1997) study included 17 couples randomly assigned to IBCT (n=8), control group/waiting list (n=9). The results of this study indicated that marital satisfaction was significantly enhanced in the IBCT group. Jacobson, Christensen, Prince, Cordova, and Eldridge's investigation (2000) included 21 couples, randomly assigned to IBCT and TBCT. Results show that both wives and husbands who benefit of IBCT experienced significant improvements of marital satisfaction compared to those assigned to TBCT. Moreover, 80% of the couples from the IBCT group enhanced their relationship compared to 64% from the TBCT group. Another study conducted by Christensen, Atkins, Berns, Wheeler, Baucom, and Simpson, (2004) involved 134 highly stressed couples. The couples underwent 26 sessions of IBCT therapy in 8/9 months. The couples benefiting of IBCT recorded significant improvements regarding the marital relationship, effects that maintained at the 2-year follow-up. All these results indicate that IBCT is more efficient than TBCT. A relevant result on a more specific population is offered by an investigation conducted by Trapp (1997). This study investigated the effects of couple therapy on women diagnosed with major depressive disorder. The results of this study indicate that IBCT is more efficient in reducing marital distress and depressive symptomatology than cognitive-behavioral couple therapy.

Consequently, taking into consideration the efficacy of IBCT we can conclude that even if this form of couple intervention was developed just recently, it stands out from other forms of intervention by the positive effects produced. Furthermore, we may presume that since IBCT yields better results than TBCT, it should also have better results than the therapies that had worse results than TBCT.

In 2002 Johnson analyzed the efficacy of another type of couple therapy, namely Emotion-Focused Therapy (EFT). In her investigation she compared four studies which implemented EFT with the results of a control group from the waiting list. The results of the couples from the EFT group was significantly better than that of the control group, attaining a size effect of d=1.31, meaning that the couples included in the study improved their relationship compared to 70% of the couples in the control group.

In the 21st century, EFT continued to develop, being used more and more frequently, its efficacy being confirmed by previous research. Johnson, Hunsley, Greenberg, and Schindler's (1999) meta-analysis yielded a rate of recovery of 70-73% and an effect size of 1.3, results remaining stable even after controlling for couples with high risk of relapse (Clothier, Manion, Walker & Johnson, 2002). Similar results were indicated by Greenman and Johnson's (2012) meta-analysis.

As seen, EFT has a powerful empirical basis, its validity and efficacy being proved in several studies investigating the process and the results of the intervention (Greenman & Johnson, 2012). Moreover, the theory on which the intervention is based is furthermore sustained by other studies that are based on the same processes as EFT. For example, one can find obvious similarities between EFT and studies investigating the relationship between marital stress and marital satisfaction (Gottman, 1994). In the same time, EFT is also a theory of attachment, which has a considerable empirical validity demonstrated by a large number of studies (Cassidy & Shaver, 1999; Johnson & Whiffen, 2003). Furthermore, EFT

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proved its validity in specific populations as well. For instance, couples confronting highly stressful, traumatic events (e.g., childhood abuse, psychological disorders as, major depression) were found to enhance their relationship after undergoing EFT (Dalton, Johnson, & Classen, 2009; Denton, Nakonezny, Wittenborn, & Jarrett, 2010) assisting the members of the couple to change maladaptive attachment styles developed in childhood due to the abuse (e.g., avoidant attachment style), or to develop a more supportive relationship in couples where one of the partners was confronting psychological disorders.

Briefly put, EFT is a theoretically well-founded and empirically validated couple therapy, maintaining its efficacy regardless the new approaches that appeared in the meantime.

Even if literature indicates that both ICBT and EFT proved repeatedly their efficacy (see the synthesis conducted by Snyder, Castellani, & Whisman, 2016), no meta-analysis has been conducted in order to specifically investigate which of the two therapies (IBCT or EFT) yield better results, and which are the moderators that facilitate a higher efficacy.

Consequently, in the present paper we will investigate two of the couple therapies that produced the most research and data regarding the effect of these types of interventions. Thus, we will focus on evidencing the possible differences between IBCT and EFT, as well as risk and protective factors that contribute to the modification of the relationship associated with the effect of the therapy.

Our first objective is to investigate the effect of ICBT and EFT, followed by the comparison of the results in order to determine whether there are significant differences regarding their effects.

Next, we will focus on identifying the possible moderators that may influence the results of the intervention, as number of children, length of the relationship, clinical comorbidities, and type of outcome.

Finally, we will investigate if the level of education, age, geographic area where the study was conducted, the experience of the therapist and race of the participants influence the results.

METHODS

Literature search

Several strategies for literature search were employed. First, we explored the well-known databases using keywords for the main constructs analyzed: Wiley Online Library, ScienceDirect, Sage, American Association for Marriage and Family Therapy, and PubMedSupport Center. The keywords used were couple (with synonyms as marital or relationship), therapy (with synonyms as change, processes, treatment predictors, therapies, satisfaction), intervention (emotionally focused / integrative behavior). The literature search started in November 2017 and ended in March 2018 with no time limit in terms of the publication year of the manuscript and using English language. Second, we searched within the references of already found articles. Finally, in order to mitigate the potential bias of unpublished research, we conducted a manual search of abstracts and proceedings from relevant conferences.

Inclusion and exclusion criteria

There were three main inclusion criteria used for selecting the relevant studies for the meta-analysis. First, we selected studies with data related to EFT and IBCT, in which results for efficacy were reported. Second, we selected studies published in peer reviewed journals. Third, we selected studies in which there was reported enough statistical information in order to compute the effect size. We excluded studies which reported the same data (these were identified based upon the identical descriptive statistics of the samples). In such cases, only the first published study was included.

Data set and coding procedure

After a preliminary analysis of titles and abstracts, we found 96 articles presenting the efficacy of couple therapy. From those, 34 articles presented IBCT results and 62 articles ETF results. After reading the full-text and applying all the inclusion-exclusion criteria, a final sample consisted of 15 studies, incorporating results from 373 couples. Figure 1 shows the selection process of studies.

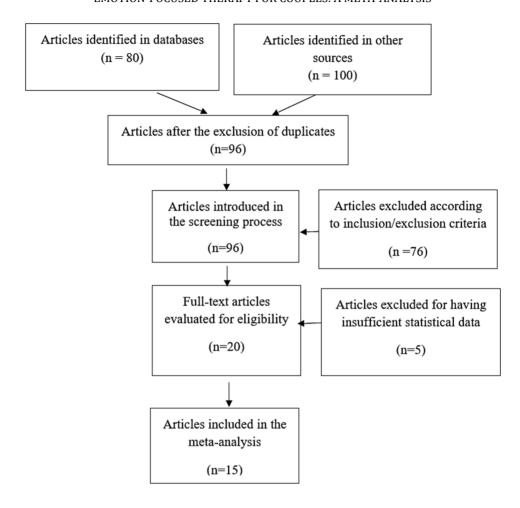


Figure 1. Flow diagram of the reviewed studies

From the total of 15, 12 studies presented results regarding the efficacy of EFT (N=291 couples) and 3 tested the efficacy of IBCT (N=82 couples). Table 1 presents the characteristics of the studies retained for analysis.

Table 1.Characteristics of the included studies

Christensen et al, 2004 gl				age	Country
30	Dyadic adjustment, global distress Soft expression,		IBCT	41	USA
	etachment, ard expression,				
	ngaging in the problem	6	IBCT	41.91	USA
	yadic adjustment	32	EFT	44	Canada
Dalton et al., 2013 Di	yadic adjustment ocial intimacy, self-	22	EFT	43	Canada
	isclosure, empathy,				
	yadic trust, dyadic				
D	djustment epression, quality of	24	EFT	40.9	Canada
	iarriage, dyadic				
	djustment	13	EFT	31.7	Canada
	orgiveness, trust,				
	yadic adjustment, global				
	mptoms, empathy and				
	cceptance, feelings and				
	eeds, discomfort	20	EFT	45.15	Canada
	lobal distress, dyadic	10	ID OT		110.4
	adjustment		IBCT	44	USA
	yadic adjustment,				
	ntimacy, communication,	20	PPT	NC	C 1 -
	assion, love	28	EFT	NS NC	Canada
	yadic adjustment	24	EFT	NS	Canada
	yadic adjustment, sexual				
	atisfaction, sexual desire,				
	everity index, depression, exual infrequency, sexual				
	voidance	49	EFT	41.5	Canada
	yadic adjustment,	49	EFI	41.5	Canada
	epression, hopelessness,				
	oping, burnout	40	EFT	50	Canada
	yadic adjustment	32	EFT	36	Canada
	lobal psychological	32	EFI	30	Canaua
	istress, Relationship				
	satisfaction, PTSD				
	mptoms, General life				
	atisfaction, Depression	7	EFT	43	Canada
	elationship satisfaction,	,	ы. 1	13	Ganada
	ttachment, support	32	EFT	44	Canada

Each study was coded for moderators related to therapy (type of therapy - EFT vs IBCT), duration of therapy, related to outcome (type of interaction - affective vs behavior, type of transferable outcome - attachment vs communication vs well-being), related to participants (number of children of the couples, age of relationship, country, age of participants, education, race). Other moderators were also initially considered and coded (i.e., experience of the therapist, comorbidities of couples), but were later dropped from the analysis due to lack of information from the original studies.

Type of therapy. The first moderator considered was the type of therapy. Consequently, we generated a categorical (dichotomic) variable named "type of therapy "with two modalities: IBCT and EFT, based upon the descriptions of intervention in each study.

Type of interaction outcome. This moderator refers to changes reported in the couple's relationship as outcome. We divided the interaction outcomes in two categories: cognitive/affective and behavioral. In the cognitive/affective category we included all outcomes referring to emotion changes, measured as distress, PTSD symptoms, general life satisfaction, depression, empathy and acceptance, feelings and needs, discomfort, severity index, social intimacy, passion, love, hopelessness, burnout. Into the behavioral category we included relationship behaviors such as adjustment, expression, detachment, engaging, sexual behavior, communication, self-disclosure.

Type of transferable outcome. Here, we considered the transferable characteristics of the outcome to a larger context than the relation itself, and divided outcomes into attachment, communication and well-being. In the attachment category we included all measurements of change from an unhealthy/dysfunctional to a healthy/functional attachment (e.g., from avoidance/anxious attachment to engagement/ secure attachment). In the communication category we included style/ quality of communication and also the functional response when receiving communication related to needs, emotions, plans, intentions of the partner. In the well-being category we included all changes in affect, satisfaction, cognitions.

Number of children per couple. We recorded the average number of children per couple reported in each study in order to explore if this variable would predict the effect of interventions.

Length of the relationship. We recorded the average number of years since the couples in each study had been together. The minimum average obtained was 2 years (all studies used the minimum 2 years as inclusion criteria).

Country. By analyzing all studies we concluded that participants were selected only from two countries: Canada and USA. Consequently, the analysis of this moderator involved comparing the results obtained by these two categories of participants.

Age of participants. For this moderator, we recorded the average age of the participants in each study in order to explore if age would predict the efficacy of the interventions.

Education. In order to quantify the education of participants, due to the fact that not all studies reported the distribution of educational levels in their sample and in order to exclude as few studies as possible from the analysis, we recorded the percentage of participants with higher education.

Race. Also, due to the diversity of reporting race distribution in the samples we decided to quantify the percentage of Caucasians in each sample and explore if it would predict the effect size of interventions.

Duration of therapy. Finally, in order to perform a dose-response analysis, we quantified the duration of therapies (number of weeks) and explored if it would predict the effect of interventions.

Data analysis

Analyses were conducted by using the Comprehensive Meta-Analysis software, version 2.2.050 (Biostat Inc., Englewood, NJ, USA). As an indicator of effect sizes, Pearson's coefficient of correlation (r) was used, with values above 0.50 considered large, around 0.30 considered moderate and values around 0.10 interpreted as small effects (Cohen, 1988). Given the heterogeneity of the studies, all analyses were based on a random effects model.

Publication bias analysis

In order to test our results for publication bias we used the classical fail-safe N test of Rosenthal who suggested that rather than simply speculate about the impact of the missing studies, we compute the number

of studies that would be required to nullify the effect. If this number is relatively small, then there is indeed cause for concern. However, if this number is large, we can be confident that the treatment effect is not null. Our results yield a z-value of 10.85609 and corresponding 2-tailed p-value of 0.001. The fail-safe N is 446. This means that we would need to locate and include 446 'null' studies in order for the combined 2-tailed p-value to exceed 0.050. Put another way, there would be need of 29.7 missing studies for every observed study for the effect to be nullified.

RESULTS

The efficacy of EFT and IBCT

The efficacy of EFT for couples was measured in 12 studies, incorporating a total number of 291 couples. Figure 2 presents the forest plot of the effects obtained by each study and also the overall effect size.

Study name						
	Std diff in means	Lower limit	Upper limit	Z-Value	p-Value	
Dalgleish et al., 2015	0.904	0.492	1.315	4.307	0.000	+
Dalton et al., 2013	4.315	2.789	5.842	5.541	0.000	
Dandeneau & Johnson, 1994	0.596	-0.225	1.417	1.423	0.155	
Denton et al.,2012	1.287	0.003	2.570	1.965	0.049	
Greenberg et al., 2010	0.894	0.122	1.665	2.271	0.023	
Jam es, 1991	0.513	-0.244	1.271	1.329	0.184	+++
Johnson et al., 2013	0.934	0.455	1.414	3.818	0.000	
MacPhee et al., 1995	0.569	-0.007	1.146	1.937	0.053	
McLean et al., 2011	0.580	-0.069	1.229	1.751	0.080	
Walker et al., 1996	1.229	0.474	1.985	3.189	0.001	
Weissman et al, 2017	0.616	-0.205	1.438	1.471	0.141	
Wiebe et al, 2016	0.621	0.240	1.003	3.192	0.001	
	0.878	0.585	1.171	5.865	0.000	💠
						-2.00 -1.00 0.00 1.00 2.00

Figure 2. The forest plot for the effect of EFT for couples

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As figure 2shows, from the 12 studies included in the analysis, 4 studies obtained non-significant effects, 1 study yielded a marginally positive significant effect and the rest of 7 studies obtained positive significant effects. The overall effect was a significant positive one, of high magnitude, d=0.878, CI95%=[0.585, 1.171].

The efficacy of IBCT was measured in 3 studies, incorporating a total number of 82 couples. Figure 3presents the forest plot of the effects obtained by each study and also the overall effect size.

Study name	Statistics for each study								
	Std diff in means	Lower limit	Upper limit	Z-Value	p-Value				
Christensen et al, 2004	0.708	0.438	0.979	5.133	0.000				
Cordova et al., 1998	1.335	0.194	2.477	2.293	0.022				
Jacobson et al, 2000	0.920	0.176	1.663	2.424	0.015				
	0.761	0.513	1.009	6.015	0.000				
						-2.00 -1.00 0.00 1.00 2.00			

Figure 3. The forest plot for the effect of IBCT

As figure 3 shows, all 3 studies obtained large significant positive effect sizes and implicitly, the overall effect size was a large significant one, d=0.761, CI95%=[0.513, 1.009].

In the next stage of our analysis we were interested in comparing the effect of those two interventions. The comparative analysis revealed that there were no significant differences between their effect sizes, Q(1)=0.108, p=0.743. Consequently, for further analysis we pooled together all the studies, measuring EFT and IBCT. The forest plot for all studies is presented in figure 4.

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Study name	Statistics for each study					
	Std diff in means	Lower limit	Upper limit	Z-Value	p-Value	
Christensen et al, 2004	0.708	0.438	0.979	5.133	0.000	+
Cordova et al., 1998	1.335	0.194	2.477	2.293	0.022	
Dalgleish et al., 2015	0.904	0.492	1.315	4.307	0.000	+
Dalton et al., 2013	4.315	2.789	5.842	5.541	0.000	
Dandeneau & Johnson, 1994	0.596	-0.225	1.417	1.423	0.155	+++
Denton et al.,2012	1.287	0.003	2.570	1.965	0.049	
Greenberg et al., 2010	0.894	0.122	1.665	2.271	0.023	
Jacobson et al, 2000	0.920	0.176	1.663	2.424	0.015	
James, 1991	0.513	-0.244	1.271	1.329	0.184	
Johnson et al., 2013	0.934	0.455	1.414	3.818	0.000	—
MacPhee et al., 1995	0.569	-0.007	1.146	1.937	0.053	
McLean et al., 2011	0.580	-0.069	1.229	1.751	0.080	
Walker et al., 1996	1.229	0.474	1.985	3.189	0.001	
Weissman et al, 2017	0.616	-0.205	1.438	1.471	0.141	+++
Wiebe et al, 2016	0.621	0.240	1.003	3.192	0.001	+
	0.856	0.630	1.082	7.423	0.000	•
						-2.00 -1.00 0.00 1.00 2.00

Figure 4. The forest plot for all studies included in the meta-analysis

As figure 4shows, the overall effect size of EFT and IBCT taken together was positive and significant, and also of a strong magnitude, d=0.856, CI95%=[0.630, 1.082]. Also, performing the heterogeneity analysis of these results, the distribution of effects proved to be significantly heterogeneous, Q(14)=27.02, p=0.019, leading us to perform the moderators' analysis to test several explanations for this heterogeneity.

Moderators' analysis

Type of outcome - interaction (affect vs behavior). The analysis performed for this moderator revealed that studies which quantified affect as outcome obtained a significant large positive effect size, d=0.699, CI95%=[0.453, 0.944], similar to the effect obtained by studies which measured behavioral outcomes, d=0.871, CI95%=[0.665, 1.076] with no significant differences between the two categories of studies, Q(1)=1.110, p=0.292 (Table 2).

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 $\label{eq:Table 2} \textbf{Results of the moderation analysis performed for categorical moderators}$

Moderator	Categories of	No of	Cohen's	Lower	Upper	QB	df	р
	the moderator	Studies	d	limit	limit			
Type of								
outcome -								
interaction								
	Affect	10	0.699	0.453	0.944	1.110	1	0.292
	Behavior	15	0.871	0.665	1.076			
Type of								
outcome -								
transferable	!							
	Attachment	4	0.575	0.155	0.995	3.053	2	0.217
	Communication	14	0.894	0.667	1.122			
	Wellbeing	10	0.626	0.361	0.891			
Country			•					
	Canada	12	0.869	0.592	1.147	0.001	1	0.999
	USA	3	0.870	0.340	1.399			

Type of outcome – transferable (attachment vs communication vs well-being). The moderation analysis indicated that studies from all three categories of the moderator yielded similar significant strong positive effects as follows: d=0.575, CI95%=[0.155, 0.995] for attachment, d=0.894, CI95%=[0.667, 1.122] for communication, and d=0.626, CI95%=[0.361, 0.891] for well-being, with no statistical differences between them, Q(2)=3.053, p=0.217 (Table 2).

Length of the relationship. By performing a meta-regression, we analyzed if the length of the relationship (in years) predicted the effect size obtained by each study. The results proved that the length of the relationship was not a significant predictors of the effect size, b= -0.002, p= 0.842, which means that the effect of couple therapy is independent from its duration.

Number of children. The meta-regression performed with the number of children as a predictor and the effect size as a criterion variable, proved that the number of children was not a significant moderator for the efficacy of the therapy (b= 0.122, p= 0.237).

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Average age in the sample. The results of the moderation analysis indicated that age was not a significant predictor of the effect size, b=-0.014, p=0.239. In other words, the efficacy of the therapy was independent from the age of the participants under therapy.

Percentage of participants with higher education. The analysis of this variable as a potential predictor of the effect size, proved no significant predictive value, b = 0.001, p = 0.644, meaning that higher education made no difference for the efficacy of the couple therapy.

Percentage of Caucasians. A similar meta-regression was performing in order to test if the percentage of Caucasians in the samples predicted the effect size of the interventions. The results proved that there was no significant relationship between the two variables, b= 0.002, p= 0.581, meaning that the interventions had the same (high magnitude) effect, irrespective of the Caucasians proportion in the samples.

Duration of therapy. The last meta-regression performed aimed to test if the duration of therapy predicted the effect sizes. The results indicated that the duration of the therapy did not predict the effect size, b= 0.002, p= 0.594, meaning that the therapy had the same large effect, independent of its duration.

Country. The last moderator taken into account was the country where each study was performed. The analysis is presented in table 2. As the results show, both categories of studies yielded significant strong positive effect sizes, d=0.869, CI95%=[0.592, 1.147] for Canada and d-0.870, CI95%=[0.340, 1.399] for USA, with no significant differences between them, Q(1)=0.001, p=0.999.

DISCUSSION AND CONCLUSIONS

The present meta-analysis had three major objectives: (1) to investigate the efficacy of EFT and IBCT, (2) to identify the possible differences regarding the efficacy of the intervention between EFT and IBCT, and (3) to explore the effect of different moderators on the efficacy of the therapy.

Our results indicate that couple therapy has a large effect both globally (d=.85) and individually (EFT d=.87, and IBCT d=.76). These results are sustained by previous studies (Christensen et al., 2004;

Johnson, 2003). However, being a meta-analysis that includes the investigation of all studies conducted on this topic, we can firmly assert that in case of marital stress couple therapy significantly enhances the relationship between the partners.

Regarding the second objective, our results indicate that there are no significant differences between EFT and IBCT, while both interventions have a statistically significant large effect size (EFT: d=.87, IBCT: d=.76). These results are similar to those in the literature, indicating no significant differences between different forms of couple therapy. Shadish and Baldwin's (2003) meta-analysis revealed no significant differences between couple therapies. However, Christensen et all's (2004) study indicate that there may be differences in the efficacy of interventions. IBCT producing significantly better results than traditional therapy, IBCT was developed more recently than EFT and integrates everything that has worked before (cognitive-behavioral, humanistic/experiential approaches), while EFT is a humanistic/experiential intervention using the cognitive-behavioral component only as the result of understanding and changing the cycle of interaction. EFT begins with identifying and solving problems of attachment, but later on, when the problem can be seen from a different perspective, the problem-solving process receives increased attention from a different, more rational angle as well. This may be a plausible explanation why these two forms of intervention have good results without significant differences between them.

The third objective of the study was to investigate the moderators that may impact the efficacy of the couple therapy. Since we found no significant differences between the two interventions (EFT and IBCT), the analysis of moderators was conducted for the aggregate effect of those two therapies.

Moderators related to the type of outcome:

Change: affective versus behavioral. This type of moderators investigates where exactly does the change happen - at the affective, emotional or behavioral level. Our results indicate that there are no significant differences in efficacy from this point of view. In other words, even if the couple encounters difficulties while solving problems, or

within the affective sphere (e.g., expressing emotions), both EFT and IBCT produce statistically significant positive results. These results are attributable to the techniques employed by both therapies. Both address emotional problems: IBCT uses acceptance, empathy and unified detachment, while EFT uses techniques to change the process of interaction and emotional bonds. In this way, both interventions succeed to produce change at the emotional level that may further on facilitate change at the behavioral level – especially due to the fact that after using emotional techniques both EFT and IBCT lay emphasis on behavioral change as well (Greenman & Johnson, 2012). Even if there are no differences between the emotional and behavioral categories, we can notice that behavioral change is slightly more efficient, having an effect size of d=.87 compared to the emotional category which has an effect size of d=.69. These results may suggest that even if there is an evident change at the emotional level, this change may be slower, but more enduring in comparison to the rapid change produced on the behavioral level. Nevertheless, we may say with a considerable certainty that the differences between the two moderators are not statististically significant since both categories are well represented (over 10 studies).

Transferable attachment versus communication versus wellbeing. After benefiting of couple therapy, the client may experience a global change in well-being, or a change at the level of communication with others, or a deeper change at the level of attachment. Results illustrate that changes are produced at all the three levels, without significant differences between them (p=0.217). Put in a different way, once with the enhancement of the couple's relationship, one can notice improvements in other relationships as well. These results are similar to those in the literature which sustain that a dysfunctional marital relationship may negatively impact other relationships of the members of the couple, while a functional relationship may enhance them (Glaser & Newton, 2001). If we investigate the categories of outcomes, communication has the largest effect (d=.89), followed by well-being (d=.62), and attachment (d=.57), attachment having the most stable effect. Regardless the fact that couple therapies focus on change at the level of attachment, the large, significant results cannot be observed in this direction. This result sustains the idea that change in attachment is a long-term investment that necessitates lots of time and effort (Bowlby, 1983). Even if both EFT and IBCT focus on producing change in attachment, they are time- and procedure-limited (approximately 21 sessions), insufficient time to produce great change. One of the most significant limitations to illustrate this result is represented by the fact that attachment was investigated in 4 studies, while communication in 14 studies, and well-being in 10 studies. Thus, we can say that the category of outcome attachment is underrepresented.

In the present meta-analysis, we also tested the effect of moderators related to the characteristics of the couple: length of relationship and number of children. Our results indicated a statistically non-significant effect for both categories, meaning that, regardless the length of the relationship and number of children, couples may benefit from couple therapy.

Other moderators as age, level of education, race of participants presented a non-significant effect regarding the efficacy of the therapy. Regardless these factors, the mechanisms subjacent couple therapy (communication training, emotional relating) functions and maintains its effect.

The studies included in this meta-analysis have been conducted in Canada and USA. Investigating this aspect, we did not find any difference in the efficacy of the two couple therapies in this regard. The length of therapy varied between 11 and 21 sessions, which is enough time to fulfill the intervention protocol for both therapies, results similar to those presented in Shadish and Baldwin's (2005) meta-analysis.

The results of our meta-analysis are relevant for the clinical practice as well. Thus, it is very important to know both for counselors and potential clients that regardless the type of couple therapy they decide to attend to will have a beneficial effect. These results inform therapists that if a therapeutic approach does not function with a couple, they can recommend another intervention that might function. Thus, clients may choose from the two forms of intervention (EFT and IBCT) the one that best fits their needs and towards which they can best react with trust and be collaborative.

Another important element refers to the fact that regardless the characteristics of the couple, the couple therapy will have an effect. Thus, this study brings forward positive results for IBCT and EFT couple therapies.

Moreover, the present paper also sustains the idea that solving the couple's problems enhances the couple's general well-being. Thus, if one of the members of the couple is not certain that couple therapy will enhance the relationship, maybe he/she will be willing to turn to therapy in need for personal development. We may say that well-being and the improvement of social relationships is a bonus to couple therapy.

Besides the above-mentioned contributions, the present study has certain limitations as well. First of all, we have to keep in mind that the present study does not indicate who benefits more from couple therapy: male of female participants. For further research it would be very important to investigate possible gender induced differences, which in a global approach to the results cannot be detected.

Furthermore, our meta-analysis investigates the results of the therapy immediately after its cessation. Including studies that investigate the effects of the intervention on a longer period of time would offer extremely valuable information from a clinical point of view. Sometimes, therapy may have an immediate, statistically significant positive effect, however, the effect may not last in time (Christensen et al., 2010).

Another limitation to our study may be represented by the low number of studies included in the outcome category of Attachment. Taking this aspect into consideration, we cannot assert for certain which is the effect of therapy on the attachment-style characteristics of the patients.

Summarizing, our meta-analysis brings forth relevant data from scientific, clinical, and practical point of view. Thus, based on our results we may conclude that: (1) EFT and IBCT have a large, statistically significant effect, (2) there are no significant differences between the two approaches, and (3) regardless the characteristics of the couple therapy, both approaches are efficient.

Our meta-analysis is the first large study that compares the two theoretical approaches and investigates their efficacy. This far, no meta-analysis has been conducted that would have analyzed the data produced by the newly developed Integrative Behavior Couple Therapy.

Furthermore, based on the analysis of the 15 studies included in the present meta-analysis, our study indicates that moderating factors do not have an impact upon the efficacy of those two couple therapies. Consequently, regardless the length of the relationship, number of children, age, level of education, and race, the two forms of intervention (EFT and IBCT) have a high efficacy in solving marital problems.

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INTEGRATING ART THERAPY IN SCHOOLS: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT. Art therapy is a method of treatment that involves the mental world of human beings. The purpose of this therapy is to improve the patient's emotional and physical functioning and condition. Art therapy is utilized for emotional and mental problems and as a diagnostic tool. This therapeutic technique is currently common in a wide variety of settings in varied therapeutic and rehabilitative settings such as: educational settings, hospitals and mental health centres. With regard to interventions implemented within schools, the significance and comprehension of art therapy is lacking. The purpose of this study is to identify the variety of interventions that exist in the literature on integration of art therapy in schools. Furthermore, this article will present the methods of evaluation, the results, as well as factors that influence the existence of this intervention. The results of the systematic review might be useful for continuing and expanding the integration of art therapy within schools.

Keywords: Art therapy, adolescents, children, school children, learning disabilities, emotional and behavioural problems.

1. Introduction

Art therapy began to appear in the early 1940s. Art therapy is utilized for emotional mental problems and as a diagnostic tool. Art therapy is a method of treatment that involves the mental world of

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human beings and has a double purpose: First of all, there is direct implementation of the expressive tool as a healing tool. There is also, indirect implementation in the form of psychotherapy, where the purpose of the therapy is to improve the patient's emotional and physical functioning and condition (McNiff, 1992). This therapeutic technique is currently common in a wide variety of educational settings from early childhood through childhood to adolescence, and is applied in medical and mental health centres (Pinchover, 1998; Malchiodi, 2012; Snir & Regev. 2018). Therapeutic interaction normally takes place in a treatment room, accompanied by the therapist's observation of the creative process. The therapy utilizes and enlists the language of art in order to form insight, personal progress and growth (Case & Dalley, 2014). Expression through art is a tool in order to connect the patient's inner experience with the external world and constitutes a way of communicating feelings and sensations that the person finds hard to express in words (Amir & Or, 2005; Case & Dalley, 2014). For this reason, art therapy is recommended for various populations, mainly for those who find it difficult to give voice to their feelings, such as: the elderly and people with physical handicaps, mental, language and communication difficulties, as well as people who find verbal therapy hard. Nevertheless, art therapy is also recommended for those who have good and clear verbal skills, as it is a word-circumventing process through which many insights can be reached, even among those with excellent verbal skills (Rubin, 2016). Children and teens with various academic and emotional difficulties experience their world as one which lacks order and organization. such that any encounter or conflict can be experienced by them at very high intensities. As a result, their ability to express their experiences in words often encounters difficulties. Art therapy utilizes additional communication and visual channels that can help children express their feelings and troubles (Safran, 2002). A study on the use of art therapy with school children who have learning disabilities found that the participants reported a rise in their overall functioning. Art therapy had clearly helped the children explore their feelings and become capable of identifying their problems and difficulties. Furthermore, the ability to share with the therapist had deepened their awareness and self-insight (Frielich & Schechtman, 2010). Art therapy at school gives the child tools to connect to his creative side and to express experiences and difficulties differently, in a way not possible with any other therapeutic process (Isis, Bush, Siegel, & Ventura, 2010). The integration of art therapy within schools facilitates the coping of school children with a wide range of difficulties. The therapeutic interventions provide a response to emotional and academic needs and aim for support, rehabilitation and hope by means of the creative tools (Nelson, 2010). Educational systems around the world have identified the significance and benefits of integrating art therapy in schools and have begun to use this therapy as an additional source of therapeutic support for children and teens (Cortina & Fazel, 2015; Snir & Regev, 2018).

2. Problem Statement

Art therapy has been utilized in diverse therapeutic and rehabilitative settings such as hospitals, mental health centres as well as preschools and schools. In everything related to interventions that take place within schools, the significance and comprehension of art therapy is lacking. The purpose of this study is to identify the variety of interventions that exist in the literature concerning the integration of art therapy in schools. Moreover, this study will also present the methods of evaluation, the results and factors that influence the existence of this intervention.

3. Research Questions

A review of four major papers on art therapy in schools (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010) identified four main research questions:

- 1. For which types of populations and for which types of difficulties was art therapy in the school suggested?
 - 2. What are the purposes of art therapy in schools?
- 3. How was the effectiveness of integrating art therapy in schools measured? And what were the results of the said integration?
- 4. Who are the role partners and what was their involvement in integrating art therapy in schools?

4. Study Aim

The purpose of the study is to identify the goals, aims, and challenges of integrating art therapy programs in schools, as portrayed in the research literature. Moreover, the study will present the tools, evaluation methods, and results of integrating art therapy, as well as the systemic attitude of role partners to art therapy.

5. Research Methods

In designing and reporting stages of the present systematic analysis of the literature, Uman's (2011) procedural guidelines were followed. In answering the research questions, the systemic literature review method was implemented. This method was chosen since it summarizes empirical studies on particular topics, offering conclusions on the actual scientific knowledge base and will also reveal unresolved aspects which need further investigation (Cooper, 1998).

In order to answer the research goals, the method used in this paper was the systematic literature review. The literature search included the following databases: Proquest - Educational database, ERIC, APA PsycNet and EBSCO - Academic Search Premier. The literature search was based on the following keywords and combinations: Art therapy, adolescents, children, school children, learning disabilities, emotional and behavioural problems.

Based on a search of each of the keywords separately, two thousand articles were found. The combination of all the key words together revealed hundreds of articles, which were filtered according to the following inclusion criteria:

- Studies published in English;
- Studies published between 2008 and 2018 in peer reviewed journals;
- Studies allowing full text access.
- Studies on art therapy within schools.

As a result of the keyword search, 45 studies were initially identified in the database. After applying the inclusion criteria, 37 studies were excluded. Two studies were removed due to duplication. Five articles were excluded (one article is on art therapy with students who have learning disabilities but the therapy does not take place within the school; four articles are on emotional therapeutic interventions in schools that are not art therapy). Ultimately, 4 studies were included in this review:

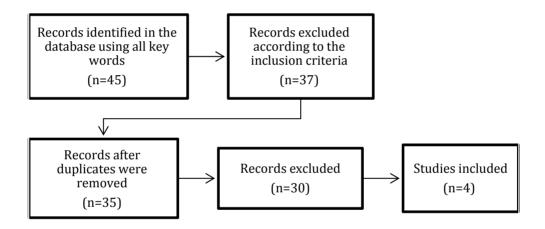


Figure 1. Flowchart for the selection process of studies referring to integrating art therapy in schools.

6. Findings

The studies reviewed are related to school children both in the mainstream educational system and in special education classes. With regard to the children's ages, one article referred to therapeutic interventions with children in primary school (Laffier, 2016); one article presented a wide review of art therapy with adolescents in high school

(Isis et al., 2010); and two articles reviewed art therapy interventions in an age range from primary school, through junior high, to high school (Cortina & Fazel, 2015; Nelson, 2010). With regard to the duration of intervention, three articles review art therapy interventions at school over many years with diverse populations (Cortina & Fazel, 2015; Isis et al., 2010; Nelson, 2010) and one article presents focused interventions regarding their time (several weeks) and population (Laffier, 2016).

Research question 1: For which populations and which types of difficulties was art therapy in the school offered?

The four studies included in the systematic review, portray art therapy interventions with school children at school. The interventions portrayed took place in the following countries: US, UK and Canada. The complete list of the populations that received art therapy and the difficulties handled by the children is presented in Table 1.

Table 1.

The population and the children's difficulties

The population and the children's types of difficulties

- School children with a low socioeconomic status, who have emotional difficulties and behavioural problems (Cortina & Fazel, 2015; Isis et al., 2010; Nelson, 2010).
- Primary school pupils who were subjected to bullying or violence (Laffier, 2016).
- School children at public schools who have emotional difficulties, learning difficulties and behavioural problems (Cortina & Fazel, 2015; Isis et al., 2010; Nelson, 2010).
- School children at public schools who suffer from poverty, broken families, racial ethnic tensions, hunger, drug abuse, violence and street gangs (Cortina & Fazel, 2015; Isis et al., 2010; Nelson, 2010).

Research question 2: What are the goals of art therapy at schools?

The therapeutic goals in all four articles reviewed can be divided into two main aspects: the first aspect consists of the pupil's personal goals, aimed primarily at alleviating his/her emotional condition and personal well-being. The second aspect refers to pedagogical and social goals in the pupil's functioning within the school system. The list of treatment goals raised in the articles reviewed can be seen in Table 2.

Table 2. The goals of art therapy in schools

The goals of art therapy in schools				
Personal goals for school children	 Personal empowerment, strengthening self-confidence and ability to cope with difficulties Creating a safe place to build connections and trust Safe space to express anger, tension and pressure Self-expression Life skills 			
Pedagogic and social goals for school children from a systemic perspective	 Social integration (in the classroom and in the community) Reducing behaviour problems Open to studying, with the goal of raising one's academic achievements Exposing the student to use of creative tools and to intensify the learning experience 			

Research question 3: How was the effectiveness of integrating art therapy in schools measured? And, what were the results of integrating art therapy in schools?

The articles surveyed examined the results of art therapy through the following Aspects: the length of the intervention (several weeks and/or up to one year or more), measurement tools and the results of the therapy. In two articles dealing with time-focused interventions (up to 14 weeks), interviews and questionnaires administered before and after the intervention were the tools utilized (Cortina & Fazel, 2015; Laffier, 2016). In two articles that present a range of interventions held over several years, use was made of evaluation tools of art therapy, interviews, observations, documentation and viewing of art products and processes (Isis et al., 2010; Nelson, 2010). Some of the articles relate to humanistic therapy approaches that focus on the client's subjective experience, and some relate to dynamic therapy theories. The list of the diagnostic and evaluation tools, as well as the results of the studies surveyed, can be seen in Table 3 and Table 4.

Table 3.

Diagnostic and evaluation tools

Diagnostic and evaluation tools

- Use of questionnaires that measure strengths and difficulties (SMFQ, SDQ)
 The questionnaires were completed by the teachers and school children
 before and after the intervention (Angold, Costello, Pickles, & Winder,
 1987; SDQ "Publications", 2014).
- Use of an emotional cognitive evaluation tool named LECATA based on art therapy (Levick, 2009).
- Conducting interviews with school children, parents and teachers before and after the art therapy intervention (Cortina & Fazel, 2015; Laffier, 2016; Nelson, 2010).
- Documenting and observation of the sessions by the therapist (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010).
- The therapeutic program was based on humanistic approaches as well as on psychodynamic approaches to art therapy that combine spontaneous artwork with structured contents and also analysis and viewing of the artwork produced (Malchiodi, 2011; Rubin, 1984).
- Use of the NNPE empowerment model as a research foundation (Zimmerman, 1995).

Table 4.

Results

Results

- The wide experimental intervention showed, based on reports by the school's teachers, headmasters and psychologists, that the integration of students with a variety of difficulties in art therapy programs helped them advance both emotionally and behaviorally (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010).
- The research results also showed a positive association between use of the artistic tool and emotional cognitive change, increasing self-efficacy, motivation, self-esteem and sense of control among students who participated in art therapy (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010).
- The students' reports showed that the therapeutic process and the artistic products generated following the sessions empowered and provided place for self-expression. The children also reported an improvement in positive feelings and also a boost in their mood (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010).
- In one study (Cortina & Fazel, 2015) the teachers reported a significant improvement in coping with the various difficulties more positive social trends among school children. With regard to behaviour problems, there was a slight drop and no significant improvement.

Research question 4: Who are the role partners and their involvement in the integration of art therapy in schools?

Integration of therapy in the school stems from the multisystemic approach, which puts the child in the centre and enables support of the child from different aspects. Art therapists who are integrated in the school have several role partners – the homeroom, teacher, educational counsellor, psychologists, and school headmaster. All of these are dominant figures in the school's pedagogic system and constitute influential factors. In addition, the pupil's parents are significant role partners as they are the child's dominant source of support. It is notable

that at times the role partners are not sufficiently acquainted with the nature of the therapist's work, as the therapist often does not come from the educational discipline, but they acknowledge that the art therapist brings with him or her different and unique content world (Greenwald, 2012; Tortora, 2010). In art therapy within schools the therapist has several role partners who also affect the results of the therapy. All the articles emphasized the significance of role partners' involvement in the success of the therapy (Cortina & Fazel, 2015; Isis et al., 2010; Laffier, 2016; Nelson, 2010). The role partners and their involvement can be seen in Table 5.

Table 5.Role partners and their involvement

Role partners	Their involvement					
 Teachers School counsellors Psychologists Headmasters Parents 	 In most of the programs the teachers were the factor who referred a child for therapy and also played an active and reporting factor on how the child functioned. In most of the integration programs, the teachers completed questionnaires/participated in interviews before and after the children's treatment, and thus contributed to understanding the treatment's efficacy. A significant part of the intervention programs included multisystemic work with school teachers, counsellors, psychologists and headmasters. This was done in order to create cohesiveness and comprehension of the therapeutic language. The school staff participated in workshops which exposed them to the field of art therapy and that which is facilitated by use of the expressive tool. Parent inclusion and involvement was an inseparable part of the programs. The parents took part in referrals and in following the results of the intervention. 					

7. Conclusions

This current article used the systematic review search technique to review the articles that exist in the literature regarding art therapy in schools, between 2008 -2018. The results of the review relate to populations from diverse backgrounds who have emotional, behavioral and academic difficulties. The articles review the existence of therapeutic programs implemented in primary schools, and all the way through to high schools. Furthermore, the literature review relates to two aspects of the goals of integrating art therapy in schools: the personal-emotional aspect and the systemic aspect. The studies reviewed for this paper present several measurement and evaluation tools that can be used to examine the effectiveness of integrating art therapy in schools. The results of the studies show a significant relationship between the therapeutic intervention provided to school children and improvements of emotional, behavioral and academic aspects, which raised the overall functioning of the children at school. Another major aspect evident from the literature review refers to the significance of multisystemic work with teachers, educational counselors, psychologists, headmasters and parents, as being capable of advancing the pupil's mental well-being.

The results of the article can help understand the significance and efficacy of integrating art therapy in schools. The results of the review indicate intervention programs focused on therapeutic goals for a defined time, as well as articles that review intervention programs spread over many years in a variety of populations and difficulties. The considerable effectiveness of art therapy, from primary school to high school, reflects the success and shows the benefits of integrating this therapy. In addition, the success of integrating art therapy in schools attests to an essential need to continue developing additional strategies and interventions that can assist children in school with personal, social and pedagogic development. Moreover, it is important to include all educational, pedagogic and therapeutic agencies in constructing intervention programs in order to create a specific fit for the population, type of difficulty and character of the school.

Notably, the small sample of studies found that after implementing inclusion criteria this might indicate a lack of evidence-based research on the use of art therapy programs in schools. The review shows no

uniform measurement and evaluation tools in which unique criteria for art therapy in schools can be generalized. Moreover, the small number of articles may be explained by the heterogeneity of the concept of art therapy. Some of the studies use terms such as creative art therapy, expressive and creative therapy, art psychotherapy. Another aspect uncovered by the review relates to art therapy as a marginal intervention among all interventions provided to school children in schools in recent years. The review shows that the integration of art therapy programs in schools is also motivated by the selection of resources and financial considerations.

In the articles reviewed, integration of art therapy in schools was provided as a service and support by therapists employed from a variety of settings and organizations external to the school. Educational systems around the world have identified the significance of integrating art therapy in schools and have begun to use art therapy as another source of support for children and teens. In Israel, the Ministry of Education has even included art therapists among its employees (Moriya, 2000; Snir & Regev. 2018). In recent decades, thousands of therapists have been integrated in the Israeli educational system, employed both directly and indirectly in a variety of educational settings (special education schools, regular schools with special education classrooms, municipal therapy centers, and hospital-based therapy centers). All these provide a response to students eligible for therapy under the Law of Special Education (1988). The nature of work with children and teens within educational settings in Israel is either individual or group therapy according to the pupil's difficulties as grasped by the system. One of the main goals of integrating art therapy in schools is to make it possible for school children to be more available for learning and for experiences of efficacy, self-confidence, success, self-acceptance and meaning in their future life as adults (Ofer-Yarm, 2014; Moriya, 2000; Ministry of Education, 2016; Nissimov-Nahum, 2013).

In summary, the multi-systemic approaches see the school as a legitimate and recommended place for conducting art therapy. These approaches simultaneously facilitate observation that relates to the pupil's needs in educational, pedagogic, functional, emotional and environmental aspects (Ofer-Yarom, 2014; Ottarsdottir, 2010).

Nevertheless, in order to understand the quality of the therapy's contribution within a school it is necessary and important to continue conducting and enhancing studies on integrating art therapy in schools in order to expand the comprehension, validity and reliability of the effect of art therapy in schools on children.

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AN INTEGRATIVE ANALYSIS OF STEREOTYPIC BEHAVIORS IN AUTISM SPECTRUM DISORDERS. A CASE PRESENTATION

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ABSTRACT. Children with Autistic Spectrum Disorders (TSA) often engage in stereotypical behaviors that greatly impede interaction with the environment and the learning process. Because these behaviors are self-reinforcing, they are often difficult to reduce. Moreover, for a method to be effective, we believe it is necessary to analyze the context in which they occur and the level of development of the child in each area that may influence the appearance or maintenance of these behaviors, besides analyzing their antecedents, consequences and functions. There are few studies that approach stereotypical behaviors in an integrative perspective. The goal of the current study is to analyze the stereotypical behaviors of a child with ASD from an integrative perspective, including Applied Behavior Analysis (ABA), The Neurosequential Model of Therapeutics (NMT) and Sensory Integration Therapy. This study has a great practical relevance because, based on theoretical foundation, it presents a complex perspective of analyzing the stereotypic behaviors and provides practical recommendations for intervention. Further research could test the hypotheses derived from this case presentation.

Keywords: autism spectrum disorders, stereotypic behaviors, integrated analysis, case presentation, vocal stereotypy

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1. Introduction

A significant problem for persons with autism spectrum disorders (ASD) is the presence of stereotypical behaviors, which are repetitive, restrictive behaviors, without an obvious purpose or function. Stereotypical behaviors interfere with learning and the interaction with adults and peers, are unusual and often lead to stigma. Rhythmic, repetitive and uncontrolled behaviors, with no apparent immediate adaptive effects are often found among stereotypies in children with ASD (Bodfish, Crawford, Powell, Parker, Golden, & Lewis, 1995). These may include motor behaviors, such as: hand fluttering, head rotation, toe walking, repetitive object manipulation (Lewis & Bodfish, 1998), or can be vocal, the children repeating meaningless sounds or words (Turner, 1999). Stereotypic behaviors can be a combination of vocal and motor actions and the motor ones can sometimes be self-harming (Lee, Odom, & Loftin, 2007).

These behaviors can lead to social stigma and can reduce the chances for social inclusion (Durand & Carr, 1987). Also, they can interfere with daily routines (Repp, Singh, Karsh, & Deitz, 1991), with the academic learning (Koegel & Covert, 1972; Runco, Charlop, & Schreibman, 1986), with the practical application of the tasks learned (Morrison & Rosales-Ruiz, 1997), as well as with play (Koegel, Firestone, Kramme, & Dunlap, 1974; Nuzzolo-Gomez, Leonard, Ortiz, Rivera, & Greer, 2002).

According to a study conducted by Quill (2000, in Condrey, 2015), many children with ASD engage in stereotypic self-stimulating behaviors, that help them cope with the anxiety triggered by changes in their environment. It is important to understand that not all stereotypic behaviors are self-reinforcing in nature, as some children engage in repetitive movements in order to calm down, that is opposite to self-stimulation (Condrey, 2015). Therefore, it is very important to assess the function of the behaviour before any therapeutic decision. Although self-stimulating stereotypic behaviors in children with ASD are very common, there is very little research to analyze these stereotypic behaviors from the perspective of calming or avoiding aversive stimuli.

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Given that the stereotypic behaviors are atypical, even odd, teachers often hesitate to include children with ASD in their classes. According to the literature, the level of comfort or discomfort that teachers have in relation to these behaviors is one of the most important factors in the assessment of self-efficacy regarding the inclusion of children. Teachers often anticipate that the students with ASD would have a multitude of behaviors in the classroom, creating constraints and challenges that overcome their ability, as teachers, to manage these behaviors (Higginson & Chatfield, 2012; Horne & Timmons, 2009; Maccini & Gagnon, 2006, in Condrey, 2015).

Stereotypic behaviors often represented a challenge for the professionals working with students with ASD. In the literature, a series of data on interventions based on antecedents or immediate consequences of stereotypical behaviors are cited, as well as their effects on behaviors: physical exercising (Tarr, 2018), noncontingent reinforcement and response interruption (Cicero, 2007), response interruption and redirection (Ahearn, Clark, MacDonald, Chung, 2007; Cividini-Motta, Garcia, Livingston, MacNaul, 2019; Joung, 2011), instruction (Lee, 2016) or effects of multi-sensory environments (Brandenburg, 2012). Most of these interventions treat the stereotypical behaviors superficially, leading to difficulties in generalization or occurrence of similar behaviors, with the same function, if the target behaviors are being reduced or eliminated.

Many therapeutic models are being tested in the field of ASD, some similar, some very different from the others, each having both supporters and critics. Each therapy has its own principles and techniques, its own "expertise zone", and the integration of therapeutic models and strategies can compensate for the weaknesses and limitations of each therapeutic models, applied independently.

Most of the studies analyze the stereotypic behaviors from the perspective of a single therapeutic approach. Therefore, an integrative analysis of stereotypic behaviors in ASD can be a start to enrich this field and provide a useful starting point for practitioners. New research questions can be derived from case presentations that approach this particular issue.

2. An integrative therapeutic approach of stereotypic behaviors

2.1. Applied behavior analysis as a basis for intervention in ASD

Applied behavior analysis (ABA, Lovaas, 1987) is a science, based on learning techniques derived from learning theory and operant conditioning (Prizant et al. 2003, in Lilley, 2011). ABA programs are intensive intervention programs that imply working in small steps towards given objectives for each child. The carefully planned learning opportunities are offered and constantly reinforced by trained therapists, for at least 30 hours per week, for at least two years. These programs have become popular due to the publication of several studies (eg. Lovaas, 1987) and of several biographic reports (eg. Maurice, 1993) that documented remarkable progress in children with ASD, using these methods. This approach currently dominates all other forms of treatment for ASD worldwide (Corsello 2005; Sigman, Spence & Wang 2006, in Lilley, 2011).

The most often used interventions for the reduction of stereotypic behaviors can be divided into three categories: (1) punishment-based interventions: response interruption and/or instructions; (2) redirection, and (3) reinforcement-based interventions: Differential Reinforcement of Incompatible Behavior (DRI), Differential Reinforcement of Alternative Behavior (DRA) and Differential Reinforcement of Other Behavior (DRO). Besides these interventions, that act as a consequence of the behavior, several interventions are developed that target the antecedents, such as noncontingent reinforcement. The latter uses three different procedures that identify and provide stimuli with known reinforcing properties: positive reinforcement (social mediation), negative reinforcement (escape) and automatic reinforcement (without social mediation) (Cooper, Heron, & Heward, 2016). Following the functional analysis of behavior, one or more interventions are chosen and combined, until the reduction of the target behavior is obtained.

These techniques proved to be effective in the reduction of several behavioral stereotypes (Ahearn, Clark, MacDonald, Chung, 2007; Cicero, 2007; Cividini-Motta, Garcia, Livingston, MacNaul, 2019; Joung,

2011; Lee, 2016), but the studies that test the effectiveness of these techniques only report the reduction of the target behaviors, which is the main objective of the studies, without documenting the reoccurrence of the behaviors or their occurrence in other forms, which hold practical relevance.

More recent research on ABA promotes the effectiveness of three main factors: the use of positive reinforcement, the reduction of contingencies with punishment significance and the formulation of specific objectives. The policy behind this approach is the emphasis on positive aspects or the enforcement of adaptive behaviors, rather than the elimination of problematic ones.

These principles underlie several therapies and intervention techniques in ASD: Discrete Trial Teaching (DTT, Smith, 2001), Verbal Behavior (VB, Skinner, 1957), Pivotal Response Treatment (PRT, Koegel & Koegel, 2006), Floortime or DIR Model (Greenspan & Wieder, 2007), Treatment and Education of Autistic and Communication Handicapped Children (TEACCH, Schopler, 1994), and Picture Exchange Communication System (PECS, Bondy & Frost, 1994). ABA is compatible with many therapeutic techniques and can constitute the foundation of an integrative therapeutic intervention.

2.2. An integrative therapeutic model for the reduction of behavioral stereotypes in children with ASD

One such therapeutic approach relies on The Neurosequential Model of Therapeutics (NMT), that "is a developmentally sensitive and neurobiologically informed approach to clinical problem solving" (Perry & Dobson, 2013, p. 249). This model was developed and used mostly with traumatized and maltreated children and teenagers (Barfield, Gaskill, Dobson, & Perry, 2012).

The NMT is not a specific therapeutic technique and represents a multidimensional assessment that guides clinical treatment and monitoring of results. The clinical formulation encompasses the child's skills and vulnerabilities along the developmental history, in a neurodevelopmental perspective that offers the clinical team the possibility "to select and sequence a set of enrichment, educational, and therapeutic interventions

to best meet the needs of the client" (Perry & Dobson, 2013, p. 250). The purpose of this semi-structured process is to help the therapist to systematically consider the key developmental factors that influence the client's current functioning (Perry & Dobson, 2013).

A series of neurological modifications have been detected in patients with a history of chronic trauma and traumatic stress during childhood (Kerns, Newschaffer, & Berkowitz, 2015). These results offer a new perspective on the pathophysiology of traumatic stress and the vulnerability of children with ASD in the development of trauma-related pathology. Moreover, several pathological features of posttraumatic stress are similar with those found in ASD (Kerns, Newschaffer, & Berkowitz, 2015).

Children with ASD, compared with typical ones, proved to have an exaggerated cortisol response to novel and threatening stimuli (eg., psychosocial stress, sensory stimulation) and raised salivary cortisol level when anticipating re-exposure to perceived stressors (Corbett, Mendoza, Wegelin, Carmean, & Levine, 2008; Jansen, Gispen-de Wied, van der Gaag, R.J., & van Engeland, 2003). These results concerning neurobiology of distress in children and adolescents with ASD could indicate a pre-existent vulnerability to future trauma (eg., an inherently weak stress-response system) or an exposure to past traumatic experience, marking an ongoing circle of biological and behavioral dysfunctions (Kerns, Newschaffer & Berkowitz, 2015).

Several studies have shown that the emotional regulation deficits can predispose persons with ASD to anxious disorders and other more diffuse difficulties (eg., tantrums or emotional meltdowns) (White et al. 2014; Mazefsky et al. 2013, in Kerns, Newschaffer & Berkowitz, 2015). Biological abnormalities involved in the emotional regulation deficits, such as the cerebral structural abnormalities (eg., deficits in prefrontal medial cortex, amygdala, cingulate and orbitofrontal cortex), as well as physiological abnormalities are also found in ASD (White et al. 2014, in Kerns, Newschaffer & Berkowitz, 2015). These neurobiological vulnerabilities to emotional or arousal disturbances are one of the pathways to posttraumatic stress in trauma-exposed persons (Kerns, Newschaffer & Berkowitz, 2015).

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The NMT model is a comprehensive approach that attempts to match the type of techniques to the stage of development and the brain region that mediates the child's problems. A review of the child's developmental history, followed by an assessment of the current functioning are performed, in order to identify the brain areas and neural systems involved in the neuropsychiatric symptoms (vulnerabilities) and the key strengths that the child has. Starting from the initial point, various enrichment and therapeutic activities are recommended in order to meet the child's developmental needs (MacKinnon, 2012). The sequence in which these are addressed is very important, the main idea of the model is to start with the problems that show underdevelopment of the brain areas that are expected to develop first: (1) brainstem and diencephalon (selfregulation, attention, arousal, impulsivity problems), by somatosensory activities, sensory integration activities, (2) limbic brain system (attachment and relational problems), by play and arts therapy, and (3) cortical brain (cognition, high level function problems) by verbal, insightoriented therapies (Perry & Hambrick, 2008). The NMT model requires intensive training and has been applied by various therapeutic settings (eg., childtrauma.org, beaconhouse.org.uk), that provide a wide range of resources for professionals to use in their own work.

In order to implement this neurodevelopmentally informed, integrative model, The Beacon House team (beaconhouse.org.uk, Lyons, Whyte, Stephens, & Townsend, 2015, MacKinnon, 2012) developed a series of recommendations for therapeutic interventions, starting with sensory integration, dissociation (brainstem regulatory interventions), attachment, emotional and behavioral regulation (interventions targeting the limbic system), cognitive, identity and self-concept development (cortical brain interventions).

Regarding *sensory integration*, most persons with ASD have sensory processing and integration disorders that interfere with their capacity to interact, to behavior problems, inflexible routines and motor stereotypes (Sinclair, Oranje, Razak, Siegel, & Schmid, 2017, Cascio, Lorenzi, & Baranek, 2016), related to one or several of the seven sensory systems: vestibular, proprioceptive, tactile, visual, auditory, olfactive and taste. Sensory integration therapy begins with the organization of the first three systems, following the rest of the systems, in a manner the

facilitates positive results such as: the reduction of self-stimulative self-harming behaviors, reduction in anxiety and increase in task behavior, as documented by various studies in children with ASD, ADHD and Sensory processing disorders (SDP) (Mullen, 2009).

As a survival mechanism, *dissociation* means escaping adversity by mentally disconnecting, separating thoughts, emotions and behaviors, in order to preserve psychological survival and reach a regulated state (MacKinnon, 2012). Various types of dissociation have been described: amnesia, derealization, depersonalization, identity confusion (Lyons, Whyte, Stephens, & Townsend, 2015).

Evidence of dissociation in ASD is rather anecdotic and research on the topic is necessary. Often, ASD has been associated with various pathologies, such as trauma-related pathology and PTSD (Haruvi-Lamdan, Horesh, & Golan, 2018), a higher susceptibility to distress, anxiety and depression (Cachia, Anderson, & Moore, 2016) than typically developing individuals, but evidence of dissociative mechanisms as response to distress, adversity are not researched.

One useful technique for the decrease of dissociation is mindfulness (Kabat-Zinn, 2003), that might be helpful in the diminishment of self-stimulation, increase of attention span, by intentional awareness on breathing, walking, action, hearing, feeling, in the present moment, without judgement. Usually, the purpose of mindfulness activities in schools is the engagement in positive actions and not disciplinary practices (Grossman, Cowan & Shankman, 2010).

A number of studies have documented the positive effects of mindfulness techniques on the level of attention focus in ADHD (Zhang, Chan, Lo et al., 2017), on the mental health and well-being, social skills in young people with ASD (Keenan-Mount, Albrecht, & Waters, 2016), but evidence on their effectiveness for children is scarce. One study documented the effectiveness of mindfulness techniques on anxiety, cognitive problems, social responsiveness, psychological well-being and aggressive behavior in adolescents with ASD (Cachia, Anderson & Moore, 2016). Another study analyzed the effects of joint mindfulness practice on children with ASD and their parents, on areas like: parental distress, maternal quality of life, child's behavioral problems (Hwang, Kearney, Klieve, Lang, & Roberts, 2015), but more evidence is necessary in order to prove their effectiveness.

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Attachment behaviors and strategies help the child gain the sense of security in moments of danger and threat, by ensuring the proximity of the caregiver. Attachment security within the parent - child relationship can be improved using various techniques of attachment-based play therapy, such as Theraplay intervention (Phyllis & Jernberg, 2010). Within the intervention with children with ASD, the therapist's goal is to increase closeness, by physical and visual contact, focus on the here-and-now and ignoring self-stimulating behaviors. The parents and children are brought together in therapy, in order to develop and practice a close, playful, responsive interaction, characteristic of a secure, healthy relationship (Phyllis & Jernberg, 2010). Theraplay intervention proved to be effective in the improvement of the relationship between parents and their children with ASD, in terms of emotional expressiveness, the parents' availability for the child, visual contact and positive guidance of the child. The children proved to improve in their expressive language, proximity seeking with parents and acceptance of the parents' guidance (Phyllis & Jernberg, 2010).

At an early age, the adult's contribution is the most important factor of *emotional regulation* in children. The adult co-regulates the child's emotions, accepts the child's emotional states and thus helps the development of the ability to self-soothe and regulate own emotions. Maladaptive coping strategies that can be present in children that experienced traumatic experiences are: thumb sucking, head banging, skin picking, self-harming behaviors, substance abuse, sexual promiscuity (Lyons, Whyte, Stephens, & Townsend, 2015).

Behavioral regulation strategies are connected to the child's window of tolerance (Siegel, 2010), a state of tolerable arousal that allows learning and thinking. Exposure to adversity leads to changing states, and the child swings from hyperarousal (fight/ flight reactions) to hypo-arousal (numbness, emptiness). A lack of capacity to control behaviors, a feeling of helplessness and physiological reactions are signs of dysregulation as a result of the exposure to adversity (Lyons, Whyte, Stephens, & Townsend, 2015).

Several *cognitive skills* might be under-developed in children with ASD: planning, problem solving, organizing, learning from experience. Moreover, exposure to stressful events can further lead to investment of resources in security attainment and testing of adult's trust (Lyons, Whyte, Stephens, & Townsend, 2015, MacKinnon, 2012).

Exposure to messages from adults that trigger the feeling of being unwanted, unloved leads to identity confusion, a feeling of not belonging and an intense need for external validation (Lyons, Whyte, Stephens, & Townsend, 2015).

In the MNT (Perry, 2006), the intervention needs to begin with primitive brain stabilization and sensory regulation, followed by intervention for attachment, emotional regulation and meaning making, identity development and cognitive processing of emotional information (Lyons, Whyte, Stephens, & Townsend, 2015). Various therapeutic techniques can be useful for each of the brain areas involved in the development of these capacities.

Until now, the relationship between the NMT and stereotypic behaviors in children with ASD has not been analyzed. Knowing that many children with ASD have difficulties in sensory integration, developing secure attachment, emotional and behavioral regulation, theory of mind, we believe that studying this field could be useful. Moreover, self-stimulation could be associated with the dissociation stage of the NMT model, a relation that needs deeper investigation. The current paper presents the assessment of a common case of ASD, with the goal to analyze self-stimulating behaviors from an integrative perspective and to rise the interest of researchers for studying this area more thoroughly. No intervention was implemented with the case, but several therapeutic directions were derived from the case presentation, using elements from ABA, NMT, Sensory Integration Therapy, Mindfulness and Theraplay.

3. Method

In order to emphasize the complex nature of stereotypic behaviors, several factors were considered: *distal factors*, from the case history, and *proximal factors*, derived from the current functioning in the school and therapeutic settings in which the child was immersed.

3.1. Participant and response definition

The participant, A., is a masculine gender 6 years and 7 months old child, the only child of a family living in a big city from Romania. The child's psychiatric diagnosis is ASD, ADHD and delay in expressive

language. He is enrolled in the regular school system and benefits from the assistance of a "shadow" – a therapist specialized in ABA. He is included in a specialized center, where he attends behavioural therapy.

A.'s target behaviours were: "vocal stereotypy", defined as singing the same song and repeating noises, words or phrases, which are inappropriate for the context, "motor stereotypy", defined as movements in hands or feet not appropriate in the context, and "combined motor and vocal stereotypies" defined as repeating words and noises during movements in hands or feet, not appropriate in the context.

3.2. Instruments and procedure

The information in the case presentation were obtained from a developmental semi-structured interview with the participant's mother, from systematic observation performed by the first author and measuring his abilities through standard evaluation, described below.

From the *developmental semi-structured interview*, we obtained information about the case history: history of the problem, interventions, prenatal, perinatal and early postnatal history, medical history, motor and language development, academic history, history of social-emotional development, behavioral functioning and family history.

The *systematic observation* method was used for monitoring the progress in several areas: time spent in an activity, turn taking, parallel play, imitation of peers, social interactions, verbal communication, visual contact, self-stimulation and stereotypies and latency in responses. It was also used in measuring the indicators of the sensory functions in the three sensory systems: vestibular, proprioceptive and tactile sensory systems, the indicators of the attachment with parents (avoidant behaviors, proximity seeking behaviors, oppositional behaviors with the function of obtaining parental attention), emotional regulation (expressing the emotions appropriately to the context) and behavioral regulation (physical aggressivity with peers, self-stimulation, numbness).

We used continuous measurement procedures including frequency (total event count), duration (total time), rate (frequency per unit time), IRT (time between responses), and latency (time between an antecedent stimulus and the occurrence of a specific response). We used also

discontinuous measurement procedures: whole interval recording, partial interval recording and momentary time sampling method, using a structured observation form.

Meeting the diagnostic criteria and the main developmental acquisitions were measured using two *standardized measurement instruments*: the Autism Diagnostic Observation Schedule (ADOS, Lord et al., 2000) and The Assessment of Basic Language and Learning Skills, Revised (ABLLS-R, Partington, 2018).

As a diagnostic test, the Autism Diagnostic Observation Schedule (ADOS, Lord et al., 2000) was used. This instrument is a semi-structured assessment based on the operationalization of diagnostic criteria for autistic spectrum disorders in the Manual of Diagnosis and Statistics of Mental Disorders (DSM) and the International Classification of Disorders ICD. This instrument allows the evaluation of communication skills, social interactions, play or imaginative use of materials.

A.'s main developmental acquisitions were measured using the Assessment of Basic Language and Learning Skills, Revised (ABLLS-R, Partington, 2018). It is a criterion-referenced assessment, based on the systematic observation of child's skills and allows the administrator to identify deficiencies in language, academic, self-help, and motor skills and then implement and monitor individualized intervention.

4. Results of the assessment and case presentation

4.1. Case history

History of the problem

Description of A.'s problem from the mother's perspective: according to the mother, A. is a "very clever boy, with strong personality, loving child, but with an attention deficit, a boy that provokes your intelligence and creativity". Though the mother noticed A.'s progress in ABA therapy and describes the child in positive terms, the behavioral stereotypies seem not to decrease, and they still present a negative influence on the interaction between mother and child.

Parents' reactions to the diagnosis: the first worrying signs were obvious around the age of 1 $\frac{1}{2}$ years, but the mother was not aware that there could be a deficit in the child until the age of 2 $\frac{1}{2}$ years when he was enrolled in the kindergarten.

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The first reaction was "shock and denial", then the family realized that they needed to find services to help the child. The extended family is a support system, they try to understand the diagnosis, support and try to adapt to the child's needs.

History of the interventions

The first ABA therapy process, shortly after the diagnosis, was unsuccessful in the mother's opinion and the family decided to move to a larger city to find better options. The second ABA therapy process led to some progress after four months and a frequency of 2-3 sessions per week. During the same period, the child started speech therapy, which helped him verbalize, but in an echoic manner.

At the age of 3 years and 4 months the child started an intensive ABA therapy process, two hours per day, then, after two months, for 8 hours per day. Meanwhile, A. benefited from some sensory integration therapy sessions, but the mother was not satisfied with the relationship that the child had with the therapist and with the effect, so she decided to stop the therapy.

From the age of 4 ½ years, the family decided to change the therapy center again and opted for a therapy center where the child had 8 hours of therapy per day, but his progress was slow or inexistent and therefore the family decided to enroll him in a homebased ABA therapy for one year (8-10 hours per day).

In the present, the child goes to preparatory grade, 2 hours per day, then has 4/5 hours of therapy in an ABA therapy center.

Prenatal, perinatal and early postnatal history

The pregnancy period was normal, without notable problems, except some nervousness periods for the mother.

The labor was long and the birth occurred with some difficulties, but the child's Apgar score was 9 and no postnatal complications were mentioned.

Medical history

According to the mother, A. had always suffered from sleep disorders, selective eating, and, occasionally, aphthae and skin rashes.

Around the age of one, the child recovered from a severe anemia episode, followed shortly by signs of developmental delay.

No accidents, illnesses and allergies were reported, no infection of the ears, neurological problems, genetic conditions and congenital problems were present during development. The child has no visual or auditory problems.

Diagnostic and main developmental acquisitions

A.'s scores obtained by applying the *Autism Diagnostic Observation Schedule* (ADOS) vary between the limit for Autistic Spectrum Disorder and that for a diagnosis of autism, indicating the presence of clinically relevant symptoms in this area.

The scores obtained through Assessment of Basic Language and Learning Skills, Revised (ABLLS) were far below average at the following subscales: Cooperation and Reinforcer Effectiveness, Imitation, Requests, Labeling, Intraverbals, Play and Leisure, Social Interaction, Group Interactions and Class Routines. And the scores were close to average for: Visual Performance, Receptive Language, Vocal Imitation, Spontaneous Vocalization and Generalized responding.

Motor development: According to the mother, no motor delays were noticed, and main milestones were attained according to chronological age: held head steady around 2-4 months, sat without support around 6 months, began to walk independently around 14 months, but currently the child manifests some mild motor coordination and balance problems (needs to find support from walls and handrails while walking and going up and downstairs, often trips and falls). A. does not pedal the bicycle with support wheels, does not jump on one leg, does not jump over an elastic band, but catches and throws ball, can use tools, strings beads on a thin lace, paper cuts. He does not use the tripod grasp correctly in writing, does not use the given space when writing letters and graphic signs, but is able to write words and short sentences. The child demonstrates right laterality.

Language development: The first articulated sounds appeared around 6 months. After the sever anemia at age of one, the use of verbal language stopped and reemerged by the age of two and a half years, after several speech therapy sessions, in an imitative, echoic manner. At present, expressive language is poorly developed: the child expresses his needs,

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asks for help, answers simple questions, rarely comments spontaneously, asks questions, and uses complex sentences in communication. He does not have difficulties in pronunciation of sounds, but his vocabulary is poor, and echolalia is still present. The receptive language is better developed, and A. has a large number of words that describe the environment.

Daily living skills: A delayed autonomy in elimination is reported, the child reached day time continence at 5 years and night time continence at 6 years. He has autonomy in alimentation since age 4, at present he is autonomous in dressing and undressing, although he shows big latency, he brushes his teeth, prepares a sandwich, puts on and takes off shoes, can do easy shopping. He has difficulties in respecting safety rules and does not avoid danger.

Academic history

Experience in the school system: A. went to regular kindergarten where he was assisted by a specialized teacher. At the beginning, he spent one hour per day at the kindergarten, but as disruptive behaviors started, a decision was made to stop the attendance for a period of several months, followed by a new attempt to integrate the child, at first 40 minutes per day, than 1 hour per day. After 8 months of attendance, the progress was notable at the level of the time spent in an activity, turn taking, parallel play, imitation of peers, social interactions. The behavioral disruptions (physical aggressivity with peers, tantrums, shouting) were gradually diminished with behavioral interventions.

At present, he is enrolled in a regular school, in preparatory grade, and attends school for two hours per day with a shadow teacher. As difficulty of tasks rapidly increased, he needs curricular adaptation. A.'s difficulties at school and the possible solutions are discussed by the team responsible for A.'s integration (teacher, shadows, supervisor in behavior analysis BCBA, school psychologist, support teacher, speech therapist, nurse, and mother). Attempts to adapt the teaching methods are made, but the teacher is often reluctant to the proposals and the success of the adaptation process is limited.

A. does not go to school willingly and needs constant motivation, through positive and negative reinforcements. Most vocal stereotypies are manifested at school and significantly increase the difficulty of the learning process. These behaviors intensify when the expectations are

too high and the people around the child are too intrusive (ex., when he has to write in the notebook, when the teacher asks something or makes a demand). Following functional analysis of the behavior, two main functions were identified for the stereotypic behaviors, functions that are often combined: self-stimulation and task avoidance. The behaviors either appear or are intensified during aversive situations, targeted by the need to calm down.

Besides stereotypic behaviors, moments of absence were identified, in which redirection is almost impossible. Independent response to the teacher or peers are rare. No other behavioral disruptions were identified.

Regarding the positive aspects of school inclusion, the child is fond of his desk mate, he interacts with her from time to time, imitates her, brings her presents and hugs her.

School performance, strong and weak points: in terms of performance, the child's level matches the level of his peers: he reads words and sentences, performs basic arithmetic computations. His weak points are verbal communication, visual contact, understanding of social rules, self-stimulation and stereotypies.

Emotional, behavioral and social functioning: At the beginning of the therapeutic intervention, A. manifested withdrawal, lack of response to stimulation from the adult, avoidance of contact, rare imitative behaviors, severe reactions to frustration, even aggressivity. These problems were gradually reduced with behavioral interventions.

During this period, he exhibits high latency in responses and is dependent on the prompt. He shows difficulties in directing attention onto one single stimulus and ignoring distractors and has exaggerated reactions to some sensory stimuli (tactile, auditive, visual). In terms of social behaviors, A. often manifests atypical behaviors to show affection towards attachment figures (ex., the shadow teacher), rarely engages in functional play with peers, only if supported, sometimes imitates children, has severe difficulties in verbal communication.

Teacher's assessment: the teacher is pessimistic about A.'s evolution and inclusion in the class, compares the child with his peers and another child with ASD that she taught 19 years ago. The teacher encounters difficulties in communicating with the child.

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History of social-emotional development and behavioral functioning
Temperament – during early childhood, A. had an active
temperament, difficult to control, difficult to motivate and engage in any
activity. His state was highly fluctuating between high activism, when he
became challenging for his parents, and high apathy, when he needed
important stimulation. High interference of behavioral problems was
identified in both learning and the interaction with people and the
environment.

Between 2.5 and 5 years, the intensity of behavioral problems diminished, but the child's level of activism remained atypical, oscillating from very agitated to highly absent. Aggressive behaviors as reactions to frustration emerged, while self-stimulating behaviors increased in intensity and complexity (vocal self-stimulation, in the form of English words, combined vocal and motor behaviors, unusual body movements). The child liked animals, letters and drawings.

At the age of 5-6 years, the child began to like animals more, to draw or build letters, to play with modelling clay, he likes books, masks (especially cosmetic ones), puzzles, picture cards, which he uses for self-stimulating purposes. The child prefers solitary activities, rarely searches for other children's company, and has a strong bond with his parents, having difficulties separating from them.

Family history

A.'s parents are highly educated persons, who have been married for 11 years and A. is the only child. The family relations were tensioned for a period following the diagnosis, but slowly the family managed to recover, and the relations became closer. It unites around A.'s needs, trying to attend to them by adapting their daily life, despite the high challenges.

The family history is not marked by any significant medical problems, genetic disorders, developmental disabilities or psychiatric conditions.

The parents' expectation regarding A.'s future is the acquisition of a higher level of autonomy, so that his inclusion in the community could be accomplished. The mother summarizes A.'s developmental track after the announcement of his diagnosis as sinuous, his progress slow, but the child's potential is seen by the mother as exceptional and the mother's belief is that the child will eventually be completely rehabilitated.

4.2. Case analysis from an integrated perspective

Following the analysis of the data collected about the case using the semi-structured interview and the systematic observations of A.'s behavior, an integrative therapeutic approach with the purpose of reducing vocal stereotypies would be proposed. The case analysis follows a transtheoretical approach, inspired by the Neurosequential model of Therapeutics (NMT, Perry & Dobson, 2013), with emphasis on multisensory integration, attachment, emotional and behavioral regulation, and cognitive higher functions. The directions proposed for the intervention in A.'s case are based on the Applied Behavior Analysis (ABA, Lovaas, 1987, Lilley, 2011 etc.), with integrated techniques from attachment-based interventions (Theraplay, Phyllis & Jernberg, 2010), occupational therapy and Mindfulness (Kabat-Zinn, 2003).

Analysis of the sensory functions

The hyperactivity of vestibular sensory system in A.'s case is manifested by problems in balance (falls suddenly, needs support when walking downstairs, avoids jumping, moves very slow, experiences nausea when swinging, runs in the wrong direction in sports classes, does not perceive distances, pushes against others, sometimes seems "lost", feels overwhelmed in crowded places and in the group of school mates). The hyperactive vestibular system is doubled by a hypoactivity in proprioceptive sensory system (runs a lot, makes many atypical moves, is hyperkinetic) and a hypoactive tactile sensory system (constantly searches for new textures, likes playing with shaving foam, modelling clay, slime, kinetic sand, tries to taste inedible foods: glue, soap, shaving foam etc.)

Analysis of the vocal stereotypies and dissociation tendencies

A tendency to escape in his own thoughts, as a defense mechanism when confronted with adverse experiences in school setting was noted (fig. 1), as well as the tendency to identify with cartoon characters under the same circumstances, both associated with behavior stereotypies, mostly vocal. Attention focus difficulties, diminished motivation, and the presence of a state of confusion are present in the school context.

We took data regarding the frequency of behavior stereotypies in school (fig. 1) and at the therapy center (fig. 2). The rate per hour of three types of stereotypies was calculated with whole interval recording method, using a structured observation form. Every experimental session lasted for 60 minutes, at a specific time in a day.

The results show that vocal stereotypies are more frequent than motor and combined (vocal and motor) stereotypies and that these behaviors are much more frequent in the school setting than in other settings.

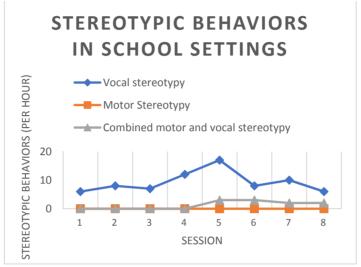


Fig. 1. Frequency of A.'s stereotypic behaviors during one-hour sessions in the school setting

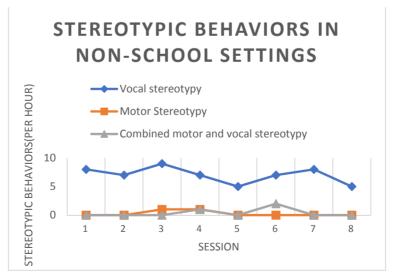


Fig. 2. Frequency of A.'s stereotypic behaviors during \one-hour sessions in the therapy center

Analysis of the attachment with parents

Several signs of disorganization of attachment were observed during observations of parent-child interactions: avoidant deactivating strategies in certain instances alternating with proximity seeking and oppositional behaviors with the purpose to attract parental attention.

Analysis of the emotional regulation

His reactions are exaggerated in fearful situations, such as: door opening, door closing, a person appearing or disappearing, noises or steps on the hallway. In play situations, he shows interest in experiencing emotions, especially negative ones (creates narratives of dark places in which a monster lives, plays games in which somebody scares him). The volatility of his emotional reactions is obvious in social situations, in which A. manifests atypical reactions (hitting a child he likes until he cries, trying to hit a child who cries and at the same time telling an adult to hug the crying child).

Analysis of the behavioral regulation

A.'s behavior swings between over-activation and low impulse control (hyperactivity, doubled by self-stimulation) and low activation, numbness and absence in environments with higher expectations. In school, he is generally very slow and does not answer the teacher's questions. The main problem is self-stimulating behaviors.

Identity and self-concept

Self-concept and identity development are immature, the child shows low self-confidence, manifested as the tendency towards negative self-evaluation, especially in school (appeals to self-punishment in situations when he needs to choose between doing something that he does not want to do and a punishment, when frustrated in school, seeks to unstick the tokens given as rewards, uses negative self-labels, such as "misbehaving").

Positive characteristics and strong points

A.'s strong points are the good physical health and condition, the fact that he learns and generalizes quickly, his compliance, as well as the close relationship with his therapist.

3.3. Working hypothesis and recommendations

One of the causes for the high frequency of A.'s vocal stereotypies is the fact that he interprets events and environmental factors as aversive, which supposedly raises his distress level and the stereotypic behaviors function as defenses against perceived danger. Several difficulties were found at basic levels of A.'s functioning, as conceptualized in the NMT model: sensory integration, dissociation, attachment security, emotional and behavioral regulation. So far, the intervention was focused on cognitive development and lower levels were neglected, so the child's difficulties regarding these lower levels were not approached.

Given the developmental difficulties at each level, the sensory integration therapy could be a good point to start, following dissociation, attachment security building, emotional and behavioral regulation. All these interventions could be conducted in association with ABA therapy, that so far proved effective in many areas of the intervention in A.'s case. Avoiding child's labelling and punitive means of intervention are necessary at this level. Following this model of intervention, we expect a significant and durable decrease in A.'s vocal stereotypies.

In A.'s case, some examples of exercises useful for *sensory integration regulation* would be: (1) for the vestibular system: hammock swinging, walking on the beam, jumping over an elastic cord, swinging on the Bobath ball in various directions, rollovers, obstacle courses etc. with increasing intensity and duration of the exercises, (2) for the hypoactive proprioceptive system an intensive program of movement exercises: running, trampoline jumping, jumping on the Bobath ball, pressing, throwing and catching a ball games, pushing and pulling games, with gradual decrease of intensity and duration of the exercises, (3) for the tactile hypoactive system: tactile games, recognition of objects by touch or taste, walking barefoot on various textures, games with tactile materials (kinetic sand, stones, shells, rice, flour, maize grains), with gradual decrease of intensity and duration of exercises.

In order to approach the tendency to *dissociate* during stressful situations, learning some mindfulness techniques could lead to better management of aversive environmental stimulation and, therefore, to the reduction of vocal stereotypies. Some examples of exercises are: (1) "Mindful Posing" – taking funny body positions (ex., Superman position)

in order to feel strong, brave and happy, in a quiet, familiar setting, without distractors; (2) "Guess what it is?" (using smell, texture, taste, sound); (3) blowing soap bubbles, focusing on the long breath and on the shape, size, movement, direction, color of the soap bubbles; (4) balloon play: the purpose is to keep the balloon floating, without hitting the ground, while the focus of the players is to move slowly and delicately, imaginarily connecting with the frail balloon.

The recommendation is that these exercises should be proposed during the times when A. is motivated, involved in tasks and in a good mood, so that they would not be associated with punishment. In time, they could be used as interventions targeting the antecedents, when stereotypic behaviors are anticipated. It is expected that the more A. would learn to use these techniques independently, the higher the awareness of his environment would be.

In order to help the development of *attachment security*, several techniques from the Theraplay program, done together with the parents, could be useful (ex.: games involving physical contact and touch, visual contact, movement games). These interventions need to be structured, to follow the purpose of increasing the security in the relationship, to actively involve the parents and to be fun for all those involved.

For the purpose of developing a better *emotional regulation*, validation of positive and negative emotions, followed by the training of adequate ways to express them (by drawing, clay modelling etc.) is one of the strategies that is is expected to be useful. For the development of behavioral regulation, the use of ABA techniques proved to be effective so far and can be further implemented. In the therapeutic approach of the problematic behaviors and the development of alternative behaviors several techniques could be useful: RIRD (response interruption and redirection), RIRD plus DRA (differential reinforcement of alternative behavior) and RIRD plus DRO (differential reinforcement of other behavior). Noncontingent reinforcement (NCR) could be a less intrusive alternative to RIRD, in case the latter is too aversive for the child. The focus of the behavioral intervention should be at this point the increase of response fluency and incidence of more adaptive behaviors and the improvement of functional communication. The intervention should be conducted in a non-aversive manner, so that it would be appropriate to the child's characteristics.

5. Directions for future research

The testing of the hypothesis derived from our case study and a more detailed analysis of the factors that can lead to the occurrence and maintenance of behavior stereotypies and their functions could be possible directions for future research. Also, it would be interesting to study the relation between NMT model and stereotypical behaviors in children with ASD in particular, or ASD traits in general.

6. Conclusion

In the case of ASD, no therapeutic program is effective if used as a single therapeutic approach. A combination of various techniques, from different therapeutic models, is necessary in most cases (Phyllis & Jernberg, 2010), leading to the necessity to implement an integrative approach to treatment.

Children with ASD are unique, each different from the other, and there will always be exceptions in which certain techniques, though empirically supported and widely used, will not have the expected effects. These exceptions represent the biggest challenges for a therapist and in most of the cases necessitate an integrative approach.

The behavioral stereotypies represent the most difficult to treat behavior problems in children with ASD, that affect their life to a large extent and deprive them of important environmental stimulation. The reduction of these behaviors is necessary in order for the learning process and the social interaction to be optimal, as well as for the inclusion of these children in a group. But in order to choose an effective intervention, the context in which they appear and are maintained should be carefully analyzed, and the child's developmental level should be carefully considered.

Our case presentation could be an outset for the implementation of an integrative approach to the assessment and intervention planning in a case in which a classical ABA approach reached its limitations. It can be a useful resource for the scientific community, as new research questions derived from it can be explored in the area of stereotypic behaviors in children with ASD.

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PSYCHOLOGICAL SAFETY AND TRUST. A CONCEPTUAL ANALYSIS

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ABSTRACT. Working in an environment that feels safe is one of the most important aspects when studying performant teams. Team or group members must trust each other while working together on various tasks. This trust is gained over time, after successfully passing through all phases of team development. In this theoretical paper, we discussed the concept of psychological safety in the relation between trust and performance. We approached both Edmondson's idea of interpersonal trust as a prerequisite for psychological safety and the idea that psychological safety might be a mediator that influences the well-known relationship between interpersonal trust and team performance. After making the required theoretical clarifications, we concluded that further investigation is needed to have a clear conclusion on this topic.

Keywords: psychological safety, trust, performance, teams, groups, members, relations, organisations

When working in group or team projects, one can encountered all sort of challenges in such contexts. One of the aspects that strikes the most is the influence of trust between team members upon the performance of the entire team.

The concept that best describes and analyzes the connection between trust and performance is psychological safety. This has become a

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widely studied concept in large areas such as business, education and health (Turner & Harder, 2018) and less in the field of human development (Wanless, 2016). This concept is linked to the concept of interpersonal trust and also has components that are distinguished, which brings new directions for understanding the differences in performance between groups with the same level of trust (either high or low).

In our present-day organizations, groups have become a very common work unit, roughly 80% of the large organizations are using them (Guzzo & Shea, 1992; Drach-Zahavy, 2004). Hackman (1987) describes work as the proper way for a team to form and develop itself and working as the main activity for team members to connect between themselves and the environment.

The purpose of this study is to analyze the concept of psychological safety in connection to trust and team performance. There are five stages of team development (forming, storming, norming, performing and adjourning) and in each one psychological safety can be a mediator that influences the connection between trust and performance. Team cannot become performant if there is no trust and if they don't feel safe enough to experiment and make mistakes. Therefore, understanding psychological safety is essential for developing performant teams.

A team can be defined as a collection of individuals that share a common purpose, whose actions and results are interdependent, perceived by themselves and others as a social entity and placed in an organizational context (Cohen & Bailey, 1997; Hackman, 1987). When trying to understand teamwork and team learning (Newman, Donohue & Eva, 2017), psychological safety is a critical factor (Edmondson & Lei, 2014).

According to Marks, Mathieu & Zaccaro (2001), the work group is a number of people that work together to achieve a certain result, which would not be reached individually, because they would be lacking the required skills. Likert (1961, 1967) argued that efficient organizations should capitalize the groups potential to reach their objectives. It is considered that the organizations that use work groups have members which are very involved (Cohen, 1994; Lawler, 1996), have access to a wider range of knowledge and skills and enjoy a more efficient and adaptive decision making process (Kellermans, Floyd, Pearson & Spencer, 2008; Nielsen, 1996), set far more challenging purposes (Likert, 1967), bring more satisfaction to their members (Forsyth, 1999) and

achieve greater performance (Likert, 1961) than the organizations oriented solely towards the individual. The interactions that take place between team members, with other teams or people from the work context bring a change in those teams in terms of complexity.

In the attempt to discover what can predict the efficiency and efficacy of a team and why certain teams are more efficient than others. several researchers (Steiner, 1972; McGrath, 1984; Hackman, 1987) have developed models for studying how groups and teams work. All these theoretical models have in common the input - process - output (IPO) structure. Although in the beginning researchers have looked at the output, at how efficient teams were, nowadays the focus is on the processes that explain how certain inputs influence the output. Marks et al. (2001) have noticed that many of the constructs presented by the researchers as processes within the IPO model were rather emergent affective or cognitive states. Emergent states describe cognitive, affective and motivational group states because of the members interactions. These are the attitudes, values, thoughts and motivations of the team members (Marks, Mathieu & Zaccaro, 2001). These states are developed within the existence of a team, are dynamic and vary according to the team context, inputs, processes and results. Emergent states are not team actions or interactions but rather products of the team experiences and become new inputs for the next processes and results (Marks, et. al, 2001). Ilgen et al. (2005) have proposed an alternative model, called IMOI (Input-Mediator-Output-Input), which considers the emergent states as concepts different from the team processes. They have replaced the P (process) letter in the IPO model with M (mediator), which reflects a wider range of variables that can explain the variability and viability of teams' efficacy. Adding the I (input) letter in the end, the authors have invoked the notion of cyclic causal feedback. The IMOI model includes the stages of team development as following: the IM (input-mediator) phase is the forming stage, the MO (mediator-output) phase is the performing stage and OI is the changing stage, the last one in the team development. In the forming stage, the team members learn to trust each other based on the feeling that the team is competent enough to get the job done. They also base this trust on the psychological safety, which offers team members the freedom to express themselves, knowing that the other team members will not behave in a manner to harm them.

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Another important mediator that can appear in this stage is careful and efficient planning. This resides in information gathering, a process that involves developing strategies, searching, communicating and sharing information. Another mediator discussed by Ilgen et al (2005) is structuring, a process that involves developing and maintaining roles, norms and patterns of action within the team. The two cognitive structuring constructs identified by Ilgen are (1) common mental models, which state that performance is greater when members have more cognitive elements in common and (2) transactive memory, which states that performance is greater when members are shared according to their majors.

In the performing stage, on the affective level connections are created and feelings appear between members and towards the team. For this to happen, a proper management is required for team diversity. attitudes, values and personality and a correct conflict management between members. In terms of attitudes, there are three sets of attitudes that can affect the perception of psychological safety: attitudes toward inclusiveness, trust in collective responsibility and openness in communication (Thorgren & Caiman, 2019). The second mediator included by Ilgen et al (2005) in this stage is team adaptation when the work environment for a task is changed from routine to new conditions or vice versa. Another aspect of adaptation is the degree in which team members help each other and share their work volume, especially when requests are high. As a precursor of adaptation, another mediator appears: learning. This refers to learning from the minorities in the group or team and also from the best member of the team. The last stage (change stage) shapes the moments when a team ends and episode in the development cycle and begins a new cycle. Ilgen et al (2005) noted that the processes in the change stage completely lack in the empirical literature on teams. According to Kozlowski & Ilgen (2006, pp. 78), "teams are complex dynamic systems that exist in a context, develop as members, interact over time, and evolve and adapt as situational demands unfold", therefore it is important to understand how team functioning can be affected by the interaction between team members (Soares & Lopes, 2014).

Trust between group or team members

One of the emergent states that researchers have studied most is trust. This concept is a very complex and emotionally challenging, with a lot of meanings for different persons (Reina, Reina & Rushton, 2007). This is one of the reasons why researchers still have to agree upon a definition. One of the oldest definitions of trust belongs to Barber (1983), who sees trust as a set of socially learned and confirmed expectations that people share. Another definition on trust is the willingness to be vulnerable to others (Frazier et al. 2017). Although there is not an unanimously accepted definition, we can agree that there are three common elements to all definitions on interpersonal trust. First, trust is an expectation or a belief that the other person is well intended. Second, a person cannot control or force another person to behave according to his/her expectation. Third, trust involves a certain level of dependency because the results of one person can be influenced by another person (Costa, Roe & Taillieu, 2001; Cook & Wall, 1980; Cummings & Bromley, 1996; Dirks, 1999; Homer, 1995; Jones & George, 1998; Lewicki & Bunker, 1996; Mayer, Davis & Schoorman, 1995; McAllister, 1995; Robinson, 1996; Rousseau et al., 1998; Spector & Jones, 2004; Tan & Lim, 2009).

Within work groups we can study the trust that members have in their leader or the trust relationship developed between the group members. A series of models have been suggested for explaining interpersonal trust, each with applications in certain work areas.

According to the relational model of trust, a proper theory of organizational trust must include the social and relational fundamentals of choices linked to trust (Mayer et Al., 1995; McAllister, 1995; Tyler & Kramer, 1996).

Trust is not only conceptualized as a "calculated risk orientation, but also as a social orientation towards other persons and society as a whole" (Kramer, 1999, p. 573). In this model, the choices are more affective and intuitive than calculated. In the opposite direction there is the model suggested by Lewicki and Bunker (1995) that considers trust to be "positive expectations about another person's reasons regarding themselves in a risk situation" (pp 139). The two authors have identified three types of trust within the work relations: trust based on calculation,

trust based on knowledge and trust based on identification. Trust based on calculation is dependent on the behavioral consistency through punishments and rewards. Although the authors claim that this type of trust can be driven both through potential benefits as well as costs, they have discovered that the most influential are the intimidation elements. They also state that the efficacy of intimidations depends on a person's ability to impose sanctions when needed. Lewicki & Bunker (1995) have defined knowledge-based trust as being the trust in the other person's predictability and the support it offers. This trust comes from working together and regulate communication and it is based on a deep interpersonal familiarity and the understanding that it appears in time, after repeated interactions.

Identification based trust is that type of trust that appears from understanding the fact that the internalizing of the other person's wishes and intentions has been achieved. This means that the persons involved in this relation understand each other, agree with each other and offer support in reaching a common goal.

This form of trust allows each part to act as a support agent for the other part and to reciprocate in certain moments.

The transactional model of trust created by Reina, Reina & Rushton (2007) helps understanding trust and offers a set of behaviors to build it. This model defines trust as being transactional due to its reciprocal nature: one has to offer in order to receive. This model has three components: contractual trust, communication trust and competences trust.

Contractual trust is character trust, a trust in the intentions and consistency of people and the engagements they take. This sets the tone and direction of collaboration and is built from behaviors like expectations management, encouraging mutual help and ensuring consistency.

Communication trust creates an environment where the members of a group, team or organization members feel safe to ask what they need. These members want open and unrestricted access to information. They want to ask questions before making a decision, to express an honest opinion, to challenge assumptions, give and receive feedback and ask for help. Such behaviors have the ability to increase and maintain a high level of communication trust. This type of trust sets the course of communication and the way the team members will discuss.

Competences trust involves recognizing the competences of a person in doing what it takes in a certain situation, even if it involves an interaction between individuals, roles or specific aptitudes. This is built from behaviors like recognizing the skills and abilities of team members, their contributions or helping them learn new skills. The third component of the transactional model allows the team members to raise the level of performance and further develop new abilities.

Another main model about trust is the one created by Costa, Roe & Taillieu (2001). They define trust as a psychological state that is manifested in behaviors towards others, is based on expectancies according to their behaviors, reasons and intentions in situations that involve a risk towards their relations.

According to these authors, trust is formed of three components: the tendency to have trust, the perceived credibility and trust behaviors. The tendency to have trust is a general desire to trust others. Mayer et al. (1995) claim that this tendency in the context of work relations should be seen as a situational characteristic, affected by the team members and situational factors. Perceived credibility resides in evaluating the actions and characteristics of the person being trusted. Good (1988) defined perceived credibility as how individuals except others to behave according to their requests, implicit or explicit. This judgement is based on the evaluation a person does regarding the character, competence, motivation and intentions of the other person (McAllister, 1995).

Cummings & Bromiley (1996) claim that this perceived credibility can be accessed within groups through the following dimensions: the belief that the other person is making an honest effort to behave according to any engagement, both implicit and explicit, and the belief that the other person is honest.

Smith & Barclay (1997) have identified four categories of trust behaviors: openness to communication, acceptance of influence, tolerance to opportunities and control reduction.

According to these authors, we can distinguish two types of trust behaviors: cooperation and monitoring. Cooperation behaviors reflect how much team members communicate in an open manner about work, accept other colleagues influence and feel involved in the team. Monitoring behaviors refer to how much team members feel the need to control other people's work and supervise this work.

Psychological Safety

In a large study done over two years, by one of the world's IT giants, Google, over 200 Google employees were interviewed and over 250 attributes were analyzed. The conclusion was that there are five key attributes that set successful teams apart from other teams, and psychological safety was the first of them, along dependability, structure & clarity, meaning of work and impact of work (Rozovsky, 2015).

Making sure that all team members will cooperate and get involved in team activities is critical for diverse and talented team leaders. It is possible that one or several team members don't feel enough psychological safety in the work environment in order to participate completely and honestly (Edmondson, 2004).

This idea was supported by Kahn (1990), who discovered that psychological safety was one of the three main conditions that paved the way employees would take on their role in the organization. Kahn (1990, p. 708) gave the following definition to the concept of psychological safety: "being able to expose yourself and engage into an action, without fear of any negative consequence upon self-image, status or career". Edmondson (2004) adds to this definition by stating that psychological safety is a team level concept that describes the perceptions of individuals regarding the consequences of interpersonal risks in their work environment. Psychological safety perception tends to be similar among persons that are close or work together, because they are the subjects of the same contextual influences and also because these perceptions are being developed from joint and strong experiences (Edmondson, 1999a). This concept is built from unquestioned beliefs about how others will reply when someone is making their voice heard.

At the same time, it is a key team quality, being considered a "shared belief that the team is in a safe environment for taking such interpersonal risks "(Edmondson, 1999, p. 354).

Psychological safety does not always imply a familiar environment, where individuals are friends, nor the lack of pressure, stress or problems. Rather, it describes a climate where the focus is on productive discussions that help an early prevention of problems and reaching common goals, because individuals are less predisposed to focus on self-protection.

Psychological safety is not achieved from the beginning, but rather built in time. With the right guidance and activities, people will expose themselves and get out or their comfort zone.

Based on the research done by Kahn (1990) there are four factors that influence the most psychological safety: interpersonal relations, group and intergroup dynamics, style and management processes and organizational norms. If the interpersonal relations are supportive (Gibb, 1961) or trustworthy and the climate is based on openness (Jourard, 1968), then individuals feel a psychological safety.

In the context of a work environment, group or team members conspire, consciously or unconsciously, to play roles that diminish their mistakes related anxieties. People feel safer when they have a certain degree of control over their work.

As for organizational norms, people feel safer when roles are clearly shaped within those limits. Norms are considered common expectations regarding general behaviors of the system members (Hackman, 1987). The persons that generally act according to those work and behavior Norma usually feel more secure than those who stray from those protective limits. Norms deviation and the possibility to do that can be sources of anxiety and frustration, especially for the persons with lower status or advantages. When employees that work together have common goals that go over their specific roles, when they are connected by common general knowledge about their work process and roles and when they are connected through mutual respect, they are less likely to blame each other for failures. They are more likely to experiment the psychological safety needed to accept failure as an opportunity to learn. Therefore, good quality relationship manifested in common goals, common knowledge and mutual respect will facilitate the development of psychological safety (Carmeli & Gittell, 2009).

Edmondson (2004) connects the concept of psychological safety and trust by stating that they both describe psychological states that involve perception of risk or vulnerability and taking decisions with the purpose of minimizing negative consequences and that they both have potential positive consequences for the group, team or organization.

Because trust and psychological safety describe intrapsychic states related to interpersonal experience, it is important to clarify the conceptual differences between these two constructs, such as establishing

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the empirical proofs of the existence of psychological safety, the less known of the two. Psychological safety is a distinct and complementary phenomenon that, like trust, can affect different behavioral or organizational behaviors. Although psychological safety also involves an element of choice, the definition is slightly different from the one of trust, where is assumed that individuals make choices based on evaluating risk by maximizing expected wins and minimizing expected losses. Such rational choices are made through a conscious calculation of advantages, calculation based on an explicit and consistent system of values (Schelling, 1960, p. 4; ref. in Kramer, 1999). The relational model also considers the social aspects and defines trust as a risk calculated orientation and people or society orientation (Kramer, 1999), so in this model, choices are more affective and intuitive than calculated.

Edmondson (2003) has identified three differences between the two concepts: regarding the focus, time limits and level of analysis. Regarding trust, the object of focus is others, their credibility or potential actions. In psychology safety, the focus is on the self or how others will offer the presumption of innocence in case of an error. The calculation done in psychological safety considers the short-term interpersonal consequences that a person expects after doing a specific action. In contrast, trust refers to the anticipated consequences over a larger period, including the future.

Conclusion and Discussion

To conclude, despite the overlapping parts, the two concepts (trust and psychological safety) describe different emergent states which are commonly associated with high team performance. We can see how important trust and psychological safety are in the development and growth of a working group towards a great performance. In order to use this information properly, we need complex research that supports either Edmondson (2003) hypothesis that interpersonal trust is a prerequisite for psychological safety, either the idea that psychological safety might be a mediator that influences the well-known relationship between interpersonal trust and team performance. When groups are faced with the need to learn together in new and uncertain environments

and situations, psychological safety has a vital role in supporting collaboration (Edmondson, 2011). There is strong evidence that trust and psychological safety are two different concepts (Edmondson, 2011) and the former is a prerequisite for the latter. And the main difference is that psychological safety is experienced at a group level, while trust reflects the interactions between two individuals (Edmonson, 2004). Also, when talking about psychological safety, it is others that will give you the benefit of a doubt when taking a risk, while with trust, you will give others the benefit of a doubt when taking a risk.

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SHAPING THE ACTUAL TEACHER'S PROFILE: HOW ICT CAN INFLUENCE IT?

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ABSTRACT. In the actual context of massive technological development, the teacher training process - or even, the teacher self-training one - should be actually based on the acquisition of technical skills, mainly related to the use of Internet and multimedia resources, but also on the didactic skills focused on how to use those resources in order to make the teaching demarche more effective. Generally, in order to introduce ICT in the teaching process, the educators have to go through three distinguish stages of professional development: (a) acquiring the necessary technical skills and introducing ICT for projecting and operationalizing the lessons - even there is an amount of mistrust and fear concerning possible technical and pedagogical problems that may occur; (b) experiencing the ICT implementation in the projected lessons - where the teacher uses the technology to conduct the lessons and improves the teaching process; (c) assessing the ICT resources involved in the lessons or in the possible new ones - ready to be implemented -, and drawing related conclusions.

ICT can contribute to shape the nowadays teacher's profile, bringing crucial added-values to the sets of following competencies: (a) communication; (b) information; (c) pedagogical design; (d) production. By introducing ICT in education, it will be clearly reduced the time

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consumption and repeatability of tasks, offering to teachers the possibility to spend more time on designing lessons in a new and competitive format, performing and evaluating the training process.

Keywords: teacher's profile; ICT skills, initial training, professional development;

I. Introduction

During decades, two main versions of teacher training have been developed: (a) the first model covers the initial training, considered complete and sufficient for the entire career; (b) the second one represents practically the natural training model, consisting of a *survival kit*, designed to cover the initial years of the teaching career. It is subsequently supplemented with professional development programs and specialized assistance that bring a series of necessary updates.

But the pedagogical training – both, theoretical and practical - can take place, at the same time, as general training (the simultaneous model) or being designed one after another (the consecutive model). Both models are met across Europe in different proportions: the simultaneous model is provided to future lower secondary teachers in Belgium, Denmark, Germany, the Netherlands, Austria, Portugal, Norway, Sweden, and the consecutive model is organized as initial teacher education for future teachers in Greece, Spain, France, Ireland, Italy, Luxembourg, Scotland. For the upper secondary education, the consecutive model is more common. (Chivu. 2008). In the *simultaneous system*, the topics allocated to various specialties and those related to psycho-pedagogical training are studied in parallel. Students have the possibility to start their teaching career immediately after the graduation. Another advantage of this training model is represented by the systematization and consolidation of the psycho-pedagogical and methodical knowledge, while studying also specialized topics, as well as connecting theory and practice. Students can immediately check the functioning of the teaching-learning-evaluation process in terms of knowledge, skills, behaviors, attitudes, and values to be passed on to secondary education students, during their teaching practice. In the *consecutive system*, the specialized topics are studied in the beginning, followed by the ones related to psycho-pedagogical module. This system has the advantage of proposing of a deepened and systematically learning of the specialty topics, but the beginning of the teaching career is delayed, taking into account the fact that the psychopedagogical subjects are studied after the graduation of the university.

In Romania, according to the *National Law of Education*, people who want to embrace a teaching career have at their disposal both systems. In this respect, all universities have *Teacher Training Departments*, offering a package of psycho-pedagogical subjects (level I) to be studied as a completion of the initial training, in the simultaneous system (for students who are enrolled in bachelor studies) or in the consecutive systems (for graduates). In addition, another package of psychopedagogical subjects (level II) can be studied in the simultaneous system (for students who are enrolled in master studies) or in the consecutive systems (for master graduates). Practically, studying psycho-pedagogical subjects offers the opportunity to start and develop a teaching career in any specialization. (Iucu, & Păcurari, 2001)

In the teachers' training process, the *knowledge triangle* - innovation, education, technology - should be considered and developed in order to enhance the creativity, capacity for innovation, trainability and technological skills, but also the abilities for accepting and introducing novelties in educational practice. Generally, in all educational systems, the *professional training* of the teaching staff is designed to develop (Enache, & Crişan, 2014): (a) wide cultural horizon (rich knowledge of literature and art, science and technology, social and political life); (b) deep knowledge in the field in which they were trained; (c) pedagogical knowledge; (d) didactical skills and abilities. In addition, teachers must acquire (e) new competencies related to the pedagogical use of ICT, mostly considering that learning is taking place in the actual context not just inside the school, but also outside the school, the nowadays students becoming more responsible for their own learning process and exploiting ICT with great ease. (Jager, & Lokman, 1999).

II. The Teacher's Profile

A generic teacher's profile must list a series of abilities and skills, but in any case, the teacher's personality should be included in the first place. The personality was defined by Allport (1961) as "the dynamic organization within the individual of those psycho-physical systems that determine particular thinking and behavior". In fact, the personality represents a universal phenomenon, but it is manifested in individual forms. For a modern person, the personality requires two conditions - to have the awareness that represent something valuable (the *status* - what an individual expects from others according to his/her social position), and to be recognized as a value, as a remarkable individuality (the social role - the set of behaviors that others expect from an individual). The personality involves three dimensions: temperament, aptitude and character. When discussing the fully developed personality, it is also considered the ability to react positively to changes, failures, conflicts, but also the ability to adapt and accommodate, to use the new information technologies, to communicate in a foreign language etc. (Chivu, 2008)

But related to teacher training, the personal *skills* prove to have a great importance in the process of development of didactic activities. Here it comes the discussion about the *pedagogical competence* that involves - according to Mitrofan (1988) - three basic skills: *scientific, psycho-pedagogic* and *psycho-social*. The *psycho-pedagogical* component is given by the ability to adopt a different role, to easily and appropriately establish relationships with others, to influence teachers in several leadership contexts, to communicate easily and efficiently with a group, to use power and authority adequately, to easily adopt different styles of leadership and creativity. (Chivu, 2008). It is manifested itself more easily when it comes to mastering and using *new information technologies*, as it streamlines relationships, communication and, implicitly, their results. (BECTa, 2000)

Anyway, the teacher must prove a warm personality, energy and vitality, a real desire to help others, interpersonal skills and abilities (to be able to motivate, encourage, identify the learning potential in any situation, smile, be open and polite, show tact and empathy, value all the participants' contributions), flexibility, sensitivity and responsibility, ability to identify and solve students' problems. A valuable training process - led by the teacher - involves the continuous adaptation of plans

and materials to integrate students' ideas and skills, knowledge and enthusiasm in relation to taught topics, credibility in the eyes of students, confidence in one's own strengths. (Chivu, 2008)

The teacher's moral profile is given by the *personal dignity*, together with *personal qualities* - energy, firmness, perseverance on fulfilling the tasks, independence and steadfastness on defending the pedagogical opinions, promptness of his/her decisions, and *character features* - spirit of initiative, self-mastery, discipline, honor and modesty, work dedication, self-exigency etc.

Mitrofan (1988) expressed that a teacher must have near psychopedagogical competence (ability to determine the difficulty of a learning material for students, ability to render learning material more accessible. ability to understand students, to penetrate their inner world, to understand the difficulties faced by students in learning and assimilation. continuously reforming of his/her teaching program and manifesting creativity in their psycho-pedagogical work), psycho-social capacities (assuming and playing different roles, easily and appropriately establishing relationships with students, easily influencing group of students, communicating easily and efficiently with the group, easily adopting different styles of leadership). Other important issues are also noted: qualities pertaining to senses, language, attention, intellect, emotion, personality (openness to student's issues, warmth, understanding of the problems of those with whom they work, cooperative style, lively intelligence, capacity of abstraction, balanced approach to problems, balanced, lucid character. Along with those features, authority, prudence, conscientiousness, seriousness, sense of duty, courtesy, sociability, delicacy, sensitivity, ability, sincerity etc., have been also mentioned.

In addition, at present, teacher's *ICT skills* become compulsory, being required in concrete educational and managerial settings, facilitating also the practice and development of other skills. (Gray, 1999). However, relations between school of the future and teachers of future are illustrated in Table 1 (adapted after Chivu, 2008), having as basis several concepts expressed by visionary figures of Education and Psychology:

Table 1. School of future and related teachers' skills

Characteristics of education considering the school of future	Teacher's skills in the school of future
1. Unity of sciences and plurality of cultures (Bourdieu, 1985); international education (Văideanu, 1988)	1. Knowledge, attitudes and values, skills within international education (Văideanu, 1988)
2. On-going education, alternating between school study and working in labs or enterprises (Bourdieu, 1985); permanent education (Văideanu, 1988); initial and continuous training (De Landsheere, 1991)	2. Professionalization - subject of self-education (Todoran, 1974)
3. Cognitive/socio-emotional balance (De Landsheere, 1991)	3. Paying more attention to students' emotional development (Văideanu, 1988)
4. Using of modern teaching methods and techniques (Bourdieu, 1985); computer assisted learning (Văideanu, 1988)	4. Knowing how to program a computer, setting it up so as to turn it into an every-day instrument of action (De Landsheere, 1991); using computers to enable constant dialogue with students (OECD, 2008)
5. Openness towards and by autonomy (Bourdieu, 1985)	5. High scientific competence in the field of the taught topics, but also the way of teaching (NRC, 1997)
6. Switching from a knowledge- based education to an education that articulates knowledge, skills and attitudes and framing in self- education service (Văideanu, 1988)	6. Socio-emotional, cognitive, methodological and material factors for cooperation and development (De Landsheere, 1991)
7. Individualization (Todoran, 1974); individual treatment according to the students' skills and personality (De Landsheere, 1991) 8. Switching from subject-centred	7. Individualized teaching (De Landsheere, 1991); teachers organize teaching so as their methods make appeal to each student and to the entire class (OECD, 2008) 8. Diagnosing students' learning

Characteristics of education considering the school of future	Teacher's skills in the school of future	
programs to student-centred programs (White-Cheatham, 2014); switching from "apprendre á être" to "apprendre á entreprendre" (Văideanu, 1988)	difficulties (OECD); collaborating with parents (De Landsheere, 1991)	
9. Promoting inter-disciplinarity (Văideanu, 1988)	9. Sharing experiences and responsibilities (De Landsheere, 1991)	
10. Fully open teaching-educational system (De Landsheere, 1991)	10. Knowledge, imagination, calm, team spirit, enthusiasm, courage, determination, ability of synthesis, selection, flexibility, prospective vision (Văideanu, 1988)	

III. The Teacher's ICT Skills

It can be noticed that concerning both the characteristics of the school and the education of the future, as well as teacher's competences, the prospective character of education lists *ICT skills* as being important in the didactic process: *knowing how to program a computer, setting it up so as to turn it into an every-day instrument of action* (De Landsheere, 1991); *using computers to enable constant dialogue with students* (OECD, 2008). Future cultural revolutions will stimulate institutions offering initial and continuous training programs to incorporate and develop new technology courses and exploit their educational valences (personalized, attractive, dynamic, active and conscious learning, effective communication, developing team work skills, facilitating the accomplishment of tasks through the Internet etc.). (Haddad, & Draxler, 2002)

The education system needs to be transformed in order to answer to new individual and social needs, being able to cope with changes and innovations. Those economic, political, and social transformations determine the need to reorganize the educational system, to enhance its efficiency and performance, make it more economical so as to meet the new economic and social requirements. But progress made by Information and Communication Technologies allow to provide new solutions to those

problems. The appropriate use of new ICTs makes the education system more efficient and more powerful, if there is a willingness to accept and make some necessary changes. In this respect, it is expected that the first segment to be reformed should be the teacher training. Given that technological innovation stimulates economic transformation and that it also causes the necessary social adaptations, it represents also the key to the reorganization that the education system must accept. The wider use and integration of micro-informatics, multimedia, the Internet and other telematics innovations can be a starting point for reforming learning methods and rationalizing the learning process. (Enache, & Crişan, 2014)

The use of new ICTs in the educational process can develop and enrich the skills and abilities of the teaching staff. However, in order to make the best of their educational potential, teachers need to know them very well and use them effectively. Teacher training should include ICT courses, computer assisted instruction training, but also related issues, in which teachers acquire knowledge, but, above all, they form and develop their ICT skills. In order to become an effective mediator in the learning relationship, the use of computer, its applications, and especially Internet services, also require specialized training. At the same time, making an optimum combination between new technologies and effective pedagogy represents a daunting task for both initial teacher training and in-service training institutions. (Jung, 2005)

IV. How ICT Skills Can Enrich the Education Manager's Profile

For organizations, leaders' skills represent the most valuable characteristics of the leadership. Of course, those differ by levels and managerial types. As general skills, required by an ideal manager profile, the conceptual, human and technical skills are strongly needed. Among those ones, ICT skills (mainly related to the use of the new information technologies) are also taken into consideration. In this respect, the technical skills have to include: knowledge of methods, techniques, equipment involved in managerial, financial or marketing activities, skills necessary for carrying out specific tasks (designing computer application, filling-in accounting documents, statistical analysis, writing official documents, designing plans, programs or even strategies). (OECD, 2001)

The abovementioned general skills are very important for all managers, but the conceptual ones are more important for top managers (in education: inspectors, researchers, educational actors directly involved in educational policy making, Ministry of Education staff etc.); the human and technical ones have greater importance for lower-level managers (teachers as class managers) and medium-level managers (school principals). For the actual profile of education managers, the *computer skills* are clearly required considering the fact that the managerial activity is more complex and is visibly more efficient through the use of new information technologies. In education management, certain functions and activities involve, in addition to communication and relating and planning, also organization, control and evaluation, at a much more complex and superior level compared to the teaching activity itself. Anyway, a good profile of the nowadays education manager must include skills which exploit ICT in a great measure:

Communication and networking skills (specific skills - choice of appropriate ways and means of communication to streamline the managerial profile, adapting to different situations/ contingencies to operatively solve problems in education; resolving conflict situations. after investigation, through mediation and negotiation with the view to ensure a climate of trust and responsibility; adequate using of concepts communication, didactic communication, communication blocks, emitter, receiver, conflict, negotiation, priorities, innovation, educational marketing, educational needs, needs analysis, market, clients, offers, services, educational demand; applying those concepts in planning and carrying out educational management activities; adequate organization of managerial activities according to the principles of priority management, tensions and change; optimal using of spatial and temporal factors in order to make education management more efficient, taking into account the principles of priority management, tensions, and change; manifesting a creative methodological behavior at the level of management; offering an innovative conduct at professional level; valorizing personal qualities and assuming principles of professional conduct, accessing various sources of information for documentation purposes, providing empathic relationships with students, parents, other teachers, other educational partners, designing and developing proper school management, promoting joint projects between school, family and community).

• Related skills in order to properly use of ICT (specific skills - synthesizing information for creating a useful database for the managerial act; capitalizing information in the database in order to make decisions according to the realities of the educational environment; using computerized informational techniques and technologies for rendering the activity, more effective and qualitative).

There are also a series of skills that nowadays education manager must acquire, with more or less involvement of ICT (Chivu, 2008):

- Valuing personal qualities and assuming professional deontological principles; accessing various sources of information for documentation purposes; manifesting empathy in the relationships with students, parents, other teachers, other education partners; designing and carrying out a good management of the school organization, communicating with the external environment; designing and developing proper school management, promoting joint projects between school, family and community).
- Psychosocial competencies (specific competencies valorizing the individual and group peculiarities of the interlocutors, in order to achieve effective communication; adopting an appropriate behavior in the relations with interlocutors, in order to achieve a collaborative climate; forming abilities for fast adapting to social changes; developing effective strategies of the partnership between principal-teachers, principal-students, principal-parents, principal-inspectors, teachers, parents; collaborating among parents/community to achieve a genuine partnership in education; identifying the dynamics and trends of the labor market and correlating it with the teaching-learning process; solving conflicting situations in order to ensure a climate of confidence and responsibility within the educational unit; using of psychobehavioral self-control methods and techniques; adopting effective leadership in order to overcome crisis situations).
- Managerial and coordination skills (specific competencies designing activities to achieve a qualitative education; organizing activities to achieve the objectives of the managerial plan; coordinating the instructional-educational process in order to achieve school progress).
- Assessment competencies (specific competencies establishing the objectives and evaluation criteria in accordance to the principles of total quality management; using of assessment techniques and tools specific to the educational process; assessing the educational approaches in order to identify the training needs).

- Resource management competencies (specific competencies managing material and financial resources according to the priorities of the managerial plan with respect to the general and specific legislation; managing the decisional act by taking responsibility or delegating responsibilities within the working groups in the educational unit; selecting human resources according to the specificity of the unit; valorizing the information from the legislative, curricular, and evaluation documents, in order to make the appropriate decisions; efficient using of the existing human resources and selecting the personnel according to the specificity of the unit and strategy of its development in the coming years; efficient using of time resources and prioritization).
- Skills related to institutional development (specific competencies analyzing the educational context in which the institution operates in order to design an adequate institutional development strategy; designing the institutional development strategy; promoting national and European values in education, through programs and partnerships).
- Competencies related to self-management (specific competencies evaluating of own activity in order to increase the quality of the managerial act; selecting the training path for career development in accordance with the personal aspirations and specifics of the institution; manifesting openness to the innovative trends, necessary for professional development).

V. Conclusions

In the classroom, teachers must prove deeper understanding of a topic, using a great variety of teaching methods, ensuring support for students by creating projects that can enhance learning, offering support for groups and individuals, orienting students towards key-concepts and problems raised by the gathering, processing and using of information, and adapting it in flexible frames of formative and summative evaluation.

Apart from the basic roles of a teacher (as instructor/tutor) - *shaper, coach* and *support provider* -, under the impact of ICT use in education teachers are expected to become more effective in the following additional roles:

- *collaborator* many of the activities based on ICT take the format of project-oriented ones. In those cases, the teacher participates as team member in the students' groups, solving the proposed tasks and interacting with them.
- *developer* for reaching a qualitative didactic process, the teacher *develops* teaching materials, most of them embracing the form of digital materials.
- researcher it should be the natural status of a teacher, considering his/her implication and innovation in the didactic projection of the lesson. Innovating with the help of ICT offers to students the possibility to obtain and interpret the results and design conclusions.
- *self-educated in ICT* practically, basic ICT constitutes the first step which must be fulfilled in the teacher training process. But teachers can continue their work on self-instruction in ICT, for moving forward the educational benefits, in both pedagogically and technically senses.
- *member of teachers' team* activities that use ICT require often team activities, due to the fact that related knowledge, abilities and skills play a crucial role on accomplishing the work tasks (especially in collaborative projects).

The professional development of teachers represents an essential key for introducing efficiently use of ICT in school. Thus, it is important for teachers to extend their techno-pedagogical skills, mostly insisting on four important competencies: (a) using ICT for *communication* and *collaboration* contexts; (b) processing, interpreting and using *information*; (c) *pedagogical designing* of formal and non-formal activities, by including ICT in such demarches; (d) creating ICT-based *learning resources* as educational support for students. In this respect, proposed programs for teachers' professional development must support and train teachers to positively integrate ICT into their classroom, but also must shape their attitudes related to ICT as being a successful factor for increasing students' motivation and understanding and enhancing students' learning nowadays. (Gorghiu, et al., 2012).

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FOSTERING INTERCULTURAL COMPETENCE IN TEACHING ENGLISH FOR LAW ENFORCEMENT

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ABSTRACT. Cultural diversity has been one of the essential realizations of the globalized society. Once individuals have become interconnected they have also become aware of their being culturally diverse. However challenged today's globalized society may have become, the issue of overcoming cultural differences still remains actual. Following this line of thought, this paper starts with an overview of the status of English as a *lingua franca*, and then shifts the focus to the clarification of the concepts of *cultural diversity*, *cultural awareness* and *intercultural competence*, while emphasizing their complementarity. Finally, it explores how intercultural competence may be fostered and developed in a sector of the ELT such as English for Law Enforcement. Some instances of classroom activities, which teachers may use to trigger their students' awareness of police-related cultural aspects, will be analysed from a didactic perspective.

Keywords: cultural diversity, cultural awareness, intercultural competence, English Language Teaching (ELT), English for Law Enforcement (LEE)

1. The status of English world-wide and in teaching

Siemund, Davydova & Maier (2012) analyse the spread of English in today's global society, ascertaining that the spread of English was due to the colonialization of various territories by Great Britain and also to

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the status of the United States as an economic power in the 20th century. The authors are in keeping with Kachru's (1982) opinion that English is distributed in concentric circles, namely: the inner circle represented by countries such as the US and the UK, where English has always been the 1st language and the outer circle comprising countries such as India (which is a multilingual setting where English occupies the 2nd language position). Moreover, there is an expanding circle including, for example, Poland and China, where English has an important status as an international language, though colonialization has not occurred there and English is not used in administration (p. 15).

An opposing standpoint (Facchinetti, Crystal & Seidlhofer eds., 2010) views the use of English world-wide as both a process of localization and internationalization. The author (Crystal, 2010) explains that localization occurs, for instance, when English is used in new countries (non-native English countries) in contexts in which people talk about their everyday life or culture using English as an international language. Thus, varieties of English involve not only local cultural contents, but also influences from the accent and grammar of the speaker's native language (p. 21). As to the internationalization of English, Seidlhofer (2010) argues that the use of English as a means to communicate internationally has given rise to a "new" language, the so-called English as a lingua franca or English as an international language. This language includes speakers from all concentric circles (p. 51). The author supports the idea that English as a lingua franca is not a variant of the language, but a completely new phenomenon (p. 153).

In the light of the above discussions, we can conclude all variants of English have a rather complex status, as the original English language has evolved and transformed, giving rise to a new concept, which is that of "World Englishes" (Seargeant, 2012), which are employed in different contexts such as universities around the world which offer many English courses and degrees (p. 120), as well as publications and organizations which have English as a focus (p. 121). The approach of "World Englishes" to today's status of English language involves, as we have seen, the concentric circles which symbolize the different ways in which English has spread worldwide and also the localization of English in its various speaking environments, which occurs simultaneously with its internationalization, by becoming a lingua franca for the speakers who use it in their communication in different backgrounds.

Mansfield and Poppi (2012) suggest that the international dimension of English should be discussed in ELT also. The authors argue that, due to the changed position of English in today's society - its status as a lingua franca -, issues such as understanding different kind of accents and understandable ways of communicating should be learned by the students in class. Furthermore, students should be exposed to English spoken extensively by non-native speakers, as in real-life communicative situations non-native speakers will most likely have to talk to other non-native speakers, for which reason they have to be intelligible. As such, EFL teachers will have to teach learners to develop "pragmatic strategies of achieving understanding" (p. 163). The process of teaching students different native or non-native varieties of English is termed "awareness raising" (p. 163) by the two authors.

In the same line of thought, Burns (2013) exposes the aspects she considers teachers should take into consideration in class in regard to the international status of English. The aspects include open discussions with students about different concepts such as English as an International Language or English as a Lingua Franca, multi or plurilingualism, international communication, language learning experiences and strategies, as well as students' exposure to different Englishes and adjustment of the teaching materials to local needs.

To sum up, English language teaching should take into account the complex status of English today, promoting it to students as an international language or as a lingua franca, as a foreign or second language, while raising their awareness of all its varieties.

2. Cultural diversity, cultural awareness and intercultural competence in ELT

According to Shachaf (2008) culture is a complex concept with multiple dimensions and levels of analysis. It can be considered from various perspectives such as international, national, regional, ethnic and even organizational. The belief that a deep knowledge of culture is the facilitator of communication between people accounts for this multitude of perspectives of cultural analysis.

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Therefore, in ELT it is also essential that learners of a second language have the opportunity to learn about, explore and understand the target language culture. Developing "intercultural competence" involves more than having some knowledge about that culture. It implies developing the ability to comprehend that culture instils our beliefs and shapes our behaviours in relation with ourselves and others (Scarino & Liddicoat, 2009).

Cultural diversity represents different ways of thinking and communicating. It overcomes discrimination and adheres to the inclusion of people irrespective of their differences in terms of education, gender, age, location, nationality, language or culture. Cultural diversity implies learning from others and about others. However, learning about another culture does not entail the internalization of the target culture norms, but it only means that one is offered the ways to manage and overcome cross-cultural differences.

For teachers of EFL (English as a Foreign Language) there is an issue of how to introduce into their English language classes some aspects related to the knowledge and understanding of the culture pertaining to the language they teach. As such, it has been argued that language teachers are increasingly recognizing the need to incorporate socio-cultural factors into their classrooms (Palmer & Sharifian, 2007).

However, there is no consensus among language instructors as to what approach they should adopt in teaching culture-related issues in their classes. Cohen et al. (2003, p. 53) refer to Michael Paige's culture learning model, of which dimensions are grouped in the following categories: the self as culture, cultural elements, intercultural phenomena (general learning about culture), particular cultures (specific learning about culture) and strategies for culture learning. His model can be used by teachers in their classes, and by exploring these dimensions they can help students relate to the target language culture, while raising awareness of cultural differences and developing their "intercultural competence" (Byram, 1997).

Among the attempts to define intercultural competence, Harden and Witte (2011) resort to the definition of the two terms considered separately. Thus, "interculturality" is something that emerges in a "third space" between two cultures, while "competence" represents a set of abilities or skills. Another definition of the concept of intercultural competence belongs to Risager

(2005), who states that it is created as a result of the knowledge, abilities and attitudes gained at the meeting point between the learners' culture and the target language culture. In short, in ELT intercultural competence can be viewed as something that appears at the junction between the students' own culture and the culture of the target language.

Intercultural language learning is not an addition to the processes of teaching and learning, but it is rather part of the interactions that occur both inside and outside the classroom. Liddicoat (2005) argues that the learners' engagement in a culture other than their own will allow them to distance themselves from their assumptions rooted in their own culture and, thus, develop an intercultural identity, which allow the exploration of the borders between the two cultures. Culture involvement in language teaching is based on the distinction between a "cultural perspective" and an "intercultural perspective". The cultural pole means the learner's knowledge about another culture, the intercultural pole is the learner's transformational engagement in the process of learning.

There are specific strategies for becoming more culturally competent (according to Paige's cultural learning model) and they involve the students' learning about a particular culture from native informants or the development of their cultural observation skills, as well as learning about the target language culture by means of authentic materials that reflect that particular culture. By using such strategies, the students may be stimulated both to identify and deepen their understanding of the cultural differences, thus developing their cultural awareness, both relative to the target language culture and their own. Byram (1997) considers that people who possess "intercultural competence" are able to have a deep insight into their culture and the way it shaped them, which further allows them to recognize the way cultural elements are expressed in behaviours in various cultures.

Such strategies may include authentic materials such as cultural collections or cultural observations (such as role-plays), culture journals or web quests. Cultural collections represent cultural information in various formats such as magazines, newspapers, online sites, literature, music, everyday items, movies etc. Exposure to "cultural collections" items offers students the opportunity to listen or see "real" things or events etc. from a different culture and, thus, allows them to tap into the underlying

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meaning of that culture. Therefore, authentic materials bring along a wealth of resources for a variety of classroom activities that may contribute to increasing the students' awareness of the target-language culture. Such assignments may include: researching on a particular cultural aspect and reporting in class, asking questions or comparing their perceptions on the target culture so as to be able to detect certain cultural patterns and, thus, enlarge their understanding of the English-speaking culture, or describing various criteria etc. However, teachers need to set the goals they want to achieve at the end of a lesson focused on cultural learning and have them in mind when designing class assignments.

3. Intercultural competence in teaching English for Law Enforcement

As a rule, the language instructor teaching in an ESP (English for Specific Purposes) environment faces a challenge when it comes to the English teaching resources he/she needs to use in class, as, most often than not, these resources are not already available due to the novelty of the field or the sheer lack of language resources for that particular subject. Therefore, the ESP language teacher in general, and the Law Enforcement English teacher in particular, has to develop his/her own teaching materials for the field their students specialize in their basic studies.

An alternative that the language teacher has at his/her disposal is to teach Law Enforcement English from the cultural awareness perspective, that is to integrate in his/her teaching a comparative approach in which various law enforcement issues are viewed, analysed or discussed in different cultural environments. For instance, in our Law Enforcement English teaching experience we often resorted to comparisons between the Romanian and the English-speaking countries' milieus, mostly the UK and the US. In this way, we could raise our students' awareness of the state-of-play extant in these countries, while allowing them to contrast and compare various police-related issues, such as symbols associated with police organization, police ranks, police education and training, police uniform and equipment, as well as police recruitment requirements and promotion conditions, criminal codes, police ethics etc.

As such, we have developed teaching materials based on extensive documentation and research in order to select the appropriate Internet resources for our teaching aims, which was to stimulate students' reflective and debating skills, as well as their synthesis and analysis, while familiarizing themselves with cultural aspects and lexis specific to the law enforcement environments in various English-speaking countries.

The tables below display some instances of the activities we developed for our Law Enforcement students enrolled in English language classes with a focus on developing the students' ability to analyse and reflect not only on their own culture, but also on the target language culture. Thus, the classroom experience demonstrated the adequacy of these tasks in eliciting interesting and complex ideas and reflections on the part of the students when it comes to comparing different police forces in the world, as well as the role of stimulus that the visual aids brought about.

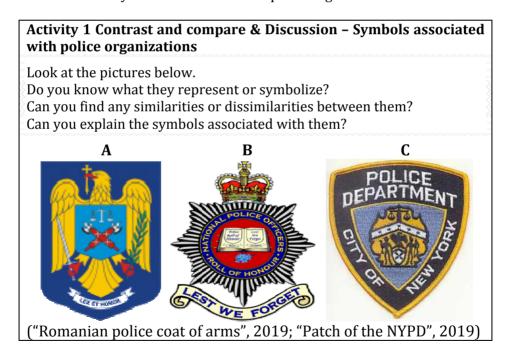
Furthermore, there is a specific teaching aim underlying each of the activities displayed in the tables below, which we had in mind in the design process. Besides the aim of practising and developing the students' language learning skills, the adjacent purpose was to provide the students exposure to authentic materials, which showcased various aspects pertaining to the culture of the police as an organisation from different English-speaking regions. The subsequent description of the tasks below will highlight the way in which students will have become aware of a range of cultural similarities and differences between varied police forces across the globe by the end of the teaching sequences suggested.

The activity in table 1 will give the students the opportunity to contrast and compare different images representing items of police paraphernalia such as a patch, a badge and a coat of arms, which are usually associated with various symbols and slogans that carry deep meanings emblematic for the police forces in the three different countries they represent. The learners will be able to identify symbols such as the scales, the eagle, the sword, the olive branch, the cross, the crown or slogans such as "Lex et Honor" (Law and Honour) or "Lest we forget" etc., which are related to the police organisation's values and mission. Thus, the activity raises the students' awareness of the police culture and some of the universal symbols that are traditionally illustrative of this kind of organisation and its role in society.

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By asking the questions under Activity 1 (Table 1), teachers will elicit from their students the intrinsic meanings these universal symbols carry such as bravery, justice, Christian faith, audacity, peace etc., which are but a few of the values fostered by the police organizations world-wide. Such a semantic analysis will allow students to realize that the police organization is founded on similar values and guided by identical principles, regardless of the geographical area they belong to. This awareness raising of cultural similarities will help students understand police organizations in English-speaking environments in the light of their own.

Table 1. Symbols associated with police organizations



Likewise, the students will be stimulated to become "interculturally competent" by engaging in classroom activities (shown in Tables 2 and 3) focused on the comparative discussion of police ranking systems and

police uniform and equipment items both in their own and the English-speaking territories. Thus, not only cultural aspects can be discussed and understood, but also the specific lexis related to such topics. In this way, students are also exposed to context-specific authentic language, thus enabling them to fulfil another aim of the lesson, which is the practice and acquisition of police terminology.

The students will have the opportunity to discover whether the evolution of police uniforms and equipment and the police ranking systems are rooted in history or culturally dependent. By contrasting and comparing, they may identify the common ground between all police forces under analysis, in respect to the topics discussed. Furthermore, they will be able to comprehend what makes police organizations in these environments different and what brings them together, culturally speaking.

Table 2. The Romanian and British Police Ranks

Activity 2 Reading & Matching exercise - The Romanian and British Police Ranks Compared

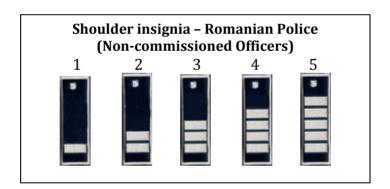
Exercise 1 Match the shoulder insignia to the corresponding Romanian rank and then identify the British rank equivalents from the diagram and fill in the charts below. (Keep in mind that there is no one to one equivalent and there may be some overlapping).



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Commissioned Officers' Ranks	Shoulder insignia	British Police rank
Chestor-general de poliție		
Chestor-șef de poliție		
Chestor principal de poliție		
Chestor de poliție		
Comisar-șef de poliție		
Comisar de poliție		
Subcomisar de poliție		
Inspector principal de poliție		
Inspector de poliție		
Subinspector de poliție		

("Romanian police", 2019)



Non-commissioned Officers'	Shoulder	British Police
Ranks	insignia	rank
Agent-șef principal de poliție		
Agent-șef de poliție		
Agent-șef adjunct de poliție		
Agent principal de poliție		
Agent de poliție		

Table 2 bis

UK police Ranks and Shoulder Insignia

UK POLICE RANKS AND SHOULDER INSIGNIA

(Metropolitan Police Service)

Non-commissioned Officers





Constable

Sergeant

Commissioned Officers









Inspector

Chief Inspector

Superintendent

Chief Superintendent











Commander Deputy Assistant

Assistant

Deputy Commissioner Commissioner Commissioner Commissioner

("Badges of rank", 2019)

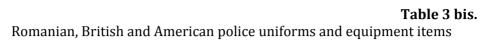
Table 3.

British, American and Romanian Police Uniforms

Activity 3 Discussion & vocabulary reinforcement - Romanian, British and American police uniforms and equipment items

Look at the diagram of the *Police officer's uniform and equipment items*. Consider also the box displaying instances of the British Police uniform. Now point out the main similarities and dissimilarities between the *Romanian*, *British* and *American* police uniforms and equipment (by taking into consideration the visual aids and the information in the diagram).

POLICE OFFICER'S UNIFORM AND EQUIPMENT ITEMS				
CLOTHING	UNIFORM	EQUIPMENT	MISCELLANEOUS	
Blouse - 100% Wool (dress uniform) Cap - 100% Wool, Round Crown Cap - Cloth, Round Crown (field uniform) Coat - 100% Wool Reefer (dress uniform - police officers; alternate field uniform - sergeants) Footwear - Military Oxford Gloves - White Jacket - cloth (field uniform) Necktie Shirt - Long and Short Sleeve (Light Blue) Socks (black) Trousers - 100% Wool	ACCESSORIES Ammunition pouch and/or magazine case/ speedloader Baton holder Belt – Trouser Belt – Equipment Handcuff case Holster Insignia - Cap shield, star, field training officer patch insignia, chevrons Nameplate Patches - PD and City Flag shoulder patches Personal aerosol OC chemical device holder Portable radio transceiver Raincoat/cap cover attachment Service bar/star Unit assignment designator Traffic Safety Vest	Ammunition - Department authorized/issued Ball point pen (black ink) Baton - Department issued Body Armour - Department issued/authorized Handcuffs Helmet - Department issued Firearm - a. Revolver (before 1991) b. Semi-automatic pistol (after 1991) Prescribed flashlight Personal aerosol O C chemical device	Baton tassel Beat Binder (Portfolio) Department Photo - Identification Card Watch Whistle	





(Uniforma poliției române, 2019; British Metropolitan Police Officers, 2019)

4. Conclusions

Culture study must be integrated in what Kramsch (1993) calls "the third culture" of the classroom. This means that the teachers have to create opportunities so as the students can both examine and reflect on the target and their own cultures. It is believed that these processes of cultural examination and reflection are derived as a desideratum of the globalized society we live in, which, for this reason, has become ever interconnected.

That is why teachers have to emphasize to their students the importance of cultivating their "awareness" of both their own culture and the other cultures of the world. Similarly, in an English for Law Enforcement class students are exposed to authentic materials that allow them to tap into the culture of the police organization in English-speaking countries, while reflecting on their own culture through the mirror of the target language culture, thus developing their "intercultural

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competence". In real-life job-related situations, such ability will allow them to effectively communicate and cooperate with their fellow police officers from English-speaking environments.

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