

EVALUATION OF A SCHEMA THERAPY-BASED PREVENTION GROUP PROGRAM FOR CHILDREN AND THEIR PARENTS

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Abstract

Although Schema Therapy has emerged as an effective treatment for a large range of psychopathology, there is limited research on its effectiveness with children and adolescents, especially for preventive purposes, in individual or group settings and with the involvement of parents. Therefore, the aim of this study was to conduct a preliminary evaluation of a newly developed group

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prevention program based on Schema Therapy (rationale, principles, and techniques) for children and their parents. It is a psychoeducational, developmentally-appropriate program addressing core emotional needs, early maladaptive schemas, schema modes, coping styles, and parent-child relationship with the aim of preventing the emergence of psychopathology in children. Participants were 90 Greek children (aged 9-13) who attended 16 weekly meetings and their parents who attended 10 biweekly meetings. The effectiveness of the program was evaluated with pre-and-post-intervention assessment (i.e., pre-experimental design). Children's early maladaptive schemas (self-reports) and strengths and difficulties (self- and parent-reports), as well as parents' early maladaptive schemas (self-reports) were assessed. Results showed a significant decrease in most early maladaptive schemas of children and in many early maladaptive schemas of parents. A significant decrease was found in children's emotional symptoms, peer relationship problems and total difficulties score and a significant increase in prosocial behavior. The supporting evidence for the effectiveness of the program and the necessity of evidence-based prevention programs based on Schema Therapy for children and parents are discussed.

Keywords: Schema Therapy, prevention, group intervention, core emotional needs, early maladaptive schemas, psychopathology, children, parents.

Schema Therapy is an evidence-based therapeutic approach that was introduced as an effective treatment mostly of personality disorders (Farrell et al., 2014) and chronic, persistent emotional disorders (Bach et al., 2017). It has also been used in group settings (Dickhaut & Arntz, 2014; Farrell et al., 2009, 2014; Skewes et al., 2015), and in couples therapy (Chan & Tan, 2020; Simeone-DiFrancesco et al., 2015). It is an integrative, multi-modal approach that shares essential features with Cognitive Behavioral Therapy, Object Relations Theory, Attachment Theory, Gestalt Therapy, and Transactional Psychoanalysis (Young & Brown, 2003), and has integrated elements from Dialectical Behavioral Therapy, Positive Psychology, and Mentalization-Based Therapy (Lockwood & Shaw, 2012; Montgomery-Graham, 2016; Taylor & Arntz, 2016; Young & Brown, 2003).

Up to date, there are very few Schema Therapy or Schema Therapy-based interventions for children and adolescents (Geerdink et al., 2012). Some of them target only children and adolescents (Alizadeh et al., 2015; Saravi et al., 2020), some others include parents as well (Roelofs et al., 2016; Sabzi et al., 2022; Salehi et al., 2017), whereas others target only parents (Louis & Louis, 2015; Louis et al., 2021). Furthermore, to our knowledge, there is no psychoeducational prevention program based on Schema Therapy that targets both children or adolescents and their parents. Therefore, this study focuses on the evaluation of a newly developed group

prevention program which is based on Schema Therapy and includes both children and their parents.

Schema Therapy

Schema Therapy is based on the premise that all individuals are born with the following *core emotional needs* (Young et al., 2003): (a) secure attachment to others, including safety, stability, nurturance, and acceptance; (b) autonomy, competence, and sense of identity; (c) freedom to express valid needs and emotions; (d) spontaneity and play; and (e) realistic limits and self-control. When these needs are not met or are met excessively, there is an increased risk for the emergence of *early maladaptive schemas*. These schemas develop during childhood and adolescence and are broad and pervasive themes or patterns, comprised of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others (Farrell et al., 2014; Young et al., 2003). Five *schema domains* have been identified that correspond to the five core emotional needs mentioned above: (a) Disconnection and Rejection, (b) Impaired Autonomy and Performance, (c) Impaired Limits, (d) Other-Directedness, and (e) Overvigilance and Inhibition (Young et al., 2003). For example, some early maladaptive schemas that belong to these schema domains are Mistrust/Abuse, Dependence/Incompetence, Entitlement/Grandiosity, Subjugation, and Negativity/Pessimism, respectively.

Furthermore, early maladaptive schemas are associated with *coping styles* for survival and self-protection, that is, Surrender, Avoidance, and Overcompensation (van Genderen et al., 2012). These coping styles emerge in childhood and are effective ways of dealing with difficulties during that age period, but in the long term they become dysfunctional. Specifically, the Surrender coping style leads individuals to give in to certain early maladaptive schemas and adapt their thoughts and feelings to them. The Avoidance coping style means that individuals avoid situations that trigger certain early maladaptive schemas and the accompanying emotions. The Overcompensation coping style means that individuals behave in a way opposite to certain early maladaptive schemas to prevent their activation.

Although early maladaptive schemas seem rather functional because they ensure survival in less-than-optimal contexts, they put children at risk for psychopathology (Farrell et al., 2014). Early maladaptive schemas that are shaped during childhood constitute the unconditional schemas, whereas those shaped later are regarded as conditional schemas (Roediger et al., 2018; Young et al., 2003). The *unconditional schemas*, such as Emotional Deprivation, Mistrust/Abuse, and Social Isolation/Alienation, are persistent in time and circumstances and are experienced with great intensity (McCarthy & Lumley, 2012; Young et al., 2003). These schemas typically emerge during childhood (McCarthy & Lumley, 2012; Stallard, 2007). The *conditional schemas*, such as Self-Sacrifice, Subjugation, and Emotional Inhibition,

appear later in life as the result of the individual's attempt to avoid the negative consequences of the unconditional schemas and to deal with them (Loose et al., 2013; Young & Brown, 2003).

Moreover, Young and First (2003) introduced the notion of *schema modes* to describe the moment-to-moment fluctuating features of thinking, feeling, and behaving; modes also include activated schemas and coping styles. Schema modes in adults are grouped into the following four categories (Lobbestael et al., 2007; van Genderen et al., 2012): (a) child modes (i.e., Vulnerable Child, Abandoned and Abused Child, Lonely Child, Dependent Child, Angry Child, Enraged Child, Impulsive Child, Undisciplined Child, Happy Child); (b) maladaptive coping modes (i.e., Surrender: Compliant Surrender, Surrender to damaged child modes; Avoidance: Detached Protector, Detached Self-Soother, Avoidant Protector, Angry Protector; Overcompensation: Attention and Approval Seeker, Self-Aggrandizer, Over-controller, Bully and Attack, Conning and Manipulative, Predator); (c) maladaptive parent modes (i.e., Punitive Parent, Demanding Parent); and (d) healthy mode (i.e., Healthy Adult).

Furthermore, in Schema Therapy for children and adolescents, the schema modes are grouped into the following four categories (Loose et al., 2020): (a) child modes (i.e., Vulnerable Child, Angry and Enraged Child, Impulsive Child, Undisciplined Child, Spoiled or Egoistic Child, Happy Child); (b) parental or peer modes (i.e., Punitive Parent/Peer); (c) competent modes (i.e., Competent Child, Internalized Caring Parents, Joined Protectors); and (d) dysfunctional modes (i.e., Surrender: Compliant Surrender, Currying Favour; Avoidance: Detached Protector, Dissociated Protector, Regressive Child, Complaining Protector, Angry Protector, Self-Soother or Stimulator, Hyperactive Protector; Overcompensation: Defiant-Oppositional Child, The Dominator, The Perfect, Excessive Controller, Self-Aggrandizer, Dramatist, Intimidator, Conning Mode, Bully and Attack, Predator).

Early Maladaptive Schemas and Children's Psychopathology

A growing body of research in adults (e.g., Bishop et al., 2021; Janovsky et al., 2020; Peeters et al., 2022; Pilkington et al., 2021) offers substantial evidence that early maladaptive schemas are associated with various types of psychopathology. For children and adolescents, in longitudinal and cross-sectional studies with clinical and community samples, associations were found between early maladaptive schemas and various types of psychopathology in children and adolescents, such as anxiety disorders (Calvete et al., 2013a; Ghamkhar Fard et al., 2014; Hajimirab et al., 2016; Leung & Poon, 2001; Mousavi et al., 2016; Muris, 2006; Van Vlierberghe et al., 2010), depressive symptoms (Alba et al., 2019; Lumley & Harkness, 2007; Roelofs et al., 2011, 2013), aggressiveness (Calvete, 2008; Calvete & Orue, 2010, 2012; Palmer, 2000), oppositional defiant disorder (Van Vlierberghe et al., 2010), conduct problems (Roelofs et al., 2013; Van Vlierberghe et al., 2010), juvenile

delinquency (Calvete, 2008), internalizing and externalizing problems (Abdolahzadeh Rafi et al., 2017; Tsouvelas et al., 2023; van Wijk-Herbrink et al., 2018; Yiğit et al., 2021), eating disorders and obesity (Muris, 2006; Turner et al., 2005; Van Vlierberghe et al., 2007, 2010), substance abuse (Muris, 2006), and perfectionism (Aghayousefi & Amirpour, 2014). Typically, clinical samples have higher levels of early maladaptive schemas compared to nonclinical samples (Rusinek et al., 2013; Simmons et al., 2006; Van Vlierberghe et al., 2007, 2010).

Furthermore, in a retrospective study (Gong & Chan, 2018), psychological distress in adulthood had significant positive links with childhood early maladaptive schemas, which also had positive links with childhood maltreatment. Finally, a recent meta-analysis (Tariq et al., 2021) indicated that specific early maladaptive schemas, that is, those belonging to the Disconnection and Rejection, Impaired Autonomy and Performance, and Other-directedness domains, were associated with higher levels of depressive symptoms in adolescents and young adults.

It is quite important to note that some of the early maladaptive schemas in childhood are considered as adaptive for this age period (Ghamkhar Fard et al., 2014; Rijkeboer & de Boo, 2010). Such schemas are the Self-Sacrifice schema, because it is regarded as an aspect of prosocial behavior, and the schema of Enmeshment/Undeveloped Self, because it reflects the need for a stronger and warmer relationship with parents, which is a quite normative need in childhood.

In sum, existing research supports the idea that early maladaptive schemas are likely to be at the root of psychopathology. These findings underscore the need to prevent the emergence of early maladaptive schemas in childhood as a way of preventing psychopathology both concurrently and longitudinally.

Parents and Early Maladaptive Schemas

Research evidence indicates that parents' early maladaptive schemas are likely to lead them to dysfunctional parenting practices, such as being aloof, unavailable, or inconsistent, not satisfying their children's core emotional needs, using invalidating or punishing practices, and having excessive demands, among others (Basso et al., 2019; Loose et al., 2020; Louis & Louis, 2015; Maçik et al., 2016; Sójta & Strzelecki, 2023; Young et al., 2003). Moreover, parents' early maladaptive schemas seem to be linked to those of their children (Gibson & Francis, 2019; Sundag et al., 2018; Zeynel & Uzer, 2020; Zonnevrijlle & Hildebrand, 2019) and to the emergence of psychopathology in the latter (Gibson & Francis, 2019). For example, significant positive associations have been found between parents' and adolescents' early maladaptive schemas, especially those schemas belonging to the Impaired Limits and the Disconnection and Rejection domains for parents and early maladaptive schemas belonging to the Disconnection and Rejection and the Impaired Autonomy and Performance domains for adolescents (Zonnevrijlle & Hildebrand, 2019).

In addition, adverse childhood experiences (i.e., emotional, sexual, and physical abuse, physical and emotional neglect) were found in a retrospective study (Alaftar & Uzer, 2022) to significantly mediate the relationship between mothers' and children's early maladaptive schemas, especially those belonging to the domain of Disconnection and Rejection. Similar findings emerged in a cross-sectional study with children and adolescents who had antisocial and depressive symptoms (Van Vlierberghe et al., 2007). Finally, the mother's early maladaptive schemas seem to be negatively associated with mother-child bonding (Zafiropoulou et al., 2014) and even with mother-fetus bonding (Nordahl et al., 2019).

In sum, existing evidence supports the need to target parents' own early maladaptive schemas as well as parenting practices when designing programs aiming at the prevention of early maladaptive schemas and psychopathological symptoms in children.

Group Schema Therapy for Children and Adolescents

As noted above, there are very few studies focusing on group Schema Therapy programs targeting children and/or their parents. More specifically, in a study conducted in Iran (Salehi et al., 2017), group Schema Therapy was implemented in children with insecure attachment and separation anxiety as well as in their parents. The results indicated a significant decrease in children's internalizing and externalizing problems. In another study in Iran (Alizadeh et al., 2015), a group Schema Therapy program was implemented in children with cancer and a significant decrease in their depressive symptoms was found. A third study in Iran (Sabzi et al., 2022) reported findings from the implementation of a group Schema Therapy-based program with mothers (only) who had 8-10-year-old daughters. There was a significant decrease in some early maladaptive schemas in children and in dependency in parent-child relationships, as well as an increase in closeness and positive relationship between parents and children, such as affection and attunement to children's emotions.

Regarding adolescents, a Schema Therapy-based group program in four adolescents with personality disorders or features of personality disorders was implemented in the Netherlands (Roelofs et al., 2016). Adolescents were also in individual therapy. The intervention included biweekly sessions with parents. The results indicated a significant decrease in adolescents' early maladaptive schemas, schema modes, and symptoms of psychopathology, as well as an improvement in their quality of life. The most significant change occurred for adolescents whose parents participated in the therapeutic program. In addition, a Schema Therapy-based group program was designed and implemented in overweight adolescents with binge eating disorder in Iran (Saravi et al., 2020). The program consisted of 13 sessions, with a three-month follow-up. The results showed a decrease in adolescents' eating attitude and an increase in their ability for self-regulation.

Finally, the Good Enough Parenting program (Louis & Louis, 2015; Louis et al., 2021), which is based on Schema Therapy, is a program that includes only parents and addresses their early maladaptive schemas, schema modes, and frustrations with their children, with the aim of improving the parent-child relationship by meeting parents' core emotional needs and increasing the quantity and quality of positive interactions. Louis and Louis (2015) reported that this program has been implemented in many countries worldwide, with very encouraging findings. A relevant qualitative research (Louis et al., 2021) indicated that this program enhanced parents' patience and intentionality and enabled them to provide more emotional support to their children and to set limits in a stable and sensitive way.

Aims and Hypotheses of the Current Study

The aim of this study was to conduct a preliminary evaluation of a newly developed psychoeducational prevention program based on Schema Therapy (with regard to rationale, principles, and techniques), that includes both children and their parents (see also Laiou et al., 2020, 2022). As a Schema Therapy-based program, it aims at decreasing children's early maladaptive schemas. This is achieved by facilitating children to become aware of their early maladaptive schemas, schema modes, coping styles, and the accompanying emotions, by encouraging children to realize and express their core emotional needs in order to satisfy them, and by educating children in ways to strengthen the Competent modes, that is, the strong, supportive, clever, and wise modes (Loose, 2011, 2020). The program also aims at facilitating parents to become aware of their own and their children's core emotional needs and early maladaptive schemas and to work on improving their relationship with their children (i.e., secure attachment, warmth, emotional reciprocity, emotional attunement). Parents' involvement in the program is necessary because, as outlined above, existing research data have indicated the interconnection of parents' and children's early maladaptive schemas (Gibson & Francis, 2019; Sundag et al., 2018; Zeynel & Uzer, 2020; Zonnevylle & Hildebrand, 2019) and the significant impact of parents' schemas on their parenting practices and the overall relationship with their children (Basso et al., 2019; Maçik et al., 2016; Nordahl et al., 2019; Sójta & Strzelecki, 2023; Zafiropoulou et al., 2014). As a result, this program is expected to prevent the emergence of children's psychopathological symptoms (Loose et al., 2013). The fact that early maladaptive schemas appear during childhood and adolescence underlines the importance of prevention and early intervention (Muris, 2006; Young et al., 2003).

More specifically, we hypothesize that after the implementation of the program there will be a significant decrease in children's and parents' early maladaptive schemas. Accordingly, there will be a significant decrease in children's

psychopathological symptoms and a significant increase in children's strengths, as assessed by both children and their parents.

Method

Research Design

This study adopted a pre-experimental research design, with a one-group pre-test and post-test scheme (Shaughnessy et al., 2015). Participants completed the measures both at pre-test, that is, two weeks before the intervention and at post-test, that is, one week after the intervention. The intervention, which consisted of 16 weekly sessions for the children's groups and 10 biweekly sessions for the parents' groups, with 90 minutes duration each, lasted four months. It was delivered by the first author, who also acted as a supervisor, and five female psychologists/psychotherapists (co-authors 5-9), all trained in Schema Therapy in the Greek Society of Schema Therapy, which is accredited by the International Society of Schema Therapy. It is also important to note that children's psychopathological symptoms – the main outcome variable – were assessed by both children and their parents.

Participants

Participants were 90 children ($M_{age} = 11.2$ years, $SD = 1.0$; 52.2% boys) and their 85 parents ($M_{age} = 44.6$ years, $SD = 4.0$; 87.1% mothers). Of them, 87 children were from Athens and three children from two large cities of northern and southern Greece. Parents' educational level was medium to high: only primary education 1.2%, only secondary education 22.6%, post-secondary education 21.4%, and tertiary education (bachelor's degree or higher) 54.7%.

The initial sample included a control group which was assessed at pre-test. However, it exhibited a high attrition rate which was mainly due to the disruption caused by the COVID-19 pandemic and the strict lockdown measures in Greece; therefore, it was excluded from the final study.

One of the prerequisites for a child to participate in the program was the participation of at least one of his/her parents, however there were two children whose both parents participated. In addition, there were seven children whose siblings participated as well in the program, though in different children's groups.

It is an ad-hoc sample consisting of individuals who volunteered to participate in the study. They were recruited from six randomly selected primary and secondary schools located in Athens, as well as after an open call via social media and via a one-day conference on parenting and children's mental health, organized by the Psychology Laboratory and held at the University of Athens.

The drop-out rate of the participants was small: 10.9%. Eleven children (6 boys) from the initial sample ($N = 101$) dropped out during the period from the first to the seventh session of the program, mainly because of objective obstacles (e.g., changes in daily family schedule, family relocation due to parents' work duties).

Measures

A. Children

Children reported their age and gender and completed the Schema Inventory for Children and the Strengths and Difficulties Questionnaire.

Schema Inventory for Children (SIC; Rijkeboer & de Boo, 2010). It is a self-report inventory consisting of 40 items which assess early maladaptive schemas of children aged 8-13 (Young, 2003). The schemas are arranged in the following 11 subscales: Mistrust/Abuse, Defectiveness/Shame, Enmeshment/Undeveloped Self, Failure, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Loneliness, Vulnerability to Harm or Illness, and Subjugation. Items are scored on a four-point Likert scale (0 = completely untrue of me, 3 = describes me perfectly). The Greek version of the inventory was used (Aggeli et al., in preparation). The internal consistency reliability (Cronbach's alpha) of the subscales of the Greek version is adequate: .70-.78.

Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). This self-report questionnaire consists of 25 items screening for strengths and psychopathological symptoms of children aged 11-16. It includes five subscales: Emotional Symptoms, Conduct Problems, Hyperactivity/Inattention, Peer Relationship Problems, and Prosocial Behavior. Items are scored on a three-point Likert scale (1 = not true, 3 = certainly true). The Greek version of the questionnaire was used (Bibou-Nakou et al., 2001). The internal consistency reliability (Cronbach's alpha) of the Greek version was adequate: .75 for the total questionnaire and .70-.76 for the subscales.

B. Parents

Parents reported their age, gender, family status, and educational level. They also completed the Strengths and Difficulties Questionnaire-Parent Version and the Young Schema Questionnaire-Short Form3.

Strengths and Difficulties Questionnaire-Parent Version (SDQ; Goodman, 1997). It is the parent-version of the SDQ described previously. The Greek version of the questionnaire was used (Bibou-Nakou et al., 2001). The internal consistency reliability (Cronbach's alpha) of the Greek version was adequate: .71 for the total questionnaire and .70-.76 for the subscales.

Young Schema Questionnaire-Short Form3 (Young, 2003). It is a self-report questionnaire which evaluates early maladaptive schemas. It consists of 90 items arranged in five domains, each one including specific schemas, as follows:

Disconnection and Rejection (Abandonment/Instability, Mistrust/Abuse, Emotional Deprivation, Defectiveness/Shame, Social Isolation/Alienation), Impaired Autonomy and Performance (Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Failure), Impaired Limits (Entitlement/ Grandiosity, Insufficient Self-Control/Self-Discipline), Other-Directedness (Subjugation, Self-Sacrifice, Approval-Seeking/Recognition-Seeking), and Overvigilance and Inhibition (Negativity/Pessimism, Emotional Inhibition, Unrelenting Standards/ Hypercriticalness, Punitiveness). Items are scored on a six-point Likert scale (1 = completely untrue of me, 6 = describes me perfectly). The Greek version of the questionnaire was used (Malogiannis et al., 2018). The internal consistency reliability (Cronbach's alpha) of the Greek version is adequate: .92 for the total questionnaire and .70-.85 for the subscales.

Procedure

The first author and the five psychologists (co-authors 5-9) contacted the selected primary and secondary schools to check their availability and willingness to participate. After being informed about the study, the volunteering teachers conducted parent meetings in which they presented the aim and the process of the study and asked for participation. Then, the parents who accepted the invitation provided informed written consent.

The first author and the five psychologists conducted an initial interview with each parent-child dyad. The aim of this interview was to screen for diagnosed developmental and/or mental health problems (e.g., autism, mental disorder) in children and their parents. As there was no such diagnosis, no one was excluded. With this process, 10 children's groups and 10 parents' groups were formed, each with 6 to 10 members.

The pre-test was conducted in-person before the onset of the COVID-19 pandemic. The intervention was also conducted in-person up to, on average, the fourth session with children and parents. Before the onset of the pandemic, the group sessions with primary school students were held in schools (in classrooms or in other suitable rooms) and with high school students were held in the psychologists' private offices, due to the secondary schools' restrictions in the use of classrooms. After the onset of the COVID-19 pandemic (March 2020), which necessitated social distancing and lockdown, the sessions were transferred on-line, after the appropriate modifications in the form and content of the program were made.

The study was conducted with permission by the Institute of Educational Policy of the Greek Ministry of Education and with approval by the Research Ethics Committee of the Department of Pedagogy and Primary Education of the National and Kapodistrian University of Athens, Greece (number of approval: 431/10.10.2019). The study has also complied with the ethical standards of the American Psychological Association regarding treatment of the sample, anonymity and confidentiality of data, respect of the participants' rights to withdraw from the study at any time, respect of the participants' right to be informed about the findings, etc.

Content of the Program

The program has two separate but interrelated components: group work with children and group work with their parents. Sixteen weekly sessions with children's groups and 10 biweekly sessions with parents' groups were held (in-person and on-line sessions). The program adopted the Schema Therapy rationale and included Schema Therapy activities and techniques, which were tailored to the children's developmental level. Examples of techniques used are the following: "chair work" for the exploration and change of schema modes; imagery to elicit specific emotions; empathic confrontation of early maladaptive schemas, schema modes and coping styles; and limited-reparenting to facilitate validation and correspondence to children's core emotional needs.

Techniques based on narrative, drawing, and play therapy are also used. More specifically, a new therapeutic story was constructed to facilitate children identify with the main character of the story and, thus, understand the basic concepts of Schema Therapy, that is, core emotional needs and their fulfillment, schema modes, and coping styles. Drawing was used very frequently, as children were asked to illustrate their various schema modes. Play therapy techniques were also implemented in children's and parents' groups. These techniques were based on drawings of the schema modes and on role-playing of schema modes and coping styles.

The structure of the program and the aim and abbreviated content of each session with children's and parents' groups are summarized in Tables 1 and 2, respectively.

Table 1. Structure and Abbreviated Content (Aims and Techniques) of the Sessions for Children's Groups

No.	Session Theme	Session Aims and Techniques
1	Acquaintance: "Who am I?"	Getting to know each other and the therapist, discussing about the aim of the group, activating members
2	Acquaintance – Goals – Expectations: "What is this group?"	Sharing the expectations and setting limits concerning the function of the group, group bonding
3	Trust in the group: "Can I trust others in the group?"	Developing safety and trust, group bonding
4	Exploring emotions: "How do I feel?"	Exploring emotions, identifying their verbal and nonverbal expression, identifying emotions that disturb the group, developing trust and support, increasing emotional connection, playing, group bonding
5	Children's core emotional needs I: "What do I need to feel good?"	Learning about core emotional needs and ways to fulfill them, developing trust and support, increasing emotional connection, playing, group bonding

No.	Session Theme	Session Aims and Techniques
6	Children's core emotional needs II: "What do I need to feel good?"	Identifying core emotional needs, suggesting ways and individuals to fulfill them, developing creativity, increasing emotional connection and cooperation, playing, group bonding
7	Working with schema modes: "Which are the parts of myself?"	Learning about schema modes, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
8	Working with the Happy Child mode: "When I feel happy!"	Learning about the Happy Child mode, identifying the needs connected with it and suggesting ways and individuals to empower it, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
9	Working with the Vulnerable Child mode: "When I feel sad, scared, or lonely"	Learning about the Vulnerable Child mode, identifying the needs connected with it and suggesting ways and individuals to sooth it, empowering the Competent modes, sharing personal experiences, developing trust and support, showing empathy, experiencing emotional relief, increasing emotional connection, playing, group bonding
10	Working with the Angry Child mode: "When I feel very angry!"	Learning about the Angry Child mode, identifying the needs connected with it and suggesting ways and individuals to confront it, psychoeducation on appropriate and functional ways to express anger, empowering the Competent modes, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
11	Working with the Undisciplined/Impulsive Child mode: "Why do I have to do this? I don't want to!"	Learning about the Undisciplined/Impulsive Child mode, identifying the needs connected with it and suggesting ways and individuals to confront it, psychoeducation on appropriate and functional ways of expression and on setting limits, empowering the Competent modes, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
12	Working with the Critical/Demanding Voice: "Those bad thoughts that hover over me!"	Learning about the Critical/Demanding Voice, psychoeducation on coping with this Voice, empowering the Competent modes, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
13	Integration and regulation of schema modes: "How can I handle my difficult parts?"	Working on the schema modes to increase deep understanding of them, empowering the Competent modes, engaging in creative activities (e.g., story, song), developing trust and support, increasing cooperation and emotional connection, playing, group bonding
14	Identifying coping styles: "How do I respond to difficult situations?"	Identifying coping styles, empowering the Competent modes, sharing personal experiences, developing trust, support, and safety, increasing emotional connection, playing, group bonding
15	Self-reflection on coping styles and their use: "How can I handle and improve my coping styles?"	Working on coping styles to increase deep understanding of them, strengthening functional coping styles, empowering the Competent modes, engaging in creative activities (e.g., story, song), sharing personal experiences, developing trust, increasing cooperation and emotional connection, playing, group bonding
16	Closure – Feedback: "My memories from our group"	Sharing feedback from the participation in the group, connecting with the Happy Child mode, expressing feelings and emotions, connecting with the transitional object

Table 2. Structure and Abbreviated Content (Aims and Techniques)
of the Sessions for Parents' Groups

No.	Session Theme	Session Aims and Techniques
1	Acquaintance – Goals – Expectations	Getting to know each other and the therapist, discussing the aims of the group and its rules, acknowledging the strengths and difficulties of the parental role, group bonding
2	Identifying emotions: “How do I feel?”	Identifying emotions, identifying difficult emotions triggered by their children, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
3	Identifying children’s and parents’ psychological needs: “What does my child need and what do I need?”	Learning about Schema Therapy and its basic concepts (e.g., core emotional needs, early maladaptive schemas, and schema modes), identifying their children’s and their own core emotional needs, sharing personal experiences, developing trust and support, increasing emotional connection, group bonding
4	Identifying the core emotional needs for secure attachment, connection, and acceptance: “How close do you feel to me?”	Learning about the core emotional needs for secure attachment, connection, and acceptance, sharing personal experiences, learning functional ways of fulfilling these needs, developing trust and support, increasing emotional connection, playing, group bonding
5	Working on the core emotional needs for secure attachment, connection, and acceptance: “How can we feel close to one another?”	Working on the core emotional needs for secure attachment, connection and acceptance, connecting with parents’ Inner Child and with the Vulnerable Child mode, sharing personal experiences, developing trust and support, increasing emotional connection, group bonding
6	Identifying and working on the core emotional needs for autonomy, competence, and sense of identity: “How do I show you that I trust you?”	Identifying and working on the core emotional needs for autonomy, competence, and sense of identity, learning functional ways of fulfilling these needs, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
7	Identifying and working on the core emotional need for freedom to express valid needs and emotions: “Do I let you express yourself?”	Identifying and working on the core emotional need for freedom to express valid needs and emotions, learning about the Internalized Critical/Demanding Parent Mode, learning functional ways of fulfilling this need, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
8	Identifying and working on the core emotional need for realistic limits and self-control: “How and why I set limits?”	Identifying and working on the core emotional need for realistic limits and self-control, learning functional ways of fulfilling this need, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
9	Identifying and working on the core emotional need for spontaneity and play: “I have so much fun playing with you!”	Identifying and working on the core emotional need for spontaneity and play, learning functional ways of fulfilling this need, sharing personal experiences, developing trust and support, increasing emotional connection, playing, group bonding
10	Closure – Feedback: “My memories from our group”	Sharing feedback from the participation in the group, connecting with the Happy Child mode, expressing feelings and emotions, connecting with the transitional object

Treatment Fidelity

Although treatment fidelity or integrity was not measured, certain procedures were implemented for the following treatment fidelity dimensions: content or adherence, quantity (i.e., dosage and exposure), and quality or process (Sanetti et al., 2021). More specifically, the program was designed and implemented by trained psychologists/psychotherapists: the first and the third authors, who also acted as clinical supervisors, are clinical psychologists/psychotherapists (PhD), certified in Cognitive Behavioral Therapy in children, adolescents, and adults by the Institute of Behavioural Research and Therapy (accredited by the European Association for Behavioural and Cognitive Therapies), and in Schema Therapy by the Greek Society of Schema Therapy (accredited by the International Society of Schema Therapy), and are also supervisors and trainers of psychotherapists; the second author, who acted as an academic supervisor, is certified in Cognitive Behavioral Therapy by the same Institute and has also received training in psychoanalytic psychotherapy; and the five psychologists (co-authors 5-9) are certified in Schema Therapy and have received additional training in child and adolescent psychotherapy.

Before the implementation of the program, the five psychologists/psychotherapists received systematic and rigorous training by the first and third authors in it. They studied the manual of the program which includes a detailed description of the aims, structure, content, activities, and techniques of the sessions with children and parents, as well as specific guidelines and several ideas for the promotion of communication and interaction within the groups. During the implementation of the program, eight supervision sessions (twice a month) were conducted by the first author. Discussions focused on the psychologists' emotions and therapeutic stance and skills. Special attention was paid to the interactions between the psychologists and the group members (children, parents) as well as among group members. Any issues arising in the groups were discussed. Through role plays, the psychologists practiced their skills in applying the techniques and implementing the activities of the program. Finally, children's and parents' participation (i.e., frequency and duration) was carefully monitored and it was ensured that all of them exhibited commitment and consistency.

Data Analysis

Descriptives (M , SD) for all variables were calculated. The normality assumption of all variables was violated as indicated by the statistically significant Kolmogorov-Smirnov tests, the inspection of histograms, boxplots, and outliers, as well as the skewness and kurtosis values (Field, 2018). Therefore, Wilcoxon signed-

rank tests were used (instead of paired *t*-tests) to examine differences between pre-test and post-test. Effect sizes were calculated with the formula $r = z / \sqrt{N}$, where *N* is the number of pairs for the paired samples, that is, 2 x *N* (Rosenthal, 1994). The effect sizes were evaluated based on Cohen's (1992) suggestions, as follows: 0.10 = small, 0.30 = moderate, and 0.50 = large effect. All analyses were conducted with SPSS version 28.01.0.

Results

Kolmogorov-Smirnov tests were statistically significant for nearly all variables studied, therefore a non-parametric test, that is, Wilcoxon signed-rank test, was used to test for differences between pre-test and post-test.

Children's Early Maladaptive Schemas

Table 3 presents the descriptive statistics, the *z*-values of the Wilcoxon signed-rank tests, and the effect sizes for children's early maladaptive schemas. Statistically significant decreases emerged at post-test for many early maladaptive schemas as experienced by children themselves, that is, for Loneliness, Vulnerability to Harm or Illness, Mistrust/Abuse, Defectiveness/Shame, Failure, Subjugation, Unrelenting Standards/Hypercriticalness, Self-Sacrifice, Entitlement/Grandiosity, and Insufficient Self-Control/Self-Discipline. In contrast, there was a statistically significant increase at post-test in Enmeshment/Undeveloped Self. The effect sizes were relatively small. The largest effect sizes (> 0.20) were observed for Subjugation, Vulnerability to Harm or Illness, Insufficient Self-Control/Self-Discipline, Loneliness, Failure, Mistrust/Abuse, and Entitlement/Grandiosity.

Table 3. Means, Standard Deviations, and Wilcoxon Signed-Rank Tests for Children's Early Maladaptive Schemas (*N* = 90)

Schema Inventory for Children	Pre-test		Post-test		Change		<i>z</i> -value ¹	Effect size ²
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Mistrust/Abuse	0.76	0.72	0.54	0.52	0.22	0.69	-2.63**	-0.21
Defectiveness/Shame	0.36	0.51	0.20	0.41	0.16	0.57	-2.40**	-0.19
Enmeshment/Undeveloped Self	1.82	0.65	1.99	0.65	-0.17	0.63	2.37**	-0.19
Failure	0.47	0.71	0.29	0.50	0.16	0.62	-2.76**	-0.22
Self-Sacrifice	1.68	0.78	1.56	0.67	0.12	0.70	-1.58*	-0.13
Unrelenting Standards/Hypercriticalness	1.52	0.74	1.31	0.67	0.21	0.80	-2.28*	-0.18
Entitlement/Grandiosity	0.45	0.57	0.32	0.47	0.13	0.43	-2.61**	-0.21
Insufficient Self-Control/Self-Discipline	1.11	0.72	0.90	0.60	0.21	0.61	-2.96**	-0.24

Schema Inventory for Children	Pre-test		Post-test		Change		z-value ¹	Effect size ²
	M	SD	M	SD	M	SD		
Loneliness	0.60	0.63	0.40	0.41	0.20	0.62	-2.85**	-0.23
Vulnerability to Harm or Illness	0.62	0.56	0.46	0.54	0.16	0.44	-3.00**	-0.24
Subjugation	0.61	0.57	0.44	0.45	0.17	0.43	-3.25**	-0.27

Note. Scale 0-3. ¹ z-value of the Wilcoxon signed-rank test for the pre-test – post-test comparisons.

² Effect size: $r = z / \sqrt{N}$, N the number of pairs for the paired samples ($2 \times N$).

* $p < .05$; ** $p < .01$.

Children's Strengths and Difficulties – Self-Reports

Table 4 presents the descriptive statistics, the z-values of the Wilcoxon signed-rank tests, and the effect sizes for children's self-reports on their strengths and difficulties. There were statistically significant decreases at post-test in Emotional Symptoms, Peer Relationship Problems, and in the Total Score. The effect sizes were relatively small (> 0.20 for these three variables).

Table 4. Means, Standard Deviations, and Wilcoxon Signed-Rank Tests for Children's Strengths and Difficulties – Self-Reports ($N = 90$)

Strengths and Difficulties Questionnaire – Self-Reports	Pre-test		Post-test		Change		z-value ¹	Effect size ²
	M	SD	M	SD	M	SD		
Emotional Symptoms	0.62	0.44	0.50	0.40	0.12	0.41	-2.63**	-0.21
Conduct Problems	0.54	0.28	0.54	0.29	0.00	0.29	-0.07	-0.01
Hyperactivity/Inattention	0.84	0.39	0.82	0.36	0.02	0.38	-0.81	-0.06
Peer Relationship Problems	0.50	0.45	0.40	0.37	0.10	0.31	-2.76**	-0.22
Prosocial Behavior	1.69	0.33	1.71	0.34	-0.02	0.29	0.62	-0.05
Total Score	0.50	0.22	0.45	0.19	0.05	0.17	-2.81**	-0.22

Note. Scale 0-2. ¹ z-value of the Wilcoxon signed-rank test for the pre-test – post-test comparisons.

² Effect size: $r = z / \sqrt{N}$, N the number of pairs of the paired samples' ($2 \times N$).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Children's Strengths and Difficulties – Parent-Reports

Table 5 presents the descriptive statistics, the z-values of the Wilcoxon signed-rank tests, and the effect sizes for children's strengths and difficulties as reported by their parents. There were statistically significant decreases at post-test in Emotional Symptoms and in the Total Score. A statistically significant increase emerged at post-test for Prosocial Behavior. The effect sizes were relatively small. The largest effect sizes (> 0.20) were observed for the Total score and the Emotional Symptoms.

Table 5. Means, Standard Deviations, and Wilcoxon Signed-Rank Tests for Children's Strengths and Difficulties – Parent-Reports ($N = 85$)

Strengths and Difficulties Questionnaire – Parent-Reports	Pre-test		Post-test		Change		z-value ¹	Effect size ²
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Emotional Symptoms	0.59	0.47	0.48	0.42	0.11	0.36	-2.67**	-0.21
Conduct Problems	0.50	0.28	0.47	0.28	0.03	0.31	-0.95	-0.08
Hyperactivity/Inattention	0.75	0.40	0.71	0.42	0.04	0.31	-1.24	-0.10
Peer Relationship Problems	0.49	0.38	0.45	0.37	0.04	0.24	-1.36	-0.11
Prosocial Behavior	1.62	0.37	1.71	0.36	-0.09	0.34	2.38*	-0.19
Total Score	0.46	0.18	0.42	0.20	0.04	0.15	-2.82**	-0.22

Note. Scale 0-2. ¹ z-value of the Wilcoxon signed-rank test for the pre-test – post-test comparisons.

² Effect size: $r = z / \sqrt{N}$, N the number of pairs for the paired samples ($2 \times N$).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Parents' Early Maladaptive Schemas

Table 6 presents the descriptive statistics, the z-values of the Wilcoxon signed-rank tests, and the effect sizes for parents' early maladaptive schemas, as experienced by themselves. Statistically significant decreases emerged at post-test in Emotional Deprivation, Mistrust/Abuse, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition-Seeking, Punitiveness and in the Total Score. The effect sizes are relatively small. The largest effect sizes (> 0.20) were observed for the Total Score, Mistrust/Abuse, and Dependence/Incompetence.

Table 6. Means, Standard Deviations, and Wilcoxon Signed-Rank Tests for Parents' Early Maladaptive Schemas ($N = 85$)

Young Schema Questionnaire	Pre-test		Post-test		Change		z-value ¹	Effect size ²
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Abandonment/Instability	1.99	0.63	1.93	0.70	0.06	0.51	-1.38	-0.11
Mistrust/Abuse	1.94	0.64	1.79	0.65	0.15	0.53	-2.78**	-0.22
Emotional Deprivation	2.05	0.93	1.91	0.99	0.14	0.63	-1.98*	-0.16
Defectiveness/Shame	1.41	0.58	1.30	0.50	0.11	0.51	-1.85	-0.15
Social Isolation/Alienation	1.82	0.84	1.73	0.86	0.09	0.50	-1.71	-0.14
Dependence/Incompetence	1.61	0.55	1.47	0.52	0.14	0.45	-2.64**	-0.21
Vulnerability to Harm or Illness	1.80	0.72	1.78	0.68	0.02	0.53	-0.02	0.00
Enmeshment/Undeveloped Self	1.75	0.73	1.59	0.70	0.16	0.53	-2.38*	-0.19
Failure	1.56	0.56	1.49	0.57	0.07	0.44	-1.35	-0.11
Entitlement/Grandiosity	2.26	0.78	2.24	0.75	0.02	0.71	-0.44	-0.04
Insufficient Self- Control/Self-Discipline	2.28	0.68	2.12	0.65	0.16	0.58	-2.18**	-0.17
Subjugation	1.93	0.76	1.83	0.81	0.10	0.49	-2.21*	-0.18

Young Schema Questionnaire	Pre-test		Post-test		Change		z-value ¹	Effect size ²
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Self-Sacrifice	3.32	0.95	3.22	1.02	0.10	0.93	-1.63	-0.13
Approval-Seeking/ Recognition-Seeking	2.33	0.83	2.18	0.83	0.15	0.61	-2.34*	-0.19
Negativity/Pessimism	2.20	0.78	2.06	0.73	0.14	0.64	-1.69	-0.13
Emotional Inhibition	1.96	0.74	1.93	0.82	0.03	0.64	-0.43	-0.03
Unrelenting Standards/ Hypercriticalness	2.94	0.81	2.83	0.85	0.11	0.79	-1.36	-0.11
Punitiveness	2.14	0.72	1.96	0.69	0.18	0.64	-2.32*	-0.18
Total Score	2.07	0.42	1.97	0.44	0.10	0.29	-3.12**	-0.25

Note. Scale 1-6. ¹ z-value of the Wilcoxon signed-rank test for the pre-test – post-test comparisons.

² Effect size: $r = z / \sqrt{N}$, *N* the number of pairs for the paired samples (2 x *N*).

p* < .05; *p* < .01; ****p* < .001.

Discussion

The aim of the current study was to conduct a preliminary evaluation of a newly developed Schema Therapy-based psychoeducational prevention program that can be implemented in group settings with children and their parents. The results supported our hypotheses, thus providing support for the effectiveness of the program in decreasing children's early maladaptive schemas and psychopathological symptoms and in increasing their strengths. Parents' early maladaptive schemas also decreased.

Children's Early Maladaptive Schemas

Initially, it is important to note that the most frequently reported early maladaptive schemas among children were Enmeshment/Undeveloped Self, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, and Insufficient Self-Control/Self-Discipline. The levels of these schemas were moderate, whereas on all other schemas children had low scores. These findings are similar to those from existing studies with nonclinical samples of adolescents (Muris, 2006; Roelofs et al., 2011; Van Vlierberghe et al., 2010).

After the intervention, there was a significant decrease in most early maladaptive schemas in children except for the Enmeshment/Undeveloped Self. Similar reductions in early maladaptive schemas have been found in the few other studies in which Schema Therapy or Schema Therapy-based programs were implemented on children and adolescents (Alizadeh et al., 2015; Roelofs et al., 2016; Salehi et al., 2017; Saravi et al., 2020). The rather unexpected increase in the schema of Enmeshment/Undeveloped Self at post-test may be attributed to the fact that this schema is functional and adaptive in this age group (i.e., 9-13 years), because it

reflects the close bond and the intense emotional sharing between children and parents (Ghamkhar Fard et al., 2014; Rijkeboer & de Boo, 2010); this bond was strengthened during the implementation of the program.

In sum, these findings provide empirical support to the validity of the new program. The decreases seem to be the result of the implementation of the principles, tools, and techniques of this Schema Therapy-based prevention program, which specifically addresses early maladaptive schemas. In this program, children were educated to identify their emotions, core emotional needs, schema modes, and coping styles and to systematically work on them. This is the essence of a Schema Therapy-based program (Roelofs et al., 2011, 2013; Van Vlierberghe et al., 2007, 2010).

Children's Strengths and Psychopathological Symptoms

Initially, it is important to note that the most frequently reported psychopathological symptoms or difficulties among children, as reported both by children and their parents, were Hyperactivity/Inattention, Conduct Problems, and Emotional Symptoms. The levels of these symptoms were low to moderate. These findings are in accordance with those of other studies worldwide (Brandenburg et al., 1990; Cury & Golfeto, 2003; Goodman et al., 2000; Holik et al., 2021) and in Greece in particular (Bibou-Nakou et al., 2001; Petanidou et al., 2014).

After the implementation of the program, there was a decrease in Emotional Symptoms, Peer Relationship Problems, and in the Total Score of difficulties as assessed by children. These findings are of value because children's self-reports of their difficulties, compared to parents' or teachers' reports, are considered as highly valid (Loose et al., 2020). The significant decrease in the Total Score of the Strengths and Difficulties Questionnaire is another important indicator of the effectiveness of the program, because the total score reflects mental health problems (Goodman et al., 2000). Existing research evidence indicates that children's early maladaptive schemas have significant links with psychopathological symptoms (e.g., Abdolazadeh et al., 2017; Alba & Calvete, 2019; Calvete, 2008; Calvete et al., 2013a; Ghamkhar Fard et al., 2014; Muris, 2006; Leung & Poon, 2001; Tariq et al., 2021; Tsouvelas et al., 2023; Van Wijk-Herbrink, et al., 2018; Yiğit, et al., 2018), therefore the decrease in the latter may be due, at least in part, to the decrease of the former. In addition, parents' participation –which is a strength of this prevention program– is likely to have contributed to children's positive outcomes, mainly through the reduction of parents' early maladaptive schemas (see next section).

Quite similarly, after the implementation of the program, there was a significant decrease, according to parents' reports, in children's Emotional Symptoms and in the Total Score of difficulties, as well as a significant increase in their Prosocial Behavior. These findings indicate that children and parents generally agreed regarding the positive effects of the program on the former. Parents did not

identify the decrease in Peer Relationship Problems, perhaps because they are “outsiders” as far as their children’s peer groups are concerned. However, they reported an increase in Prosocial Behavior, which is usually overt behavior, thus more easily observed by parents than by children themselves.

In sum, this new Schema Therapy-based program succeeded in reducing children’s emotional difficulties (i.e., anxious, depressive, and somatic symptoms) and social difficulties (i.e., in the peer group) and in increasing prosocial behavior. It is encouraging that there was a high degree of agreement between children and parents on the positive impact of the program on children’s mental health.

Parents’ Early Maladaptive Schemas

Initially, it is important to note that the most frequently reported early maladaptive schemas among parents were Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Approval-Seeking/Recognition-Seeking, Insufficient Self-Control/Self-Discipline, and Entitlement/Grandiosity. The levels of these schemas were rather low, whereas in Self-Sacrifice parents exhibited moderate levels. According to existing research, parents’ early maladaptive schemas are associated with dysfunctional parenting practices (Basso et al., 2019; Loose et al., 2020; Louis & Louis, 2015; Maçik et al., 2016; Sójta & Strzelecki, 2023; Young et al., 2003), early maladaptive schemas in their children (Gibson & Francis, 2019; Sundag et al., 2018; Zeynel & Uzer, 2020; Zonnevrijle & Hildebrand, 2019) and psychopathological symptoms in children (Gibson & Francis, 2019). Therefore, the reduction of these schemas in parents is of paramount importance.

After the implementation of the program, a significant reduction occurred in half of the early maladaptive schemas assessed: Emotional Deprivation, Mistrust/Abuse, Dependence/Incompetence, Enmeshment/Undeveloped Self, Subjugation, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition-Seeking, Punitiveness, and in the Total score. These findings justify the inclusion of parents in the program and provide support for the effectiveness of it. The psychoeducational group work enabled parents to identify their own and their children’s core emotional needs and their own schema modes and to work on ways to satisfy these needs. The fact that the satisfaction of core emotional needs runs contrary to the emergence of early maladaptive schemas may be one explanation for the reduction of the latter. Moreover, the content of the early maladaptive schemas that significantly subsided after the program is in line with the content of this program: parents experienced mutual support within the group, strengthening of their bond, free emotional expression, validation of their feelings, and secure experimentation with new behavioral styles (Farrell & Shaw, 2009).

However, it is important to note that three of the most frequently reported early maladaptive schemas, that is, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, and Entitlement/Grandiosity, did not change after the

intervention. This finding should be considered in the future implementation of the new program. More sessions in the program may be required to specifically target such core schemas that are resistant to change.

Limitations and Suggestions for Future Research

The main limitations of this study stem from the fact that it was conducted during the initial phases of the COVID-19 pandemic. As a result, the control group, which was assessed at pre-test, exhibited a high attrition rate and was excluded, the sample size was rather small, and although the program was conducted in-person before the onset of the pandemic, it had to be transferred on-line during the lockdown period. Therefore, future evaluation of the program should be done with a more rigorous experimental design including a control group and a follow-up assessment, with a larger and more representative sample, and with the same implementation mode all throughout the program. A more objective assessment of treatment fidelity should also be included. Nevertheless, the fact that the new psychoeducational prevention program can be implemented either in-person or on-line may be regarded as one of its main strengths.

The relatively small effect sizes of the change at post-test in all outcome variables may be attributed, at least in part, to the fact that the study was conducted in a nonclinical sample of children and parents, who had somewhat low mean scores on early maladaptive schemas and psychopathology and somewhat high scores in strengths before the intervention. However, it is important to note that such a psychoeducational prevention program –and not a therapeutic intervention as in most other relevant studies– resulted in statistically significant changes at post-test.

Another reason for the relatively small effect sizes may be the fact that the program was conducted during the COVID-19 pandemic, which may have influenced its implementation and outcome in various ways that could not be identified and controlled. Specifically, although the pre-test, which was conducted before the pandemic, showed low to moderate levels of early maladaptive schemas and psychopathological symptoms, these levels are likely to have risen during the pandemic (Urbańska & Słysz, 2023). Indeed, research evidence indicates that the well-being of children and parents significantly deteriorated during this period, worldwide and in Greece (e.g., Cachón-Zagalaz et al., 2020; Giannopoulou et al., 2022; Sancho et al., 2021). Therefore, the unprecedented global crisis of COVID-19 may have attenuated the positive impact of the new program on the participants.

Conclusion

The contribution of this study was the development of an evidence-based and developmentally appropriate psychoeducational group program for children and their parents, based on Schema Therapy, with the aim of preventing children's

psychopathology. Up to date, there are very few studies on the evaluation of Schema Therapy programs for children and adolescents and, to our knowledge, there is no other group prevention program based on Schema Therapy for both children and their parents. Despite the disruption caused by the COVID-19 pandemic during the implementation of the program, the significant decreases in most early maladaptive schemas of children and in many early maladaptive schemas of parents, as well as the significant decreases in children's psychopathological symptoms and increases in their strengths (as assessed by themselves and their parents) support the validity and the utility of the new program. Further in-person and on-line implementation of the newly developed program in larger community samples of children and their parents and assessment of its effectiveness are needed.

Authors' Notes

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Conflict of Interest. We have no known conflict of interest to disclose.

Data availability statement: The data are not openly available due to privacy/ethical restrictions but are available on reasonable request from the corresponding author.

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