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An Evaluation of the Effectiveness of the Programme

Moving Stories about Emotions

An Evaluation of the Effectiveness of the 'Moving Stories about Emotions' Programme in Supporting the Development of Emotional and Social Skills in Children Aged 5–8

Research report

Maria Maruszczyk
Sylwia Bedyńska
Michał Parzuchowski
Dorota Chałaczkiewicz

Key findings from the study

- The programme significantly improved children's social-emotional competences beyond the level observed in the active control group.
- The effects of the intervention persisted several weeks after the end of the sessions, indicating that the observed improvements were maintained over time.
- The comparability of the groups with regard to key controlled variables supports the validity of the comparisons between the intervention conditions.

Abstract

The aim of the study was to assess the effectiveness of the *Moving Stories about Emotions* programme (MSE) in developing the social-emotional competences of pre-school children. A randomised study design with an active control group was used, with the control group participating in an environmental education programme with an identical structure, thereby allowing for the control of non-specific intervention effects. Social-emotional competences were assessed using relevant subscales of the IDS-2 psychometric test at three time points. The groups did not differ significantly in terms of group size, demographic characteristics, parents' social capital, or the severity of developmental difficulties assessed by teachers. The intervention was associated with greater improvements in emotion recognition, emotion regulation, and the use of effective social strategies compared with the active control condition. These effects were also observed at the delayed measurement, providing evidence that the benefits of the programme were maintained beyond the immediate post-intervention period.

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Authors of the Report

Maria Maruszczyk
Ph.D. Sylwia Bedyńska
Ph.D. Michał Parzuchowski
Dorota Chałaczkiewicz

Expert Support

Ph.D. Blanka Poćwiardowska
Ph.D. Konrad Maruszczyk

Graphic Design

Anna Karwala

Text Editing

Lidia Kardasz

Project Team

Methodological Supervision

Dr Michał Parzuchowski,
Professor at SWPS University
Dr Sylwia Bedyńska,
Professor at SWPS University

Logistics

Maria Maruszczyk
Dorota Chałaczkiewicz
Paulina Kwiatkowska

Training Team

Dorota Chałaczkiewicz
Ania Szczepańska
Emilia Wiśniewska
Katarzyna Knapczyńska
Nika Rysińska
Justyna Przybyszewska
Monika Godzina
Natalia Szczepaniak
Pola Czunikin-Krasowicka

Research Team

Magdalena Stanisławiuk
Agnieszka Duszyńska
Anna Mikucka
Aleksandra Stolarska
Joanna Puławska
Marta Filipiak
Marta Sieńko
Anna Kołnierzak-Ciężak
Weronika Paszewska

Preschool Coordinators

Anna Szawłowska-Woźniak
Anna Ponenta Belniak
Kinga Kuczyńska
Monika Jasik
Ewa Lichocka
Magdalena Grządka
Joanna Teryks
Monika Rusaczonek
Renata Dolega
Dorota Włodarczyk
Agnieszka Kamińska
Monika Wiśniewska
Edyta Czerwińska
Anna Kosińska
Monika Dudzińska

Control Group Formation

Anna Konik
Anna Karwala
Wioletta Szuba
Maria Maruszczyk

Financial Logistics

Tadeusz Kluska

Translation

Zuzanna Tajchman

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Project Implementer

Characters from the MSE program

Gruntownia Centre for Quality Training
77 Traugutta Street
42-215 Częstochowa
Poland

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Theoretical introduction

Since the 1990s, there has been a growing interest in prevention programmes based on strengthening an individual's psychosocial resources designed for various age groups (Ostaszewski, 2014). These resources function as protective factors, with emotional and social competencies representing particularly important protective mechanisms among children and young people (Szymańska, 2012). The role of emotional and social competences has also been examined in the context of risky behaviours among young people. For instance, research commissioned by the National Centre for Addiction Prevention identified emotional competences—particularly self-regulation and constructive anger management—as significant protective factors against risky behaviours among children in Years 4–8 of primary school (Appelt, 2025). Accordingly, the promotion and development of emotional and social competences may be regarded as a fundamental component of effective prevention strategies targeting children and young people. Such approaches aim to strengthen individual resources from the earliest stages of education (Ostaszewski, 2016).

The catalogue of social-emotional competences proposed within psychological research is highly extensive, while their precise definition remains the subject of ongoing debate and empirical investigation. For the purposes of the present study, the theoretical framework adopted is the concept developed by Hinsch and Pfingsten (2002, as cited in Jaworowska, Matczak, & Fecenec, 2018), according to which social-emotional competences are understood as complex skills that enable individuals to respond appropriately in emotional and social situations within interpersonal relationships.

These complex emotional and social competences constitute a superordinate category encompassing partial emotional competences, such as the ability to recognise emotions accurately, and partial social competences, such as the ability to develop behavioural strategies in situations involving interaction with others. The distinction between these sub-competences is made primarily for methodological and measurement purposes, as separating them in practice is extremely difficult due to their close interdependence and mutual influence (Jaworowska, Matczak, & Fecenec, 2018).

The development of social-emotional competences has been widely addressed in psychological theory and developmental research. John Bowlby's attachment theory (1969) and Ainsworth's research (1978) indicate that the quality of early caregiver–child relationships plays a crucial role in shaping emotional and social competences, thereby influencing later social functioning. Similarly, Erikson (1950) emphasised that the successful resolution of psychosocial tasks during the pre-school period

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constitutes an important foundation for the development of interpersonal competences.

Developmental studies further demonstrate that between the ages of two and six there is a period of particularly dynamic growth in the understanding of one's own emotions and those of others (Harwas-Napierała & Trempała, 2000). Moreover, early conversations concerning emotions have been shown to predict a more advanced understanding of emotions in later developmental stages (Dunn, 1991, as cited in Schaffer, 2005).

The importance of emotional competence is also emphasised in the framework developed by Salovey and Mayer (1990), according to which emotional competence encompasses the perception, understanding, and regulation of emotions, while its social dimension is associated with prosocial behaviour, cooperation, and constructive conflict resolution. Within this framework, this set of skills and knowledge is conceptualised as emotional intelligence (Salovey & Mayer, 1990).

The understanding of emotional and social competences as a complex and multidimensional construct is also reflected in empirical research, which tends to focus on their practical manifestations rather than on establishing a single, precise definition. For example, Denham (2006) defines the social dimension of these competences as the set of abilities enabling prosocial behaviours, including cooperation, the provision of support, and constructive conflict resolution.

Accordingly, there is broad consensus among researchers and clinicians that emotional and social competences constitute an essential aspect of human functioning and play a fundamental role in the development and maintenance of positive interpersonal relationships (Domitrovich et al., 2017). Moreover, strong emotional and interpersonal skills are considered significant protective factors against outcomes such as peer rejection and, consequently, the later engagement in high-risk behaviours, including substance-related and behavioural addictions. (Szymańska, 2012).

The growing recognition of the importance of these competencies has led to the development of a theoretical framework known as SEL – Social and Emotional Learning (CASEL, 2020), developed by CASEL (Collaborative for Academic, Social, and Emotional Learning). The SEL model identifies five key competencies:

- self-awareness,
- self-management,
- social awareness,
- relationship skills,
- responsible decision-making.

In the SEL model, social and emotional competences include, amongst others, self-awareness, self-management and relationship skills, which are fundamental developmental processes determining a child's ability to function effectively in a social environment (CASEL, 2020). The characteristics of selected dimensions relevant to the research are briefly described below.

Self-awareness is understood as the ability to understand one's own emotions, thoughts and values, as well as their impact on behaviour. It encompasses skills such as: recognising one's own emotions, linking feelings, values and thoughts,

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experiencing a sense of self-efficacy, and integrating personal and social identity.

Self-management refers to the capacity to manage emotions, thoughts, and behaviours effectively across a variety of situations, while also pursuing personal goals and aspirations.It includes, amongst other things: regulating one's own emotions, identifying and applying strategies for coping with stress, and showing courage in taking the initiative.

Relationship skills encompass the ability to establish and maintain healthy, supportive relationships and to function effectively in socially and culturally diverse environments. This domain includes competencies such as constructive conflict resolution, effective communication, and the development of positive interpersonal relationships.

The three areas outlined above correspond to the principal components of social-emotional competences associated with the recognition and regulation of emotions, together with the application of constructive coping strategies in social situations. These dimensions are also reflected in other theoretical approaches, including the framework proposed by Salovey and Mayer (1990).

Recognising emotions and applying social strategies is also linked to the constructs of mentalisation and theory of mind, both of which contribute to a more comprehensive understanding of social-emotional competences. Mentalisation, defined as the ability to interpret one's own and others' behaviours by referring to mental states (Allen et al., 2014), forms the basis for emotion regulation and, consequently, relationship building.

The development of theory of mind involves the progressive understanding that other individuals possess independent beliefs, intentions, and perspectives. This cognitive capacity is closely associated with empathy and broader social competences (Wellman, 2014). Research by Smogorzewska and colleagues (2016) indicates that supporting narrative and symbolic representation of mental states contribute to the development of empathy, emotion recognition, and adaptive social behaviour, while also reducing feelings of loneliness in children (Smogorzewska et al., 2024). These outcomes are particularly relevant in light of evidence linking peer rejection to increased risk of maladaptive behaviours (Szymańska, 2012). These approaches provide a framework for designing SEL programmes based on deep psychological processes, rather than merely on behavioural training.

Research consistently demonstrates that accurate emotion recognition is associated with more effective social functioning, higher quality peer relationships, and a lower risk of rejection (Denham, 2006; Smogorzewska, 2024). Similarly, research on social strategies shows that children who are well accepted by their peers are less likely to use aggressive or avoidant social strategies and are more likely to engage in behaviours aimed at de-escalating and resolving conflicts constructively (Bryant, 1992).

The effectiveness of interventions designed to develop emotional and social skills has been confirmed by numerous meta-analyses. For example, Taylor and colleagues (2017) conducted a meta-analysis of studies on the long-term effects of SEL programmes, incorporating data from 82 studies and 97,000 participants, who were monitored for an average of between 6 months

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and 3.75 years after the intervention ended. The results showed that the benefits of SEL programmes are sustained over time and include long-term improvements in emotional and social competences, psychosocial functioning, and school adjustment.

Durlak et al. (2011) analysed 213 SEL programmes involving over 270,000 children and adolescents from pre-school through secondary education, implemented within school settings. Their findings demonstrated that participation in SEL programmes was associated with higher levels of social-emotional competences, prosocial behaviour, psychological well-being, and academic achievement, alongside lower levels of emotional and behavioural difficulties.

Furthermore, Durlak and colleagues (2011) emphasized that the effectiveness of interventions grounded in SEL theoretical frameworks increases when programmes are implemented with high fidelity, include an adequate number of sessions, and are based on clearly structured and sequential activities. Although this analysis did not directly test quantitative relationships, the authors note that programmes that are more sustained, longer in duration, and implemented consistently yield significantly greater effects in terms of social-emotional competencies and prosocial behaviours.

A more comprehensive account of the "dose–effect" relationship in Social and Emotional Learning (SEL) interventions is provided by Jones et al. (2021) in an extensive review of research on interventions grounded in SEL-related theoretical frameworks, covering several hundred programmes implemented in pre-school and primary school settings. The authors concluded that such programmes are most effective when they involve regular and frequent sessions (at least once a week), are delivered for a minimum of 4–6 months, and maintain a high level of implementation fidelity (strict adherence to the materials, planned activities and methods). Their findings further indicate that greater programme intensity, higher consistency of implementation, and better teacher preparation are associated with stronger positive outcomes in children's emotional regulation, social functioning, and prosocial behaviour.

Despite the global development of interventions centred on the SEL model, findings concerning the effectiveness of programmes designed for pre-school children remain inconclusive. The Zippy's Friends programme, implemented in more than 30 countries, has demonstrated positive outcomes in certain studies (e.g. Mishara & Ystgaard, 2006). However, systematic reviews and more recent evidence syntheses indicate considerable variability in programme effectiveness, with reported outcomes ranging from modest effects to results that are either short-lived or statistically insignificant (Szwejka et al., 2024). These inconsistencies underline the importance of designing interventions that are tailored to children's age and developmental needs.

In accordance with the concept of early prevention proposed by Deptuła (2018), the most effective interventions are those introduced at the earliest possible developmental stages. Within this framework, programmes aimed at supporting the development of emotional and social competences are regarded as among the most effective forms of intervention for pre-school children (Odom, 2005; as cited in Deptuła et al., 2018).

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Despite the increasing number of programmes designed to foster emotional and social competences, Poland still lacks interventions targeting pre-school children whose effectiveness has been conclusively demonstrated through rigorous empirical evaluation. Existing programmes have not yet been assessed using active control groups or standardised psychometric measures. One example is the pilot evaluation of the *Moving Stories about Emotions* programme (MSE) conducted by Gajda (2018). However, the study was based on a relatively small sample size. The evaluation employed the IDS-2 Social-Emotional Skills domain, and the analyses revealed statistically significant changes in selected variables measured by specific subscales, although no significant main effect was identified.

Accordingly, this research project seeks to determine whether participation in the *Moving Stories about Emotions* programme contributes to the development of emotional and social competences among pre-school children compared to an active control group, and whether any observed effects are sustained over time.

Aim of the study

The aim of the *Moving Stories about Emotions* programme is to improve the ability of children participating in the workshops to recognise social situations, identify and name emotions, and regulate emotions in a constructive manner.

Accordingly, the research question of the present study is as follows: to what extent does preventive intervention (participation in the programme) improve the level of emotion recognition and regulation, as well as the level of recognition of social situations, among pre-school children?

Hypotheses

1. Children in the control and experimental groups do not differ in their ability to name and regulate emotions and recognise social situations during the first measurement (T1, prior to the interventions).

2. Children in the experimental group will demonstrate higher competence in naming, regulating emotions and recognising social situations compared to the control group immediately after the conclusion of the preventive interventions (T2, post-intervention).

3. In the 3-month period following the intervention, the levels of naming, emotion regulation and recognition of social situations among children in the experimental group will remain higher than those of children in the control group (T3, 3 months after the intervention).

4. The frequency of the intervention increases the levels of naming emotions, emotional regulation and recognition of social situations among children in the experimental group.

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Variables

The study includes the following variables:

- The independent (grouping) variable is the type of intervention implemented (preventive intervention: the recommended programme *Moving Stories about Emotions* vs. the control programme on environmental education, *Moving Stories about Ecology*).

- The dependent variable is the level of emotional and social competence (including specific subscales relating to the recognition of social situations, naming emotions and regulating emotions).

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Method

Participants and sample selection criteria

A total of 722 children aged 5–8 years (M = 6.49, SD = 0.64) participated in the study, exceeding the initial target sample size of 618. Participants were assigned to either the experimental group (n = 360) or the control group (n = 362). The experimental group included 172 girls and 188 boys, and the control group included 178 girls and 184 boys. In total, the sample comprised 350 girls (48.5%) and 372 boys (51.5%).

A chi-square test of independence indicated that gender distribution did not differ significantly between the experimental and control groups, $\chi^2(1, N = 722) = 0.14$, $p = .708$. Likewise, the distribution of children across intervention frequency conditions did not differ significantly by group, $\chi^2(2, N = 722) = 2.94$, $p = .230$. Descriptive statistics for age by group and intervention frequency are presented in Table 1, and corresponding frequency distributions are reported in Table 2.

Initially, the study was designed for children aged 5–6 years. However, inspection of participants' ages indicated that a subset were 8 years old. This reflected contextual factors such as deferred school entry and continued placement of some children in preschool groups. In light of these circumstances, and for ethical and pragmatic reasons, all children within the selected preschool groups were retained in the study and included in the workshops. This decision was also consistent with the intervention format, which is delivered at the level of the whole preschool group rather than at the level of individual age cohorts. This inclusion is further supported by the measurement properties of the IDS-2 Social-Emotional Skills domain, which is administered identically for children aged 5–8 years, with age-specific normative standards applied during interpretation. In addition, the *Moving Stories about Emotions* programme is designed for entire preschool groups; therefore, extending the sample to include older children was consistent with its objectives.

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Table 1. Number of participants by programme type (emotions vs. ecology) and intervention frequency (intensive: twice weekly; standard: once weekly; distributed: once every three weeks).

Frequency of intervention	Moving Stories about Emotions	Moving Stories about Ecology	Total
Intensive	136	159	295
Standard	135	119	254
Distributed	89	84	173
Total	360	362	722

Note. N = 722. „Intensive" refers to sessions conducted twice weekly; „Standard" refers to sessions conducted once weekly; „Distributed" refers to sessions conducted once every three weeks.

Table 2. Descriptive statistics for participants' age by programme type and intervention frequency.

Type of intervention	Frequency	M	95% CI		SD
			Lower limit	Upper limit	
Moving Stories about Emotions	Intensive	6,47	6,38	6,57	0,56
	Standard	6,35	6,27	6,43	0,48
	Distributed	6,72	6,62	6,82	0,45
Moving Stories about Ecology	Intensive	6,77	6,65	6,89	0,77
	Standard	6,24	6,11	6,36	0,69
	Distributed	6,37	6,25	6,48	0,53

Note. M = Mean; SD = Standard Deviation; CI = Confidence Interval.

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We also examined whether the experimental and control groups differed with respect to parental educational attainment as an indicator of family social capital. The distribution of children across groups did not differ significantly based on parents' level of education, $\chi^2(3, N = 405) = 2.94$, $p = .230$. The number of children by group and parents' education is presented in Table 3.

Table 3. Number of children by intervention type and parents' educational attainment.

Parents' educational attainment	Moving Stories about Emotions	Moving Stories about Ecology	Total
Primary	3	5	8
Secondary	21	27	48
During university studies	8	11	19
Completed higher education	171	159	330
Total	203	202	405

Note. N = 405. The total reflects the number of completed parental questionnaires containing data on educational attainment.

Table 3 indicates that the sample was predominantly composed of children whose parents reported completing higher education, whereas relatively few children had parents with primary or secondary education. In addition, 15 respondents did not provide information on educational attainment. This pattern also reflects the discrepancy between the total child sample (N = 722) and the number of completed parental questionnaires (n = 420).

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Research tools

Type of intervention

Experimental intervention — the recommended programme Moving Stories about Emotions

The intervention applied in the experimental group was the recommended programme *Moving Stories about Emotions*, available in the database at programyrekomendowane.pl. This is the first Polish preventive programme for children aged 4–5 to receive a formal recommendation from the National Centre for Addiction Prevention, the Centre for Educational Development, and the Institute of Psychiatry and Neurology, and thus holds a dual endorsement from the Ministry of Health and the Ministry of Education.

In the present study, the programme was implemented in accordance with its standardised protocol. No modifications were introduced: neither additional components were added nor any elements typically included in Polish implementations were omitted.

Below is a description of how the practical implementation of *Moving Stories about Emotions* works.

The programme consists of 10 workshops aimed at entire preschool groups. The sessions focus on recognising and naming emotions — from basic emotions to more complex ones — and finding ways to constructively regulate emotional tension. These competencies are intended to support children in understanding complex social situations and responding appropriately in interpersonal contexts. In addition to child-focused sessions, the programme also includes components directed at parents and teachers. A detailed description of the implementation structure is provided below.

Workshop topics for children:

1. Discovering Emotions
2. Learning to Wait
3. When Anger Takes Over
4. When Someone Is Feeling Sad
5. When Fear Holds Us Back
6. When You Feel Too Shy to Join In
7. When Things Don't Go as Planned
8. When Someone Else Has What You Want
9. When You Keep Going
10. The Joy of Being Together

The workshops for children lasted between 45 and 60 minutes, in accordance with the programme guidelines. Each session was conducted by two facilitators, as required in the standard implementation protocol. The facilitators held higher education qualifications in relevant disciplines (psychology or pedagogy) and had completed a 32-hour training course certifying them to deliver the programme. The workshop content was based on original stories included in the

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facilitator's handbook for *Moving Stories about Emotions*. Thus, the standard implementation of the programme, which has been in operation in Poland since 2015, was followed.

During the sessions, the facilitators also used intuitive instruments (drums, kalimbas, tingshas, gongs, thunder cups and others), both melodic and non-melodic, which is a regular feature of the programme. Through active engagement with narrative-based workshop activities, children learnt how to:

- recognise their own and others' emotions,
- correctly name emotional states,
- communicate in accordance with the principles of Nonviolent Communication, supported by instructor modelling of appropriate communication behaviours,
- control their impulses, including waiting their turn,
- reduce the intensity of unpleasant feelings accompanying emotions such as anger, fear, sadness, disappointment or jealousy,
- apply various strategies related to self-regulation of emotional tension.

A standard component of the programme includes educational activities directed at both teaching and non-teaching staff, as well as parents and caregivers.

Teachers participating in the study were provided with an e-book titled "*How to Wisely Support Children's Emotions in Preschool?*". The resource contained detailed descriptions of the workshops, sets of guiding questions for discussing the stories with children, and prompts for adult self-reflection, particularly regarding their own strategies for emotional regulation. The structure of the e-book included:

- descriptions of the workshops,
- questions designed to explore and deepen the themes addressed in the sessions,
- relaxation stories,
- reflective questions concerning parenting and educational styles,
- practical exercises to be implemented with the group, together with suggestions for their subsequent discussion.

Parents and caregivers received a complimentary set of educational materials – an e-book titled "*How to Wisely Support Children's Emotions at Home?*". It included an overview of secure attachment theory as well as principles of communication grounded in the approach of Non-Violent Communication. The structure of the material was similar to that for teachers and included, amongst other things, descriptions of workshops, reflective and discussion-oriented questions, and relaxation stories

In line with the programme protocol, two-hour educational sessions focusing on emotion regulation were also conducted for teachers and for parents or caregivers.

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An additional tool employed in work with children was the *Mood Meter*, developed by the Yale Center for Emotional Intelligence. This instrument is designed to support children in recognising and understanding emotions by placing them on a two-dimensional scale:

- a vertical axis representing the intensity of emotion (low versus high energy),
- a horizontal axis representing the affective valence (pleasant versus unpleasant feelings).

Within the Mood Meter framework, emotional states are organised into four colour-coded quadrants:

- red — high-energy / unpleasant feelings,
- yellow — high-energy / pleasant feelings,
- blue — low-energy / unpleasant feelings,
- green — low-energy / pleasant emotions.

The Mood Meter was provided to teachers and remained available within the preschool groups to facilitate children's everyday practice in recognising emotions through the use of characters featured in the programme *Moving Stories about Emotions*. Instructions on how to use the Mood Meter were discussed at a meeting for teachers and were also available in an e-book.

Following each workshop session, children received colouring materials intended to encourage discussions about emotions within the home environment. This element constitutes a standard component of the programme and is designed to support the transfer and reinforcement of acquired competences beyond the preschool setting.

As part of the research project, the following frequency of sessions was implemented:

- Intensive format — sessions conducted twice weekly over a period of approximately five weeks;
- Standard format — sessions conducted once weekly over approximately ten weeks;
- Distributed format — sessions conducted once every two to three weeks, with the entire programme extending across approximately seven to eight months.

Control intervention — Moving Stories about Ecology

The present study employed an active control group design. In studies designed to determine the effectiveness of psychological interventions, standards used in medical research — based on randomised controlled trials (RCTs) — were adopted. These standards were initially formalised in the Consolidated Standards of Reporting Trials (CONSORT-2) guidelines and subsequently extended within the SPIRIT framework for studies examining psychological interventions.

Within these guidelines, researchers emphasise the potential occurrence of placebo effects not only in medical studies but also in investigations assessing the effectiveness of psychological interventions (Bąbel, 2006). Consequently, it is recommended that studies employ active control groups whose participants engage in activities

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resembling the tested intervention in form and structure, while excluding elements expected to produce the targeted psychological effect (Butcher et al., 2022). The use of active control groups has become a well-established practice in psychological research (e.g. Smoktunowicz et al., 2024).

This form of active control group was employed in the research project through an ecology module, which served as a control condition. The inclusion of such a control group was essential in order to demonstrate that any observed effects of the intervention resulted from the psychological mechanisms underlying its theoretical framework, rather than from non-specific placebo effects associated with participation in organised activities alone.

Accordingly, an ecology-focused programme was developed to mirror the structure of the recommended *Moving Stories about Emotions* intervention with regard to the number of workshops, meetings for parents/caregivers and teachers, and accompanying educational materials, including e-books. However, all content directly related to emotions and emotional regulation was deliberately excluded.

The storylines of the fairy tales featured the same characters — Mitka, Kalimba and the Green Prince — but in the control programme, these characters struggled with behaviour related to ecology. The characters threw rubbish into the forest, sorted waste incorrectly or failed to care for natural resources. As in the programme on emotions, the characters faced problems requiring a solution; however, in the control sessions, the subject matter of the activities was entirely different. Within the control sessions, facilitators did not discuss emotions or ask children to reflect on their own feelings or those of the story characters. Instead, the sessions focused exclusively on cognitive and educational content related to environmentally responsible behaviour.

During the sessions in the control group, intuitive tools and hand puppets were also used, and fairy-tale characters were introduced — mirroring the formal structure of the experimental intervention. The sessions were held with the same frequency (twice a week vs. once a week vs. once every three weeks). Participants in the active control condition attended workshops focused on environmental education.

The topics of the subsequent sessions were:

1. waste sorting,
2. recycling, i.e. reusing materials,
3. zero waste, i.e. reducing the amount of waste produced at household level,
4. reducing food waste,
5. conservation of natural resources,
6. energy saving,
7. reducing plastic production,
8. protecting air quality,
9. protecting water quality,
10. preventing a lack of contact with nature.

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The control group's workshops were prepared by an external expert specialising in environmental education for preschool children, and the content was adapted to the age of the participants. Similar to the experimental intervention, the sessions incorporated elements of drama and narrative-based activities grounded in fairy-tale plots. Several of the original stories were adapted to incorporate environmental themes. For example, the mine featured in the emotional-competence version of the programme was replaced with a waste disposal site, while the character Dyzio the Miner was portrayed as taking up employment in materials recycling following the closure of the mine.

E-books corresponding to the materials provided in the experimental condition were also developed and distributed to the parents, caregivers, and teachers of children participating in the control group. In addition, parallel session plans for caregivers and teachers were prepared and implemented in accordance with the programme schedule. The topics concerned ecological practices within both preschool and home environments.

As a result, the *Moving Stories about Ecology* programme was created to closely replicate the structure, methods of delivery, and supplementary materials characteristic of the *Moving Stories about Emotions* intervention. The only component that was not reproduced in the control condition was the Mood Meter chart. However, this omission was not considered likely to have substantially influenced the outcomes of the study.

The selection of ecology as the overarching theme for the control condition was deliberate rather than incidental. Ecological issues constitute an important area of social concern, and engagement in environmentally responsible actions may itself be regarded as a form of prosocial behaviour oriented towards the protection of the natural environment. At the same time, the formal and methodological structure of the programme remained identical across conditions. Consequently, the only substantive difference between the experimental and control interventions was the inclusion of content specifically designed to develop emotional and social competences in the experimental programme.

Process evaluation — measuring the extent to which the intervention was implemented as planned

To assess the extent to which the intervention was implemented in accordance with the study protocol and to identify any deviations from the intended procedure, a process evaluation was conducted for each child group. As a part of this, facilitators delivering both experimental (emotion-focused) and control (ecology-focused) conditions provided systematic evaluations of the implementation fidelity of each workshop session conducted with children.

Each facilitator completed a structured post-session report documenting the activities carried out. These reports included a range of process-related indicators; the specific variables collected are presented in Table 4.

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Table 4. Process evaluation report by the facilitator of the children's sessions.

Category	Evaluation aspect / Question	Answer
I. ORGANISATION AND FRAMEWORK		
Workshop organisation	Date of the workshop and name of the facilitator	Qualitative description
	Were the teachers in the group of children informed	Yes / No
	about the workshops?	Yes / No
	Did the session start on time?	Duration in minutes
	How long did the session last?	Qualitative description
	Did any disruptions occur?	Qualitative description
II. IMPLEMENTATION (KEY ELEMENTS)		
Introduction to the workshop	Was there a recap of the last story?	Yes / No
	Welcome / Name round	Yes / No
Main phase: telling the story	Getting into character – were there stickers/hand puppets?	Yes / No
	Seated pantomime	Yes / No
	Pantomime in motion	Yes / No
	Pantomime in motion – did the children walk around the room?	Yes / No
	The problematic character – was it portrayed?	Yes / No
	The central character – were there puppets or props?	Yes / No
	The problematic character – reactions: did the children react to the characters' emotions/behaviour, and were they able to talk to the character?	Yes / No
	Stepping out of the role	Yes / No
	Deviations from each element: getting into character/pantomime whilst seated/pantomime in motion/problematic character?	Qualitative description

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III. DISCUSSION AND DEBATE		
Summary of the story	Discussion – was this element present?	Yes / No
	Discussion – was attention paid to the children's emotions?	Yes / No
	Discussion – was attention paid to environmental issues?	Yes / No
	Were the characters' feelings correctly identified and named? OR were non-eco-friendly behaviours named?	Yes / No
	Did the children suggest their own ideas for regulating emotions? OR did the children suggest their own ideas for eco-friendly behaviour?	Yes / No
	Was there a reference to the emotions and experiences the children have in their own lives? (Do you ever feel that way too?) OR was there a reference to the environment and the children's experiences in their own lives? (Can you do that too?)	Yes / No
Qualitative data — deviations and comments from the facilitators	Comments on the achieved objectives	Qualitative description
	Comments on individual children's issues	Qualitative description
	Comments on group issues	Qualitative description
	General comments on implementation	Qualitative description

Note. This table outlines the structure of the process evaluation report completed by facilitators after each workshop session to assess implementation fidelity.

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Measurement of children's emotional and social competences using the Intelligence and Development Scales (IDS-2)

The measurement of emotional and social competences was carried out using the Intelligence and Development Scales – Second Edition (IDS-2) test battery, which is designed to assess children and adolescents aged between 5 and 20. The IDS-2 consists of 30 subtests and enables the assessment of multiple domains of functioning in children and adolescents. In addition to cognitive functions, such as intelligence, it also allows for the assessment of social and emotional competence (Jaworowska, Matczak, Fecenec, 2018).

The emotional and social competence domain in the IDS-2 is assessed using three subtests:

- emotion recognition,
- emotion regulation,
- social strategies.

The understanding of social competence presented in the theoretical introduction to this report forms the basis of the social-emotional module of the IDS-2 test, in which emotion recognition, emotion regulation and social strategies are treated as complementary but distinct aspects of these skills (Jaworowska, Matczak, Fecenec, 2018). Accordingly, the operationalisation adopted in the present study is directly grounded in the literature on emotional and social development. The IDS-2 subscales assess those processes regarded as key predictors of psychosocial adaptation in children of pre-school age.

The assessment is conducted individually with a child by a qualified psychologist holding a master's degree. Completion of all tasks included in the selected IDS-2 scale requires approximately 15 minutes.

The emotion recognition test involves identifying and naming emotions based on the facial expressions of the people depicted in the photographs. Each emotional expression is shown twice — once in a photograph of a girl and once in a photograph of a boy — and includes both basic emotions, such as happiness, and more complex emotional states, such as surprise.

The psychologist presents the child with the photographs one by one, asking which emotion the person in the picture is feeling. The child's responses are coded as either correct or incorrect. The task includes a total of 10 photographs representing the following emotions: happiness, anger, fear, sadness, and surprise, with each emotion presented twice. Each response is scored dichotomously: a correct answer receives 1 point, whereas an incorrect answer receives 0 points. In total, the child can achieve a score ranging from 0 to 10 points in this test.

The emotional regulation test assesses children's ability to identify ways of coping with negative emotions, such as anger, fear, and sadness. The strategies identified by participants are subsequently coded into categories reflecting their level of adaptiveness: adaptive strategies, other adaptive strategies, and non-adaptive strategies. Non-adaptive strategies are understood as behaviours that may temporarily reduce emotional tension but are potentially harmful either to the individual or to others, for example through the abandonment of personal goals, avoidance

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behaviours, or actions contributing to reduced self-esteem.

During the test, the psychologist presents the child with photographs depicting individuals expressing specific emotions and simultaneously reads short stories explaining the contextual causes of these emotional states. The child is then asked to suggest what advice could be given to the person in the story in order to help them stop feeling angry, frightened, or sad. Two separate scenarios are presented for each emotion assessed. For example, in the task 'Playing Together', the child is shown a photograph of a boy with an angry expression on his face. The psychologist then states: "*Imagine that this boy is angry because the other children do not want to play with him.*" Subsequently, the child is asked: "*What advice could you give this boy so that he is no longer angry?*"

In the emotion regulation subtest, the child is presented with photographs illustrating emotional expressions and listens to a total of six short stories, comprising two scenarios for each of the following emotions: anger, fear, and sadness.

The child's responses are assessed using a three-point scoring scale ranging from 0 to 2 points, in accordance with the standardised scoring key. Responses classified as active adaptive emotion regulation strategies are awarded 2 points. Responses identified as adaptive emotion regulation strategies receive 1 point, whereas responses categorised as non-adaptive forms of emotion regulation receive 0 points. Overall, the total score obtainable in the emotion regulation subtest ranges from 0 to 12 points.

The social strategies subtest assesses the child's ability to identify the most appropriate behavioural strategy in a given social situation, drawing on competencies related to problem-solving, interpersonal relationships, and prosocial behaviour. Its score reflects competence in more complex social-emotional skills that build upon the less complex abilities assessed in the preceding two areas, namely emotion recognition and emotion regulation. Consequently, responding successfully to these items requires the integration of knowledge and skills from both domains (Jaworowska, Matczak, & Fecenec, 2018). The situations presented within the test involve interactions with a range of social partners, including strangers, family members, and peers or friends.

During the administration of the social strategies subtest, the psychologist presents the child with an illustrated board depicting a specific social situation and reads the corresponding narrative aloud. These tasks are considered the most complex within the emotional and social competence scale, as they require the child to indicate what a given person should say or do in response to the situation presented. The scenarios typically involve interpersonal difficulties, such as not having a prepared gift or a sandcastle being destroyed, and therefore represent the highest level of complexity within the domain of social-emotional functioning assessed by the scale.

In this subtest, the child is presented with six illustrations depicting different social situations, each accompanied by a narrative read by the researcher. Responses are evaluated using a four-point scale ranging from 0 to 3 points. Answers that contribute to conflict or its escalation—such as lying, insulting others, or rejecting requests without justification—are assigned 0 points. The total score obtainable in the social strategies subtest ranges from 0 to 18 points.

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The overall level of social-emotional competence is calculated by summing the scores from the three IDS-2 subtests: emotion recognition, emotion regulation, and social strategies. The resulting raw score can subsequently be transformed using age-specific normative data, in accordance with the procedures specified in the test manual. This procedure yields either a standardised composite score for overall social-emotional competence or standardised scores for each of the individual components, namely emotion recognition, emotion regulation, and social strategies.

The reliability of the social-emotional competence measures was assessed using the test–retest method and was found to be satisfactory (Jaworowska, Matczak, & Fecenec, 2018), indicating a relatively high stability of the obtained results over time. The reliability coefficient for the overall index was high, approaching 0.80, particularly in younger age groups, including children aged 5–6 years.

Measurement of Developmental Difficulties Using the Strengths and Difficulties Questionnaire (SDQ)

The *Strengths and Difficulties Questionnaire* (SDQ), developed by Robert Goodman (2005), is a screening instrument designed to assess developmental difficulties in children and adolescents aged between 2 and 17 years. The questionnaire is widely used both in scientific research and in professional diagnostic practice by educators, teachers, and psychologists. A Polish adaptation of the instrument is also available (Skoczeń, 2018). In the present study, the SDQ was completed by teachers responsible for assessing each child participating in the research project.

The questionnaire consists of 25 statements, of which 10 relate to the child's strengths, 14 describe behavioural or emotional difficulties, and one item is considered neutral. Each statement is rated using a three-point response scale comprising the options: "*not true*", "*somewhat true*", and "*certainly true*".

The items are organised into five subscales:

- Emotional symptoms — example item: "*Often complains of headaches, stomach aches or feeling unwell.*"
- Conduct problems — example item: "*Often fights with or bullies other children.*"
- Peer relationship problems — example item: "*Other children pick on or bully him/her.*"
- Hyperactivity/inattention — example item: "*Easily distracted, finds it difficult to concentrate.*"
- Prosocial behaviour — example item: "*Helpful if someone is hurt, upset or feeling ill.*"

The first four subscales collectively constitute the *Total Difficulties Score*. The fifth subscale, prosocial behaviour, assesses the child's social resources rather than developmental difficulties and is therefore not included in the total score. The present study employed the extended version of the SDQ, which includes additional questions concerning the child's developmental difficulties. Within this section, teachers assessed whether the child demonstrated a particular type

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of problem and, if applicable, indicated the duration of the observed difficulties.

During data analysis, each item was assigned a score ranging from 0 to 2. For Items 1–20, which assessed difficulties, a score of 0 indicated the absence of a problem, 1 indicated that the problem was partially present, and 2 indicated that the problem was definitely present. For Items 21–25, which assessed prosocial behaviours, a score of 0 indicated the absence of the behaviour, 1 indicated that the behaviour was partially present, and 2 indicated that it was definitely present.

This response coding allows the severity of the child's difficulties to be assessed across four problem scales. The Total Difficulties Score provides an overall indicator of the severity of behavioural and emotional difficulties. The total SDQ score ranges from 0 to 40 points. Scores of 0–11 indicate the absence of clinically significant difficulties, scores of 12–15 fall within the borderline range, scores of 16–18 indicate elevated levels of difficulties, and scores of 19–40 reflect the highest level of behavioural and emotional difficulties (Goodman, 2005).

In this research project, the SDQ questionnaire was employed primarily to verify the comparability of the study groups with regard to the level of behavioural and emotional difficulties observed by teachers working with the participating children. Accordingly, only the *Total Difficulties Score* was included in the statistical analyses and used to compare the two experimental conditions: the emotion-focused intervention and the environmental education control condition.

Detailed information regarding the questionnaire is available on the official SDQ website.

Measuring parents' social capital using the Questionnaire for Measuring Individual Social Capital

The *Questionnaire for the Measurement of Individual Social Capital* was developed by Styła (2009) as an instrument designed to quantitatively assess an individual's level of social capital. Two versions of the questionnaire were created by the author; in the present study, the abbreviated 20-item version, referred to as KPIKS-20, was employed. The individual test items were generated on the basis of the available literature on social capital and supplemented with suggestions proposed by Van der Gaag and Snijders (2004).

The questionnaire items were assigned to five domains of human functioning, which had previously been identified by the author of the tool on the basis of scientific theories relating to social capital. The questionnaire was then assessed by expert judges, and in the next stage it was validated on a sample of 120 participants, comprising students.

The questionnaire items begin with the phrase "*Do you know anyone…?*", and respondents provide answers using a four-point response scale, where:

- 1 — No, I do not know anyone like that
- 2 — Yes, an acquaintance
- 3 — Yes, a friend
- 4 — Yes, a family member

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The reliability of the instrument was assessed using the split-half method (Styła, 2009). The inter-half reliability coefficient was reported as r_pp = 0.77, while the reliability estimated using the Spearman–Brown formula reached r_tt = 0.87. These results indicate satisfactory internal reliability, supporting the use of the questionnaire as a psychometrically sound measure of individual social capital.

Measurement of Environmental Knowledge — Proprietary Questionnaire

Environmental knowledge was assessed using a study-specific questionnaire developed for the purposes of the present study. The questionnaire was administered individually during the IDS-2 assessment procedure, immediately following the completion of the section measuring emotional and social competences. The research procedure was carried out in three measurements: T1, T2 and T3, which enabled the analysis of any changes in the children's level of environmental knowledge over time.

The questionnaire had an exploratory character and was intended to provide an initial assessment of children's environmental knowledge, as well as to examine whether participation in the control-condition intervention contributed to increases in such knowledge. The content of the questionnaire items corresponded directly to the themes addressed during the workshops conducted within the *Moving Stories about Ecology* programme and reflected the educational issues discussed throughout the sessions. It should be noted, however, that the questionnaire had not undergone psychometric validity testing, which was due to its original nature and the exploratory aim of the study.

The questionnaire consisted of five questions, worded as follows:

1. Which bin would you throw a juice bottle into? Point to it.
2. Which animal is protected? Point to it.
3. Which picture is the recycling symbol? Point to it.
4. Which toys are good for the environment? Point to them.
5. What can we do when we have too many apples and can't eat any more of them? Give as many ideas as possible.

When asking questions one to four, the researchers showed the children illustrations, each of which contained four pictures, one of which was correct and three of which served as distractors. The fifth question was open-ended and allowed the children to speak freely.

The illustrations used in questions one to four included the following:

- Picture 1 – the illustration showed four rubbish bins in the colours blue, green, yellow and red, and the child's task was to identify the bin intended for disposing of a plastic juice bottle.

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- Picture 2 – the illustration contained images of four animals: a pigeon, a cow, a dog and a lynx, and the child was asked to identify the animal that is a protected species in Poland.

- Picture 3 – the illustration showed various symbols, such as a wheelchair, an arrow, a recycling symbol and a stop sign, and the child's task was to identify the symbol indicating that the item in question could be recycled.

- Picture 4 – the illustration showed various types of toys, including plastic fruit, wooden blocks, plastic blocks and plastic horse figurines, and the child was asked to identify the toy considered to be the most environmentally friendly.

The researchers recorded the children's responses on a standardised answer sheet, documenting the illustrations selected for Questions 1–4 and transcribing the verbal responses provided for Question 5. Responses to Questions 1–4 were scored using a two-point system: correct answers received 1 point, whereas incorrect answers received −1 point. Thus, the total score for these four items ranged from −4 to 4 points.

Question 5 was evaluated using a cumulative scoring procedure based on the number of ideas generated by the child. Specifically, all ecologically appropriate responses provided by the child were counted and included in the final score. The total number of correct ideas served as a quantitative indicator of the child's level of environmental knowledge, enabling comparisons both across measurement points and between the experimental conditions.

As the questionnaire assessing environmental knowledge comprised two distinct types of items—four closed-ended questions and one open-ended question— separate calculations were carried out.

Research procedure

Inclusion criteria

Children aged between 5 and 8 years were included in the study, provided that written informed consent had been obtained from their parents or legal guardians for participation in the research project. Four-year-old children were excluded from the study, as their inclusion would have required the use of a different version of the IDS assessment battery than that applied to the remaining age groups, which would have compromised the comparability and interpretability of the results.

During the study, a number of variables that could influence the results were controlled for, including the frequency of the children's participation in the programme, as well as the type of area in which the educational setting was located (large city versus small town). In addition, the level of social capital among parents and caregivers, measured using the *Questionnaire for the Measurement of Individual Social Capital* (KPIKS-20), was included as a control variable. Teachers' assessments of children's functioning, obtained using the *Strengths and Difficulties Questionnaire* (SDQ), were also incorporated into the analyses.

Sample selection

The study sample was selected using purposive sampling. Preschools located in urban areas with

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populations both above and below 100,000 inhabitants were invited to participate. In accordance with the adopted inclusion criteria, preschools from the Warsaw metropolitan area and neighbouring towns were considered, provided that the latter did not exceed a population of 100,000.

The eligible municipalities were first assigned numerical identifiers, after which one was selected using a lottery method. At a later stage of the project, additional recruitment efforts were undertaken to increase the size of the research sample. Ultimately, data were collected in Warsaw, a city with a population exceeding 100,000, as well as in Piaseczno and Ozarow Mazowiecki, which met the criterion for smaller urban centres.

All preschools located in the aforementioned towns and listed in official public registers of educational institutions were assigned numerical identifiers and subsequently randomly allocated to the study conditions. Randomisation was conducted at the level of entire preschools rather than individual groups; consequently, all groups within a given institution were assigned to the same experimental condition. The allocation procedure was completed prior to the first measurement (T1), enabling this assessment to serve as a baseline measurement.

Preschools in which the recommended *Moving Stories about Emotions* had previously been implemented were excluded from participation in order to prevent potential carryover effects from earlier exposure to the intervention. Inclusive and special education institutions were also excluded due to the specific characteristics of the intervention and the study design. Furthermore, facilities in which the management was unable to provide a separate room for the administration of the research procedures in accordance with the established protocol were excluded from the study.

The *Moving Stories about Emotions* is a universal preventive intervention aimed at promoting mental health in the general population of children. In line with its original design, it is not intended for implementation in groups in which the proportion of children with special educational needs exceeds five, which provided an additional rationale for the applied exclusion criteria.

A total of 16 preschools were invited to participate in the study. For each participating institution, formal consent to conduct the research was obtained from the preschool management. Headteachers signed cooperation agreements that provided detailed information about the study procedure, the measurement instruments used, and the three planned assessment waves. The agreements also documented consent for the delivery of sessions for children, parents or caregivers, and teaching staff, as well as participation in the T1, T2, and T3 assessments. In total, 34 preschool classes were included in the study, and all eligible classes participated fully in the research.

Study procedure

In accordance with applicable research ethics principles, written informed consent was obtained from the parents or legal guardians of all participating children in each preschool class. Following the receipt of parental or guardian consent, an initial assessment (T1) was conducted to measure children's emotional and social competences and their level of environmental knowledge. Before taking part in the assessment, children were also asked to provide verbal assent to participate. At T1, control variables were

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additionally assessed using reports provided by teachers and parents.

Teachers of individual preschool groups completed the *Strengths and Difficulties Questionnaire* (SDQ), which is used to assess children's levels of emotional and behavioural difficulties. Parents, in turn, completed the *Questionnaire for the Measurement of Individual Social Capital* (KPIKS-20), which served to measure their level of social capital.

The questionnaires for parents were distributed via coordinators appointed at each preschool. To ensure confidentiality and minimise the potential influence of third parties on respondents' answers, questionnaires were provided to parents in sealed envelopes. Upon completion, parents returned the questionnaires in sealed envelopes to the teachers responsible for the respective preschool groups, who subsequently forwarded them to the research team. This procedure for the distribution and collection of materials was designed to maintain respondent anonymity and to ensure that the study was conducted in accordance with established principles of research ethics.

In all cases, the assessment of children was conducted on the premises of the respective preschools. The individual interview conducted by the psychologist lasted approximately 15 minutes per participant. Emotional and social competences were assessed using selected subtests of the IDS-2 battery, alongside the administration of the environmental knowledge questionnaire. Each participating preschool designated an appropriate space for data collection in advance. A separate room was required to minimise distractions and provide a suitable environment for the child's interaction with the psychologist. Children were escorted to the assessment room by their teachers, or, alternatively, were invited by the researcher to leave the classroom and participate in the interview. At the beginning of the procedure, each child was informed that participation was voluntary and that they could withdraw at any time and return to their classroom. This procedure was consistent with the research protocol approved by the Ethics Committee of the National Centre for Addiction Prevention. Ethical approval for the study was granted on 14 October 2024.

Following the baseline assessment of children's emotional and social competences using the IDS-2, participants received one of two interventions: the experimental intervention (*Moving Stories about Emotions*) or the active control intervention (*Moving Stories about Ecology*). Both interventions were implemented according to one of three delivery schedules: intensive, standard, or distributed. Children's emotional and social competences were subsequently assessed at two additional time points, following a pre-test–post-test–follow-up design. The follow-up assessment was conducted 6–12 weeks after the post-test. The interventions were delivered by certified facilitators who were randomly assigned to the participating groups.

The study was conducted between 10 September 2024 and 10 September 2025. Following the baseline assessment of children's emotional and social competences (T1), participants took part in the intervention phase, which consisted of thematic workshops focusing either on emotions (experimental condition) or ecology (control condition). The second assessment (T2) was conducted immediately following the completion of the intervention, while the third assessment (T3) served as a follow-up measure designed to

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evaluate the durability of any observed intervention effects over time. The intervals between measurement times are presented in approximate weeks, while the precise values expressed in days are reported in Table 5. It should be noted that the reported intervals represent average values. The exact timing of assessments varied across participating institutions due to organisational constraints associated with programme delivery and the availability of children, teachers, and preschool staff.

Time Intervals Between Measurements in the Moving Stories about Emotions Condition

For workshops delivered in the intensive format (twice weekly), the average interval between the baseline assessment (T1) and the post-intervention assessment (T2) was approximately 5 weeks (M=48 days). The follow-up assessment (T3) was conducted, on average, 12 weeks after T2 (M=85.3 days). For workshops delivered in the standard format (once weekly), the average interval between T1 and T2 was approximately 11 weeks (M=83 days), whereas the follow-up assessment (T3) took place, on average, 9 weeks later (M=68 days). In the case of the distributed format (one session every three weeks), the average interval between T1 and T2 was approximately 32 weeks (M=225 days). The follow-up assessment (T3) was conducted, on average, more than 7 weeks after T2 (M= 48 days).

Time Intervals Between Measurements in the Moving Stories about Ecology Condition

For workshops delivered in the intensive format (twice weekly), the average interval between the baseline assessment (T1) and the post-intervention assessment (T2) was approximately 6 weeks (M=42 days). The follow-up assessment (T3) was conducted, on average, 11 weeks after T2 (M=83 days).

For workshops delivered in the standard format (once weekly), the average interval between T1 and T2 was approximately 15 weeks (M=108 days), while the follow-up assessment (T3) took place, on average, 7 weeks later (M=49 days).

In the case of the distributed format (one session every three weeks), the average interval between T1 and T2 was approximately 31 weeks (M=219 days). The follow-up assessment (T3) was conducted, on average, more than 7 weeks after T2 (M=50 days).

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Table 5. Descriptive Statistics for Time Intervals Between Successive Measurements (Days) by Programme Type and Delivery Frequency

Time interval between successive measurements	Research condition (emotions vs. ecology)	Frequency of workshops	Mean (M)	Median (Md)	Standard deviation (SD)
measurement from T1 to T2	Moving Stories about Emotions	Intensive (twice a week)	48,8	49	8,91
		Standard (once a week)	83,85	82	6,36
		Distributed (once every three weeks)	225,57	226	15,30
	Moving Stories about Ecology	Intensive (twice a week)	42,66	42	11,04
		Standard (once a week)	108,83	75	22,64
		Distributed (once every three weeks)	219,81	218	6,05

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Time interval between successive measurements	Research condition (emotions vs. ecology)	Frequency of workshops	Mean (M)	Median (Md)	Standard deviation (SD)
Measurement from T2 to T3	Moving Stories about Emotions	Intensive (twice a week)	86,64	84	14,52
		Standard (once a week)	69,79	71	5,91
		Distributed (once every three weeks)	50,54	53	15,13
	Moving Stories about Ecology	Intensive (twice a week)	87,22	84	24,76
		Standard (once a week)	50,13	47	16,42
		Distributed (once every three weeks)	53,22	55	6,11

Note. M = Mean; Md = Median; SD = Standard Deviation. T1 = Baseline measurement; T2 = Post-intervention measurement; T3 = Follow-up measurement. Values represent the number of days between measurements.

Attendance of Children in Both Programmes

Attendance was recorded for each child at every workshop conducted within both intervention conditions. Analysis of the attendance records indicated a high level of participation across the study.

In the *Moving Stories about Emotions* programme, children were absent from an average of M=1.48 sessions. A comparable level of attendance was observed in the *Moving Stories about Ecology* programme, where the mean number of absences was M=1.59 sessions.

These findings indicate that attendance was consistently high across both programmes, suggesting strong participant engagement and a comparable level of exposure to the interventions in the experimental and control conditions.

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Results

The results presented below are organised into two main sections. The first section focuses on assessing whether significant differences existed between the two study conditions—the *Moving Stories about Emotions* programme and the *Moving Stories about Ecology* programme—with respect to selected variables that could potentially confound the interpretation of intervention effects.

Specifically, the analyses examined:

- The level of intervention implementation, as reported by facilitators delivering both programmes, including both quantitative indicators (e.g., completion of planned activities) and qualitative assessments of programme delivery;
- The level of developmental difficulties among children, assessed using the overall score obtained from the *Strengths and Difficulties Questionnaire* (SDQ);
- The level of parents' social capital, measured using parent self-reports and the overall score obtained on the *Questionnaire for the Measurement of Individual Social Capital* (KPIKS-20).

The second part of the statistical analyses was designed to test the principal hypotheses of the study concerning changes in children's social-emotional competences as a function of both the type of intervention and the frequency with which it was delivered.

These analyses incorporated two intervention conditions: the *Moving Stories about Emotions* programme and the *Moving Stories about Ecology* programme (emotions vs. ecology). In addition, the effects of three programme delivery schedules were examined:

- Intensive — two sessions per week;
- Standard — one session per week;
- Distributed — one session every three weeks.

Accordingly, the analyses investigated whether changes in children's social-emotional competences differed between the two intervention conditions and whether these effects varied according to the frequency of programme implementation. Particular attention was paid to both the immediate effects of the intervention (T2) and the maintenance of these effects at follow-up (T3).

Subsequent analyses examined the following dependent variables: overall social-emotional competence and its constituent components, namely emotion recognition, emotion regulation, and social strategies. These variables were analysed

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both as a composite indicator of social-emotional competence and as separate dimensions in order to assess the specific areas influenced by the intervention.

The study was designed to test the following hypotheses:

- Children in the experimental and control groups will not differ significantly in their levels of emotion recognition, emotion regulation, or social strategies at baseline (T1), prior to the commencement of the intervention.

- Immediately following the completion of the intervention (T2), children participating in the *Moving Stories about Emotions* programme will demonstrate higher levels of emotion recognition, emotion regulation, and social strategies than children participating in the *Moving Stories about Ecology* programme.

- At the follow-up assessment (T3), conducted approximately three months after the completion of the intervention, children in the experimental group will continue to demonstrate higher levels of emotion recognition, emotion regulation, and social strategies than children in the control group.

- Higher frequencies of programme delivery will be associated with greater improvements in emotion recognition, emotion regulation, and social strategies among children participating in the experimental intervention.

Due to the need for the most effective possible control of measurement error variance, a complex, mixed-design analysis of variance was used in the statistical analyses: 2 (research conditions: emotions vs. ecology) × 3 (frequency of intervention delivery: intensive, standard, distributed) × 3 (measurement time: T1, T2, T3). The analyses were conducted using both the raw scores from the IDS-2 battery subtests, which assess individual components of social-emotional competence, and age-standardised scores calculated in accordance with the guidelines provided in the IDS-2 test manual. It should be emphasised that the analyses accounted for both intervention fidelity and developmental differences among children of different ages, thereby allowing for a more accurate interpretation of the findings. Any observed difficulties in assimilating the programme content were not interpreted as indicators of reduced implementation quality, but rather as reflecting the natural cognitive limitations associated with the children's developmental stage, as well as the experimental nature of the *Moving Stories about Ecology* programme.

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Part I. Comparison of Research Conditions Prior to Evaluating the Effectiveness of the Moving Stories about Emotions Programme

Comparison of the Implementation Fidelity of the Moving Stories about Emotions and Moving Stories about Ecology Interventions: Process Evaluation

As part of the study, a process evaluation was conducted to assess the fidelity with which the intervention programmes were implemented. In total, 340 workshop reports were collected from the 15 preschools included in the analysis. These reports were completed by programme facilitators following each workshop session and provided information on the extent to which the planned activities had been delivered in accordance with the programme protocol. One preschool group from a school located in Warsaw was excluded from the process evaluation due to unforeseen circumstances. Consequently, this group was excluded from subsequent analyses of programme fidelity. The final dataset comprised 160 reports documenting the implementation of the *Moving Stories about Emotions* programme and 180 reports documenting the implementation of the *Moving Stories about Ecology* programme. All workshops included in the analysis were conducted during the 2024/2025 academic year.

The facilitators' responses to the closed-ended items included in the implementation reports were coded using a binary scoring system, whereby a value of 0 represented a "*no*" response and a value of 1 represented a "*yes*" response. For each variable included in the process evaluation, the proportion of affirmative responses was subsequently calculated relative to the total number of workshops conducted within each research condition. The distributions of responses for the individual implementation indicators analysed are presented in Table 6.

Table 6. Quantitative and Qualitative Aspects of Intervention Implementation Based on Facilitators' Responses to the Intervention Implementation Questionnaire

Category	Aspect of assessment	Moving Stories about Emotions (% of 'yes' responses)	Moving Stories about Ecology (% of 'yes' responses)
I. ORGANISATION AND FRAMEWORK			
Class organisation phase	Teachers were aware of the workshops	98	97
	The sessions started on time	94	95
	Duration of the session (in minutes)	M = 44,83 (SD = 2,00)	M = 44,51 (SD = 2,32)
	Percentage of organisational disruptions	15	17

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II. IMPLEMENTATION (KEY ELEMENTS)			
Introduction to the workshop	Recap of the last story	90	93
	Welcome / Name circle	92	98
Main phase – telling the story	Getting into character	100	100
	Getting into character using a sticker/ puppet	100	100
	Seated pantomime	99	99
	Pantomime in motion	100	95
	Pantomime in motion – the children walked around the room	99	100
	The problematic character	100	99
	Problem character discussed using a puppet/props	100	99
	Stepping out of character	100	99
PHASE III: DISCUSSION AND DEBATE			
Summary phase of the story	Discussion – was this element present?	100	98
	Discussion – was attention paid to the children's emotions?	100	1
	Discussion – was attention paid to ecological issues?	0	98
	The character's feelings have been correctly identified and named OR the non-ecological behaviours have been named	100	99

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	Children gave their ideas for regulating emotions OR children gave their ideas for eco-friendly behaviour	99	99
	Reference to the emotions experienced and the children's life experiences	99	0
	Reference to ecology and children's experiences in their lives	0	99

Note. Values represent the percentage of affirmative („yes") responses relative to the total number of workshops evaluated, except where means (M) and standard deviations (SD) are explicitly specified.

Qualitative Analysis of Individual and Group Difficulties During Programme Implementation

The process evaluation forms also provided programme facilitators with the opportunity to record qualitative observations. These comments included descriptions of disruptions occurring during the sessions, general reflections on programme implementation, observations regarding the achievement of programme objectives, and any difficulties or modifications encountered during programme delivery. The evaluation form included separate sections addressing: comments on session delivery, comments on the achievement of programme objectives, observations concerning individual children, observations concerning group functioning, and general remarks related to programme implementation.

This section presents an analysis of the qualitative data collected during the implementation of both intervention programmes. The material was organised into three principal analytical domains:

1. Organisational and situational challenges during programme delivery — this domain encompasses comments relating to the conduct of the sessions, including both specific incidents and broader organisational issues. The analysis was intended to identify whether situational or logistical factors emerged that could have influenced the implementation process or the quality of programme delivery.

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2. Challenges related to the achievement of programme objectives — this domain includes comments concerning the implementation of the planned educational and developmental objectives. The analysis focused on identifying situations in which programme goals proved difficult to achieve or required additional explanation, adaptation, or modification during delivery.

3. Individual and group-level difficulties in children's functioning — this domain comprises observations concerning children's behaviour during the workshops, including both difficulties exhibited by individual children and challenges affecting the functioning of the preschool group as a whole.

Organisational and Situational Difficulties During Programme Delivery

The implementation of the experimental and control interventions was associated with a comparable level of organisational and situational challenges. Difficulties affecting the delivery of workshop sessions were reported in approximately 15% *of the Moving Stories about Emotions* workshops (25 of 160 sessions) and in approximately 17% of the *Moving Stories about Ecology* workshops (32 of 180 sessions). All reported issues were documented by the programme facilitators in the process evaluation forms completed after each workshop.

The reported incidents were classified into three categories representing the predominant types of disruptions observed during programme delivery:

- difficulties related to children's concentration and behaviour;
- organisational and logistical difficulties;
- difficulties associated with the teacher's absence during the sessions.

Following categorisation, the proportion of reports assigned to each category was calculated relative to the total number of organisational difficulties recorded within each research condition. The distribution of reports across the three categories of disruptions for the *Moving Stories about Emotions* and *Moving Stories about Ecology* conditions is presented in Table 7.

Problems with children's concentration and behaviour

The most frequently reported category of implementation difficulties concerned problems with children's concentration and behaviour. These primarily involved difficulties in maintaining children's attention during the sessions and adherence to the established workshop rules. This category accounted for 75% of all reported difficulties in the *Moving Stories about Ecology* programme and 56% of those reported in the *Moving Stories about Emotions* programme. Facilitators most commonly noted children talking during the storytelling activities, engaging in activities unrelated to the session content, and disruptive or attention-seeking behaviour displayed by individual children.

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Illustrative examples of the facilitators' comments include:

- *"We managed to run the session with the 'Kittens' group, although we had to remind the children about their behaviour many times." (Moving Stories about Ecology)*
- *"The session was interrupted several times due to the children's behaviour (talking and engaging in other activities during the story)." (Moving Stories about Ecology)*
- *"One of the children (with special educational needs) was making a great deal of noise and distracting the group, disrupting and at times preventing the continuation of the story. The greatest challenge was maintaining the children's attention during the introduction of the character, the subsequent discussion, and the summary of the story." (Moving Stories about Emotions)*
- *"Individual children displayed provocative or attention-seeking behaviour." (Moving Stories about Emotions)*

Organisational and Logistical Issues

The second category of reported difficulties comprised organisational and logistical issues, primarily relating to the organisation of time, space, and the preschool's daily schedule. These difficulties accounted for 32% of all reported implementation issues in the *Moving Stories about Emotions* programme and 15% of those reported in the *Moving Stories about Ecology* programme. The comments referred to situations such as conducting workshops in walk-through rooms, delays caused by mealtimes or other organisational activities, and unforeseen events that disrupted the planned timetable.

Illustrative examples of the facilitators' comments include:

- *"The sessions took place in the gym, which turned out to be a passageway between the preschool groups and the staff room, so members of staff frequently walked through during the sessions." (Moving Stories about Ecology)*
- *"The facilitators had to wait until the children had finished eating their meal." (Moving Stories about Ecology)*
- *"The room was a passageway, so other teachers and preschool staff walked through it several times, which distracted the children." (Moving Stories about Emotions)*
- *"A fire drill took place that day, so all of the sessions had to be conducted at different times." (Moving Stories about Emotions)*

Difficulties Related to the Teacher's Presence or Absence During Sessions

The least frequently reported category of implementation difficulties concerned issues related to the teacher's presence or absence during the workshop sessions. Such difficulties were reported slightly more often in the *Moving Stories about Emotions* programme (12%) than in the *Moving Stories about Ecology* programme (9%). However, in both intervention conditions these incidents were relatively rare, with three reports recorded in each programme.

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The reported issues included the absence of the class teacher during the sessions, inappropriate or overly directive interventions by teachers in response to children's behaviour, and disruptions caused by other adults entering the room during programme delivery.

Illustrative examples of the facilitators' comments include:

- *"After the teacher left the room, the boys began showing off to one another and would not let the other children speak until we separated them." (Moving Stories about Ecology)*
- *"The teacher repeatedly and very impulsively 'disciplined' the children by moving them to a separate table whenever she felt they were disrupting the session." (Moving Stories about Ecology)*
- *"The class teacher was not present during the workshops." (Moving Stories about Emotions)*
- *"People entered the room several times (other teachers and parents collecting their children), which distracted the children. On one occasion, the class teacher's phone rang loudly." (Moving Stories about Emotions)*

Table 7. Percentage Distribution of Reported Difficulties Across Three Categories of Disruption by Experimental Condition

	Moving Stories about Emotions (N=25)	Moving Stories about Ecology (N=32)
Problems with children's concentration and behaviour	56%	75%
Logistical issues	32%	15%
Difficulties related to the teacher	12%	9%

Note. N represents the total number of reported difficulties in each experimental condition, rather than the number of participants.

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Difficulties Relating to the Achievement of Programme Objectives

The programme objectives in both the *Moving Stories about Emotions* and *Moving Stories about Ecology* conditions were reported as having been achieved in virtually all cases, as indicated by the data presented in Table 6. At the same time, facilitators were encouraged to provide qualitative comments that could offer additional information about the quality of session delivery and any difficulties encountered while working with the children.

Following the delivery of the *Moving Stories about Emotions* sessions, only one comment relating to the achievement of programme objectives was recorded among the 160 sessions analysed. In the *Moving Stories about Ecology* condition, 29 such comments were recorded, corresponding to 16% of all sessions. A detailed analysis of these comments is presented below.

The only comment recorded in the Moving Stories about Emotions condition was:

- *"The children did not know the word 'frustration', but they knew the word 'impatience'."*

This comment does not indicate a failure to achieve the programme objective. Rather, it reflects a linguistic difficulty concerning the terminology used to describe emotional states. Although the children were unfamiliar with the term *frustration*, they understood and were able to explain the behaviour of the fairy-tale character, indicating that the underlying concept had been understood despite the absence of the specific vocabulary item.

In the *Moving Stories about Ecology* condition, the comments primarily concerned difficulties experienced by younger children, particularly five-year-olds, in assimilating the environmental content compared with older children. At the same time, a number of positive observations regarding the effectiveness of programme delivery were also recorded. All comments provided by the facilitators were categorised according to the type of feedback they contained, and the proportion of each category was calculated relative to the total number of comments recorded. In total, 29 comments were recorded across the 180 *Moving Stories about Ecology* sessions analysed.

The most frequently reported category concerned difficulties in adapting the level of environmental content presented in the session scripts to the children's cognitive and developmental abilities. This category accounted for 68% of all comments (n=20). Illustrative examples include:

- *"The term 'water footprint' is difficult for the children to remember and visualise."*
- *"The children tend to suggest dishes rather than preserves in their solutions. I need some guidance."*
- *"Younger children have fewer ideas about processing raw materials than older children. You really have to draw the ideas out of them and provide many examples."*

The second most frequent category comprised positive observations concerning the effectiveness of programme delivery. These accounted for 27% of all comments (n=8). Examples include:

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- *"In the [name redacted during report preparation to protect confidentiality] group, there are children who listen attentively and participate in the story. We have no doubt that they remember a great deal: they volunteer, answer questions correctly, and clearly enjoy themselves. Some of the more challenging children may not benefit from the story to the same extent, but it is difficult to determine how much they retain."*

- *"The children remembered the names of the bins, which items should and should not be placed in them, and understood why receipts and sticks belong in mixed waste. They understood why waste should be sorted and that new products can subsequently be made from it."*

- *"The children very quickly identified the problem of food waste and had many ideas about what could be done with leftover food."*

One further comment concerned a session in which the programme objectives were not fully achieved. The facilitators reported that the story had to be interrupted because the children were experiencing difficulties maintaining concentration. The decision to interrupt the session was made in consultation with the class teacher.

Individual and Group Difficulties in Children's Functioning

Programme facilitators were able to record comments concerning the functioning of individual children. This served both to monitor children's behaviour during the sessions and to provide information that could assist other facilitators in preparing for potential substitute sessions. For this reason, process evaluation forms were generally completed on a regular basis, immediately following each session.

Comments concerning individual children were fully anonymised and are presented in this report only in the form of aggregated percentage data. The observations primarily concerned children experiencing difficulties with impulse control and behavioural regulation. No incidents were recorded during the sessions that required intervention under the Child Protection Standards at *Gruntownia*.

A total of 35 observations concerning individual children's behaviour were recorded during the implementation of the *Moving Stories about Emotions* programme, compared with 47 observations during the implementation of the *Moving Stories about Ecology* programme. These figures corresponded to 21% and 26%, respectively, of all sessions conducted within the relevant research conditions. As these observations were not directly relevant to the assessment of programme effectiveness, detailed analyses of individual children's functioning are not presented.

From the perspective of the study objectives, comments concerning the functioning of entire preschool groups were considerably more relevant, as both the *Moving Stories about Emotions* and *Moving Stories about Ecology* programmes were delivered as group-based interventions. Accordingly, the proportion of sessions in which difficulties relating to group functioning were reported was calculated. Such difficulties were identified in 28% of sessions in the emotional education programme condition and 30% of sessions in the environmental programme condition.

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The reported comments were subsequently categorised according to the types of difficulties observed at the group level. Table 8 presents the identified categories together with illustrative examples of facilitators' comments assigned to each category, while Table 9 presents the percentage distribution of the comments across these categories.

Table 8. Examples of Facilitators' Comments on Group Problems Reported Following Workshops on Emotions and Ecology

Category of group problems	Examples of Facilitator Comments from Both Conditions
High levels of excitement and difficulties maintaining discipline	"The children were exceptionally energetic; they found it difficult to wait their turn during the 'raging river' activity and talked a great deal among themselves."
Withdrawal and reluctance to participate actively	"Three children did not want to engage with the story and did not participate in most of the activities despite encouragement. However, they did not disturb the other children."
Difficulties implementing workshop plan	"The children become very excited when taking on the roles of animals. They walk on all fours and often find it difficult to follow the story, instead beginning to play their own game."
Positive comments	"Despite being quite excited, the children were very good at waiting their turn during the river activity, doing so patiently and in relative silence."

Note. Examples are drawn from qualitative feedback provided by programme facilitators on the process evaluation forms.

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Table 9. Percentage Distribution of Facilitators' Comments Across Categories of Group Issues Reported Following Workshops

Category of group issues	Moving Stories about Emotions (N = 46)	Moving Stories about Ecology (N = 54)
High arousal and difficulties maintaining discipline	46%	50%
Withdrawal and reluctance of the group to participate actively	4%	19%
Difficulties in implementing the lesson plan	13%	0%
Positive feedback	37%	31%

Note. N represents the total number of qualitative comments concerning group issues recorded by facilitators in each condition.

Comparison of Developmental Difficulties Among Children Participating in the Two Intervention Programmes: SDQ

Children participating in the two intervention conditions—the *Moving Stories about Emotions* programme and the *Moving Stories about Ecology* programme—were compared with respect to their level of developmental difficulties using the *Strengths and Difficulties Questionnaire* (SDQ). The analyses were based on the Total Difficulties Score, which represents the overall level of behavioural and emotional difficulties as rated by the children's teachers. Group differences were examined using an independent-samples t-test, with intervention condition as the grouping variable and the Total Difficulties Score as the dependent variable. The analysis revealed no statistically significant difference between the two intervention conditions, $t(695) = 1.006$, $p = .157$, Cohen's $d = 0.076$. Thus, children participating in the *Moving Stories about Emotions* programme ($M = 9.05$, $SE = 0.33$) and those participating in the *Moving Stories about Ecology* programme ($M = 8.59$, $SE = 0.32$) did not differ significantly in the overall severity of developmental difficulties reported by their teachers. Furthermore, the mean scores for both groups fell within the normative range for the SDQ Total Difficulties Score (0–11 points), indicating that children in both intervention conditions exhibited typical levels of behavioural and emotional difficulties. Consequently, developmental difficulties were considered comparable across the two groups and were not included as a covariate in the subsequent analyses.

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Comparison of Parents' Social Capital Across the Two Intervention Programmes: KPIKS-20

Parents' social capital was assessed using the *Questionnaire for the Measurement of Individual Social Capital* (KPIKS-20). Analyses were based on questionnaires completed by 420 parents. Differences in parental social capital were examined using a two-way between-subjects analysis of variance (ANOVA), with intervention condition (*Moving Stories about Emotions* vs. *Moving Stories about Ecology*) and programme delivery schedule (intensive, standard, and distributed) as the independent variables. The dependent variable was the overall KPIKS-20 score. The analysis revealed no statistically significant main effect of intervention condition, $F(1, 483) = 0.741$, $p = .390$. A statistically significant, although small, main effect of programme delivery schedule was observed, $F(2, 483) = 3.139$, $p = .044$, $\eta^2_p = .013$. No statistically significant interaction between intervention condition and programme delivery schedule was found, $F(2, 483) = 0.311$, $p = .733$. Overall, these findings indicate that parents' social capital was similarly distributed across the two intervention conditions. Although a small difference was observed between programme delivery schedules, this effect was independent of intervention conditions and therefore does not compromise the comparability of the experimental and control groups. Accordingly, parental social capital was not considered a confounding variable in the evaluation of programme effectiveness.

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Summary of Part I

The preliminary analyses demonstrated that the children assigned to the two intervention conditions (*Moving Stories about Emotions* and *Moving Stories about Ecology*), across the three programme delivery schedules, were comparable with respect to the controlled variables examined. Specifically, no statistically significant differences were found between the intervention conditions in terms of parents' social capital or the overall level of developmental difficulties assessed by teachers. Furthermore, the mean SDQ Total Difficulties Scores for both groups fell within the normative range, indicating that the participating children did not exhibit elevated levels of emotional or behavioural difficulties at baseline.

The process evaluation further indicated that both intervention programmes were implemented with a high level of fidelity. The vast majority of workshop sessions were delivered in accordance with the programme protocols, and the organisational or behavioural difficulties reported by facilitators were generally minor and occurred with comparable frequency across the two intervention conditions. The qualitative analyses likewise suggested that the reported challenges primarily reflected routine logistical issues and the management of children's behaviour, rather than systematic shortcomings in programme delivery or failures to achieve the intended programme objectives.

Taken together, these findings indicate that the experimental and control conditions were equivalent with respect to the principal background variables and implementation quality. Consequently, there was no justification for treating the examined variables as potential confounders or for including them as covariates in the subsequent analyses evaluating the effectiveness of the two intervention programmes.

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Part II. Changes in Children's Social-Emotional Competence as a Function of Intervention Type and Programme Delivery Schedule

The effectiveness of the *Moving Stories about Emotions* programme was evaluated using the Intelligence and Development Scales–2 (IDS-2), specifically the three subtests assessing social-emotional competence: emotion recognition, emotion regulation, and social strategies. Analyses were conducted both for the overall social-emotional competence score, derived by combining the three subtests, and for the individual subscale scores. In addition, results are presented using both raw scores and age-standardised scores, calculated in accordance with the IDS-2 manual. Children's social-emotional competences were assessed at three time points: before the intervention (T1), immediately following programme completion (T2), and at follow-up (T3), conducted approximately 7–11 weeks after the end of the intervention. The follow-up assessment enabled the evaluation of the durability of any intervention effects and the extent to which changes in children's social-emotional competences were maintained over time. For each outcome, comparisons were made between children participating in the *Moving Stories about Emotions* programme and those participating in the *Moving Stories about Ecology* programme, which served as the active control condition. In addition, the analyses examined whether programme effectiveness varied by the programme delivery schedule, with three implementation formats considered: intensive, standard, and distributed. Unless otherwise stated, each outcome is presented first using the raw IDS-2 scores and subsequently using the corresponding age-standardised scores. This approach makes it possible to evaluate both changes in children's performance and changes relative to age-related developmental expectations.

Change in Overall Social-Emotional Competence as a Function of Programme Type and Programme Delivery Schedule

The dependent variable in this analysis was the overall social-emotional competence score, calculated by summing the scores obtained on the three IDS-2 subtests assessing emotion recognition, emotion regulation, and social strategies.

The data were analysed using a 3 × 2 × 3 mixed-design analysis of variance (mixed ANOVA), with measurement time (T1, T2, T3) as the within-subjects factor and programme type (*Moving Stories about Emotions* vs. *Moving Stories about Ecology*) and programme delivery schedule (intensive, standard, and distributed) as the between-subjects factors. The analysis revealed several statistically significant main effects and interactions.

A statistically significant main effect of programme type was observed, $F(1, 668) = 15.305$, $p < .001$, $\eta^2_p = .022$, indicating an overall difference in social-emotional competence between the two intervention conditions. The main effect of programme delivery schedule was also statistically significant, $F(2, 668) = 4.188$, $p = .016$, $\eta^2_p = .012$, suggesting that overall competence differed across the three implementation schedules. In addition, a significant main effect of measurement time was found, $F(2, 668) = 57.182$, $p < .001$, $\eta^2_p = .146$, indicating that children's social-emo-

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tional competence changed over the course of the study.

The interaction between programme type and programme delivery schedule was not statistically significant, $F(2, 668) = 0.101$, $p = .904$, indicating that, when averaged across the three measurement occasions, differences between the two programmes did not depend on the delivery schedule.

Similarly, the interaction between measurement time and programme type was not statistically significant, $F(2, 1336) = 2.146$, $p = .118$, suggesting that, when delivery schedule was not taken into account, the pattern of change over time did not differ significantly between the two intervention conditions.

In contrast, the interaction between measurement time and programme delivery schedule was statistically significant, $F(4, 1336) = 5.208$, $p < .001$, $\eta^2_p = .015$, indicating that changes in social-emotional competence over time differed according to the programme delivery schedule.

Most importantly, the three-way interaction between measurement time, programme type, and programme delivery schedule was statistically significant, $F(4, 1336) = 7.324$, $p < .001$, $\eta^2_p = .021$. This finding indicates that the pattern of change in social-emotional competence across the three measurement occasions depended on both the intervention condition and the programme delivery schedule. Consequently, the interpretation of the results focuses primarily on this higher-order interaction, which is examined in detail in the subsequent analyses.

A statistically significant three-way interaction indicates that changes in children's social-emotional competence over time depended on the combined effects of programme type and programme delivery schedule. In other words, the effectiveness of the intervention across the three measurement occasions varied according to both the programme delivered and the frequency with which it was implemented.

Across all six experimental conditions, defined by programme type and delivery schedule, children's social-emotional competence increased significantly over time, with improvements observed between the baseline assessment (T1) and at least one of the subsequent measurements (T2 or T3; see Figure 1). However, the magnitude of these improvements was consistently greater for children participating in the *Moving Stories about Emotions* programme than for those participating in the *Moving Stories about Ecology* programme.

Examination of the estimated marginal means indicated that the *Moving Stories about Emotions* programme generally resulted in higher levels of social-emotional competence than the active control programme following the intervention. The differences between the intervention conditions were particularly evident immediately after programme completion (T2) under the intensive and distributed delivery schedules, and at the follow-up assessment (T3) under the intensive and standard delivery schedules.

These findings suggest that the effectiveness of the *Moving Stories about Emotions* programme was influenced not only by the passage of time but also by the frequency with which the intervention was delivered, with the greatest advantages over the active control condition observed under specific programme delivery schedules.

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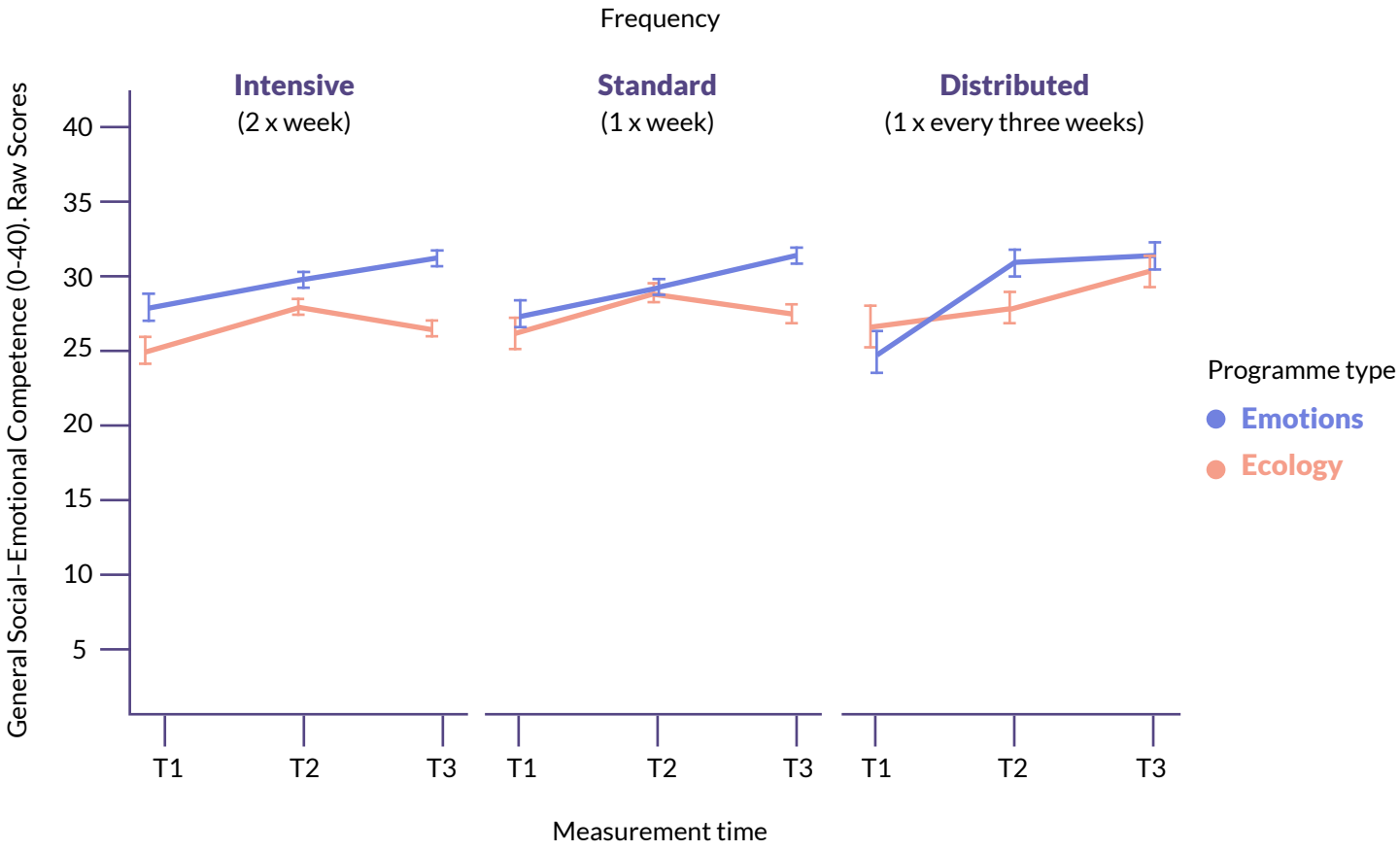
Figure 1. Mean IDS-2 General Social–Emotional Competence Raw Scores by Programme Type, Delivery Frequency, and Measurement Time



Analysis of the age-standardised IDS-2 scores for the overall social-emotional competence index revealed a pattern of results consistent with that obtained for the raw scores. A statistically significant main effect of programme type was found, $F(1, 668) = 15.305$, $p < .001$, $\eta^2_p = .022$, indicating overall differences between the *Moving Stories about Emotions* and *Moving Stories about Ecology* programmes. A significant main effect of programme delivery schedule was also observed, $F(2, 668) = 4.188$, $p = .016$, $\eta^2_p = .012$, together with a significant main effect of measurement time, $F(2, 667) = 57.182$, $p < .001$, $\eta^2_p = .146$.

The interaction between programme type and programme delivery schedule was not statistically significant, $F(2, 668) = 0.101$, $p = .904$, nor was the interaction between programme type and measurement time, $F(2, 667) = 2.146$, $p = .118$. In contrast, the interaction between measurement time and programme delivery schedule reached statistical significance, $F(4, 1334) = 5.208$, $p < .001$, $\eta^2_p = .015$. Most importantly, the three-way interaction between measurement time, programme type, and programme delivery schedule was also statistically significant, $F(4, 1334) = 7.324$, $p < .001$, $\eta^2_p = .021$.

A statistically significant three-way interaction was observed, indicating that changes in children's social-emotional competence over time depended on the combined effects of programme type and programme delivery schedule. Across all six intervention conditions, defined by programme

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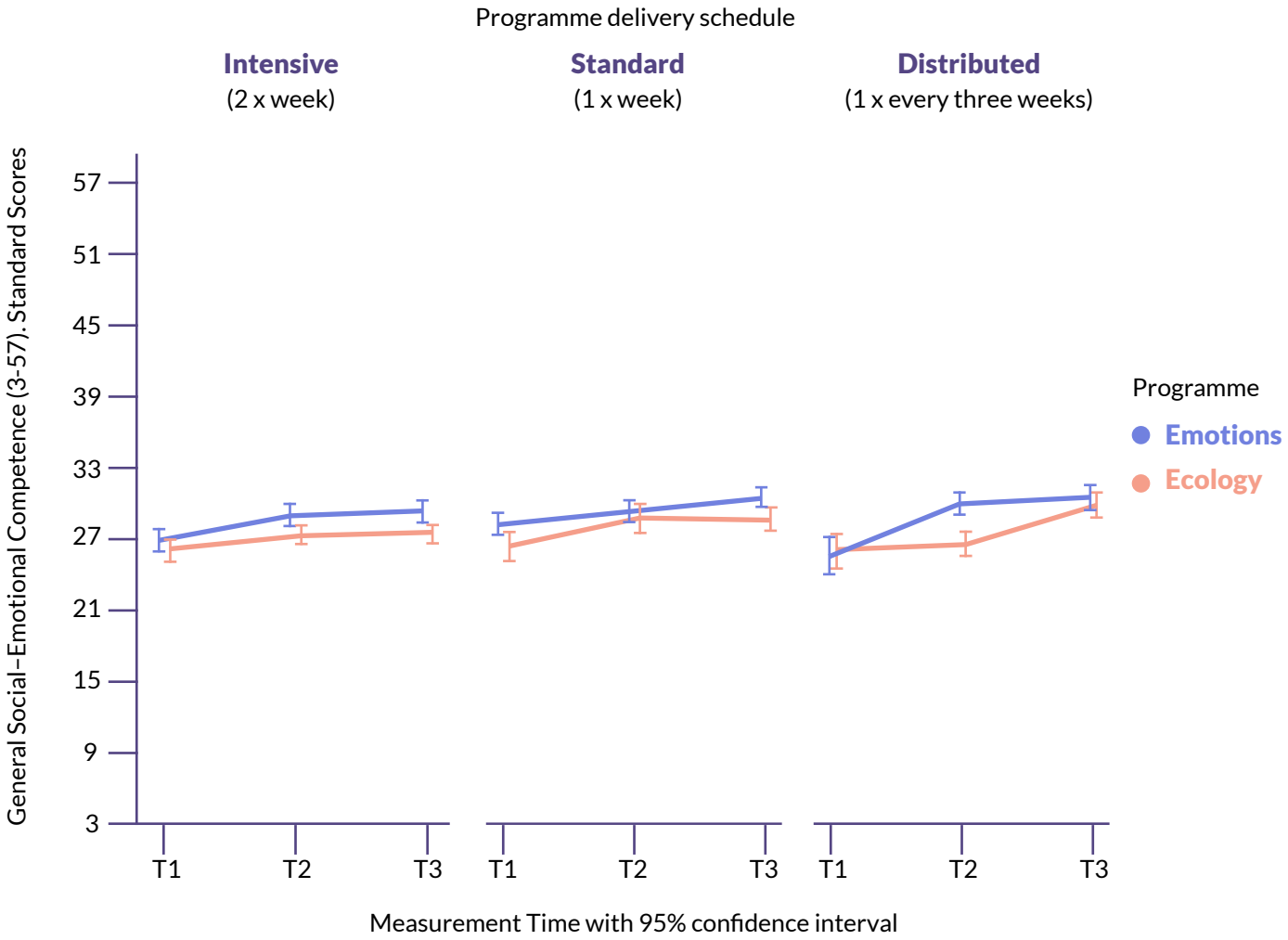
type and delivery schedule, statistically significant changes in competence were observed over the three measurement occasions (see Figure 2).

Examination of the estimated marginal means indicated that the *Moving Stories about Emotions* programme generally resulted in higher levels of social-emotional competence than the *Moving Stories about Ecology* programme following the intervention. This difference was particularly apparent under the intensive delivery schedule, where outcomes were consistently more favourable for the emotional education programme. For the other delivery schedules, the pattern was less consistent. Under the standard schedule (once per week), a statistically significant advantage of the emotional education programme was observed only at the follow-up assessment (T3), whereas under the distributed schedule (once every three weeks), a significant difference was evident only immediately after programme completion (T2).

Overall, this pattern closely mirrors that obtained using the raw IDS-2 scores, indicating that the superiority of the *Moving Stories about Emotions* programme is maintained after adjusting the results for age-related developmental differences. In particular, the findings support the conclusion that the programme is most effective when delivered according to an intensive schedule.

Figure 2. Mean IDS-2 General Social–Emotional Competence Standard Scores by Programme Type, Delivery Frequency, and Measurement Occasion



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Change in Social Strategies as a Function of Programme Type and Programme Delivery Schedule

The dependent variable in this analysis was the total score on the Social Strategies subtest of the IDS-2, measured across the three assessment occasions (T1, T2, and T3).

The data were analysed using a 3 × 2 × 3 mixed-design analysis of variance (mixed ANOVA), with measurement time (T1, T2, T3) as the within-subjects factor and programme type (*Moving Stories about Emotions* vs. *Moving Stories about Ecology*) and programme delivery schedule (intensive, standard, and distributed) as the between-subjects factors.

The analysis revealed a statistically significant main effect of measurement time, $F(2, 1320) = 43.83$, $p < .001$, $\eta^2_p = .06$, indicating that children's social strategies scores changed significantly across the three assessments. No significant main effect of programme delivery schedule was observed, $F(2, 660) = 1.77$, $p = .171$, $\eta^2_p = .01$. In contrast, a significant main effect of programme type was found, $F(1, 660) = 9.86$, $p = .002$, $\eta^2_p = .01$, indicating overall differences in social strategies between the two intervention conditions.

The interaction between programme type and programme delivery schedule was not statistically significant, $F(2, 660) = 1.19$, $p = .306$. Similarly, neither the interaction between measurement time and programme delivery schedule, $F(4, 1320) = 1.55$, $p = .184$, nor the three-way interaction between measurement time, programme type, and programme delivery schedule, $F(4, 1320) = 1.86$, $p = .115$, reached statistical significance.

However, a statistically significant interaction between measurement time and programme type was observed, $F(2, 1320) = 6.73$, $p = .001$, $\eta^2_p = .01$.

A significant interaction between measurement time and programme type indicates that the pattern of change in children's social strategies differed between the two intervention conditions over the course of the study. As shown in Figure 3, children participating in the *Moving Stories about Emotions* programme showed a greater improvement in Social Strategies scores across successive assessments than those participating in the *Moving Stories about Ecology* programme. The estimated marginal means and their 95% confidence intervals indicate that this difference was observed following programme completion and was maintained at the follow-up assessment.

The absence of a significant interaction between programme type and programme delivery schedule, as well as the non-significant three-way interaction, suggests that the beneficial effect of the *Moving Stories about Emotions*programme on children's social strategies was consistent across the three delivery schedules. In other words, the programme produced greater improvements than the active control condition regardless of whether it was delivered intensively, according to the standard schedule, or in the distributed format.

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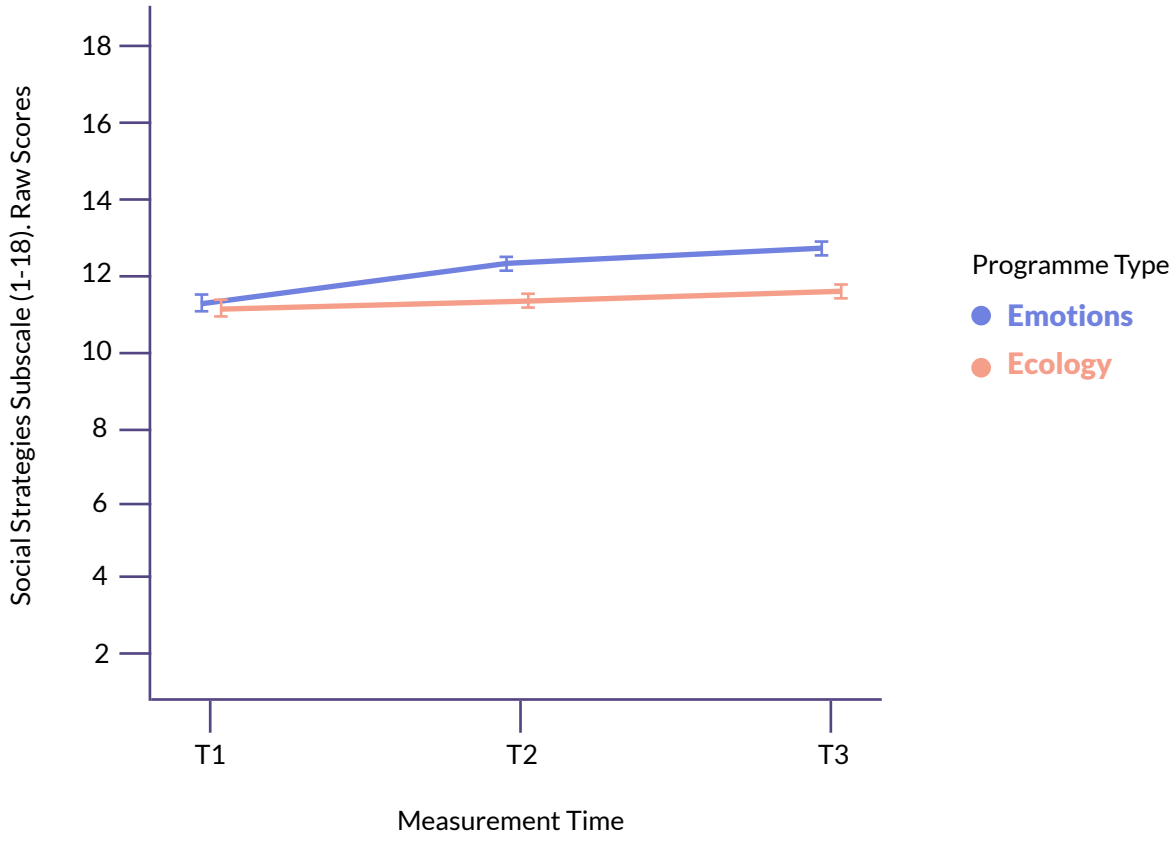
Figure 3. Mean IDS-2 Social Strategies Subscale Raw Scores by Programme Type and Measurement Time



Analysis of the age-standardised scores for the Social Strategies subscale revealed a statistically significant main effect of measurement time, $F(2, 1186) = 22.37$, $p < .001$, $\eta^2_p = .04$, indicating that children's performance changed across the three assessment occasions. A significant main effect of programme type was also observed, $F(1, 593) = 10.29$, $p = .002$, $\eta^2_p = .02$, demonstrating overall differences between the *Moving Stories about Emotions* and *Moving Stories about Ecology* programmes. In contrast, the main effect of programme delivery schedule was not statistically significant, $F(2, 593) = 1.67$, $p = .189$.

With respect to the interaction effects, the interaction between measurement time and programme delivery schedule was not statistically significant, $F(4, 1186) = 1.55$, $p = .187$. However, a significant interaction between measurement time and programme type was found, $F(2, 1186) = 11.24$, $p < .001$, $\eta^2_p = .02$. In addition, the interaction between programme type and programme delivery schedule reached statistical significance, $F(2, 593) = 3.29$, $p = .038$, $\eta^2_p = .01$. Most importantly, the three-way interaction between measurement time, programme type, and programme delivery schedule was statistically significant, $F(4, 1186) = 4.82$, $p < .001$, $\eta^2_p = .02$.

The estimated marginal means presented in Figure 4 indicate that the pattern of change over time differed across programme delivery schedules. Under the intensive delivery schedule, children participating in the *Moving Stories about Emotions* programme showed substantially

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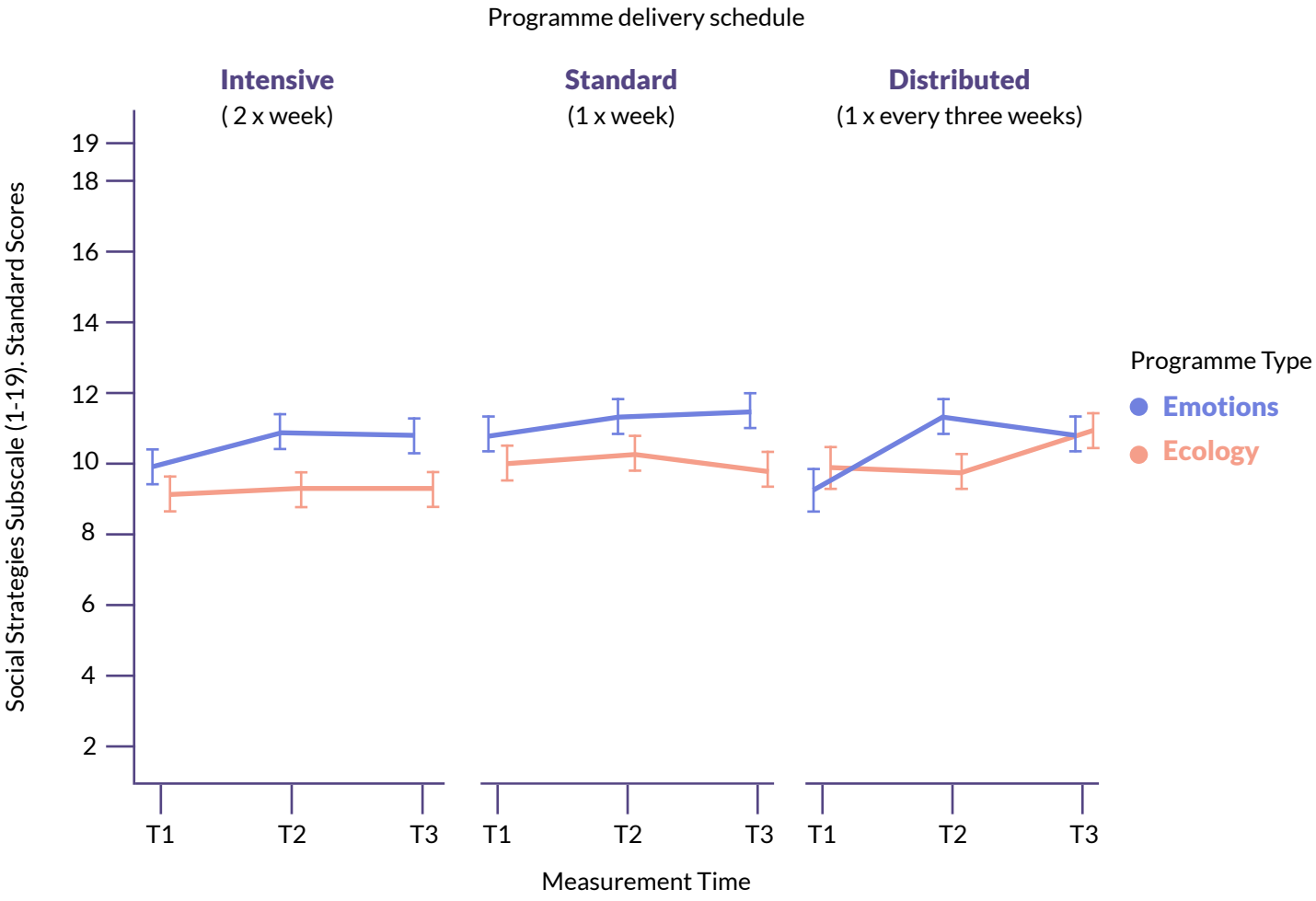
higher Social Strategies scores than children in the active control condition at both the post-intervention assessment (T2) and the follow-up assessment (T3). A comparable pattern was observed under the standard delivery schedule, with children in the emotional education programme showing greater improvement across successive measurements and achieving higher scores than those in the ecology programme following the intervention.

For the distributed delivery schedule, the advantage of the *Moving Stories about Emotions* programme was apparent immediately after programme completion (T2) but was no longer evident at the follow-up assessment (T3), suggesting that the intervention effect was less durable when the programme was delivered over a more extended period.

Overall, the analysis of the age-standardised scores suggests that the effectiveness of the *Moving Stories about Emotions* programme in improving children's social strategy skills varied according to the programme delivery schedule. The strongest and most persistent effects were observed under the intensive and, to a lesser extent, the standard delivery schedules, whereas the benefits associated with the distributed schedule were evident only immediately following programme completion.

Figure 4. Mean IDS-2 Social Strategies Subscale Standard Scores by Programme Type, Delivery Frequency, and Measurement Time



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Change in Emotion Regulation as a Function of Programme Type and Programme Delivery Schedule

The dependent variable in this analysis was the total score on the Emotion Regulation subtest of the IDS-2, measured at the three assessment occasions (T1, T2, and T3). Scores on this subtest range from 0 to 12 points.

The data were analysed using a 3 × 2 × 3 mixed-design analysis of variance (mixed ANOVA), with measurement time (T1, T2, T3) as the within-subjects factor and programme type (*Moving Stories about Emotions* vs. *Moving Stories about Ecology*) and programme delivery schedule (intensive, standard, and distributed) as the between-subjects factors.

The analysis revealed no significant main effect of measurement time, $F(2, 890) = 0.69$, $p = .501$, indicating that, when averaged across programme type and delivery schedule, emotion regulation scores did not change significantly over time. Likewise, there was no significant main effect of programme delivery schedule, $F(2, 445) = 0.20$, $p = .817$. However, a significant main effect of programme type was observed, $F(1, 445) = 13.63$, $p < .001$, $\eta^2_p = .01$, indicating overall differences in emotion regulation between children participating in the two intervention programmes.

A significant interaction between measurement time and programme delivery schedule was also found, $F(4, 890) = 6.17$, $p < .001$, $\eta^2_p = .02$, whereas the interaction between measurement time and programme type, $F(2, 890) = 0.90$, $p = .408$, and the interaction between programme type and programme delivery schedule, $F(2, 445) = 0.36$, $p = .697$, were not statistically significant.

Most importantly, the three-way interaction between measurement time, programme type, and programme delivery schedule was statistically significant, $F(4, 890) = 5.74$, $p < .001$, $\eta^2_p = .02$. This finding indicates that changes in emotion regulation over time depended on the combined effects of programme type and programme delivery schedule.

The estimated marginal means and their confidence intervals (see Figure 5) indicate that the effectiveness of the *Moving Stories about Emotions* programme varied across the three delivery schedules. The clearest improvement over time within the emotional education programme was observed under the distributed delivery schedule, where children showed significantly higher emotion regulation scores at both the post-intervention assessment (T2) and the follow-up assessment (T3) compared with baseline (T1). Comparable within-group improvements were not observed for the intensive or standard delivery schedules.

Comparisons between the intervention conditions further showed that children participating in the *Moving Stories about Emotions* programme had higher emotion regulation scores than those in the *Moving Stories about Ecology* programme at specific measurement times. Under the intensive delivery schedule, this advantage was observed at the follow-up assessment (T3). Under the standard schedule, differences between the programmes were observed at baseline (T1) and follow-up (T3), whereas under the distributed schedule, a significant advantage of the emotional education programme was observed immediately following programme completion (T2).

Overall, these findings suggest that the impact of the *Moving Stories about Emotions* programme

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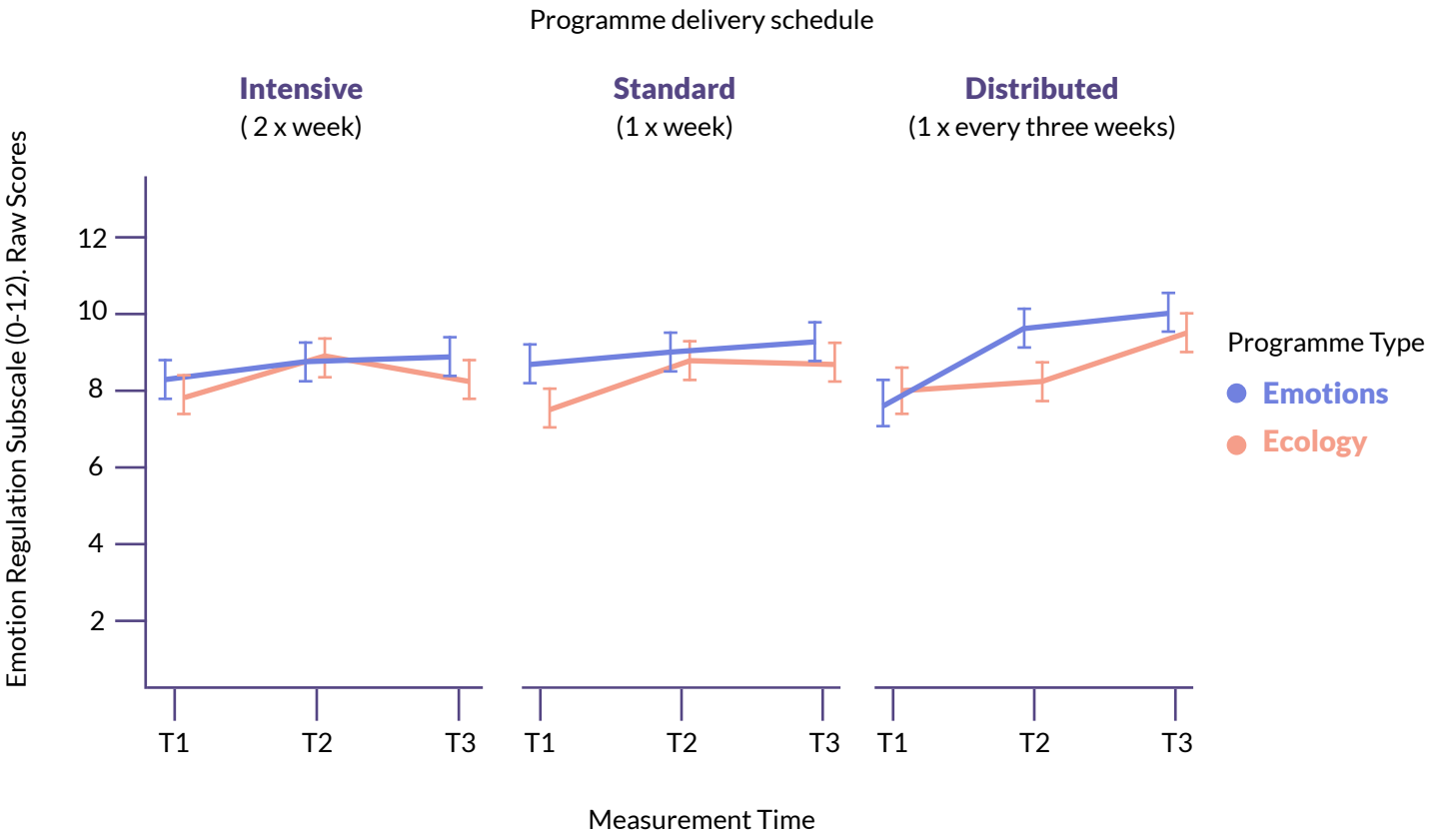
on children's emotion regulation depended on the frequency with which the programme was delivered. Although the pattern of effects varied across delivery schedules, the emotional education programme showed statistically significant advantages over the active control condition at post-intervention and/or follow-up assessments, providing partial support for the study hypotheses.

Figure 5 Mean IDS-2 Emotion Regulation Subscale Raw Scores by Programme Type, Delivery Frequency, and Measurement Time



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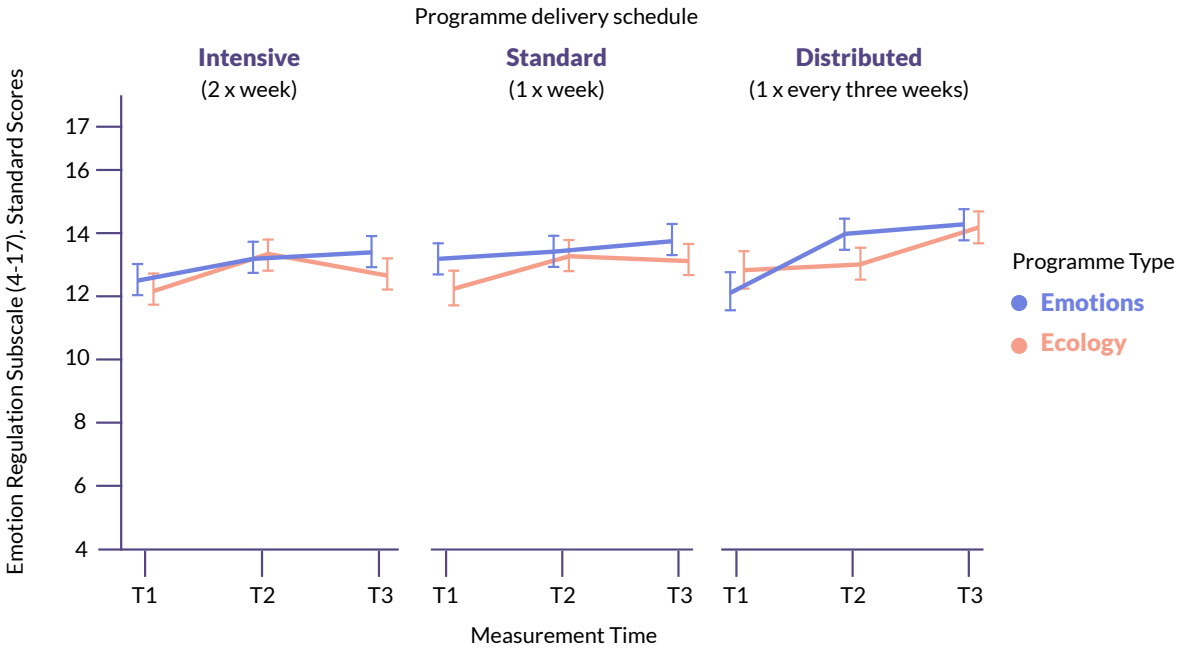
Analysis of the age-standardised scores for the Emotion Regulation subscale revealed several statistically significant effects. A significant main effect of measurement time was found, $F(2, 1174) = 49.49$, $p < .001$, $\eta^2_p = .08$, indicating that children's emotion regulation scores changed across the three assessment occasions. Significant main effects of programme type, $F(1, 587) = 5.33$, $p = .021$, $\eta^2_p = .01$, and programme delivery schedule, $F(2, 587) = 4.03$, $p = .018$, $\eta^2_p = .01$, were also observed.

The interaction between measurement time and programme type was not statistically significant, $F(2, 1174) = 0.80$, $p = .451$, nor was the interaction between programme type and programme delivery schedule, $F(2, 587) = 0.51$, $p = .600$. In contrast, the interaction between measurement time and programme delivery schedule was statistically significant, $F(4, 1174) = 4.28$, $p = .002$, $\eta^2_p = .01$. Most importantly, the three-way interaction between measurement time, programme type, and programme delivery schedule was also statistically significant, $F(4, 1174) = 5.52$, $p < .001$, $\eta^2_p = .02$.

The estimated marginal means (see Figure 6) indicate that the pattern of results closely resembled that observed for the raw IDS-2 scores. The largest increase in emotion regulation scores was observed under the distributed delivery schedule, where children participating in the *Moving Stories about Emotions* programme had significantly higher scores at both the post-intervention assessment (T2) and the follow-up assessment (T3) than at baseline (T1). Under the intensive delivery schedule, differences between the emotional and ecology programmes were primarily evident at the follow-up assessment (T3), indicating that the benefits of the emotional education programme became more pronounced over time.

Overall, the analysis of the age-standardised scores confirms the findings obtained for the raw scores and suggests that the effectiveness of the *Moving Stories about Emotions* programme in improving children's emotion regulation depended on the programme delivery schedule, with the strongest and most consistent effects observed under the distributed delivery schedule.

Figure 6 Mean IDS-2 Emotion Regulation Subscale Standard Scores by Programme Type, Delivery Frequency, and Measurement Time



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Change in Results on the IDS-2 Emotion Recognition Subscale Depending on Programme Type and Delivery Frequency

The dependent variable in this analysis was the sum of raw scores obtained in the Emotion Recognition subscale of the IDS-2 test battery, with possible scores ranging from 0 to 10 points at each of the three measurement occasions.

A mixed analysis of variance (mixed ANOVA) was conducted using a 2 (programme type: emotions vs. ecology) × 3 (programme delivery frequency: intensive, standard, distributed) × 3 (measurement time: T1, T2, T3) design. Measurement time was treated as a within-subjects factor, whereas programme type and delivery frequency were treated as between-subjects factors.

The analysis revealed a significant main effect of measurement time, $F(2, 1218) = 125.86$, $p < .001$, $\eta^2_p = .17$, indicating that children's emotion recognition scores changed significantly across the three measurement times. Significant main effects of programme delivery frequency, $F(2, 609) = 13.93$, $p < .001$, $\eta^2_p = .04$, and programme type, $F(1, 609) = 10.36$, $p = .001$, $\eta^2_p = .02$, were also observed.

A significant interaction between measurement time and programme delivery frequency was found, $F(4, 1218) = 5.14$, $p < .001$, $\eta^2_p = .02$, indicating that changes in emotion recognition scores over time differed depending on the frequency of programme implementation. The interaction between programme type and delivery frequency was also statistically significant, $F(2, 609) = 3.85$, $p = .022$, $\eta^2_p = .01$, suggesting that differences between the emotional and ecological programmes depended on the frequency of delivery.

However, the interaction between measurement time and programme type did not reach statistical significance, $F(2, 1218) = 2.94$, $p = .053$, and the three-way interaction between measurement time, programme type, and delivery frequency was not significant, $F(4, 1218) = 0.49$, $p = .742$. This indicates that the pattern of change in emotion recognition over time did not differ significantly between the two programme types depending on delivery frequency.

The significant interaction between programme type and delivery frequency indicates that the difference between the *Moving Stories about Emotions* programme and the *Moving Stories about Ecology* programme depended on how frequently the sessions were delivered (see Figure 7). The largest difference between programmes was observed under the intensive delivery schedule (twice weekly), with children participating in the emotional education programme achieving higher scores than those participating in the ecological programme. No statistically significant differences between programmes were observed under the standard schedule (once weekly) or the distributed schedule (once every three weeks).

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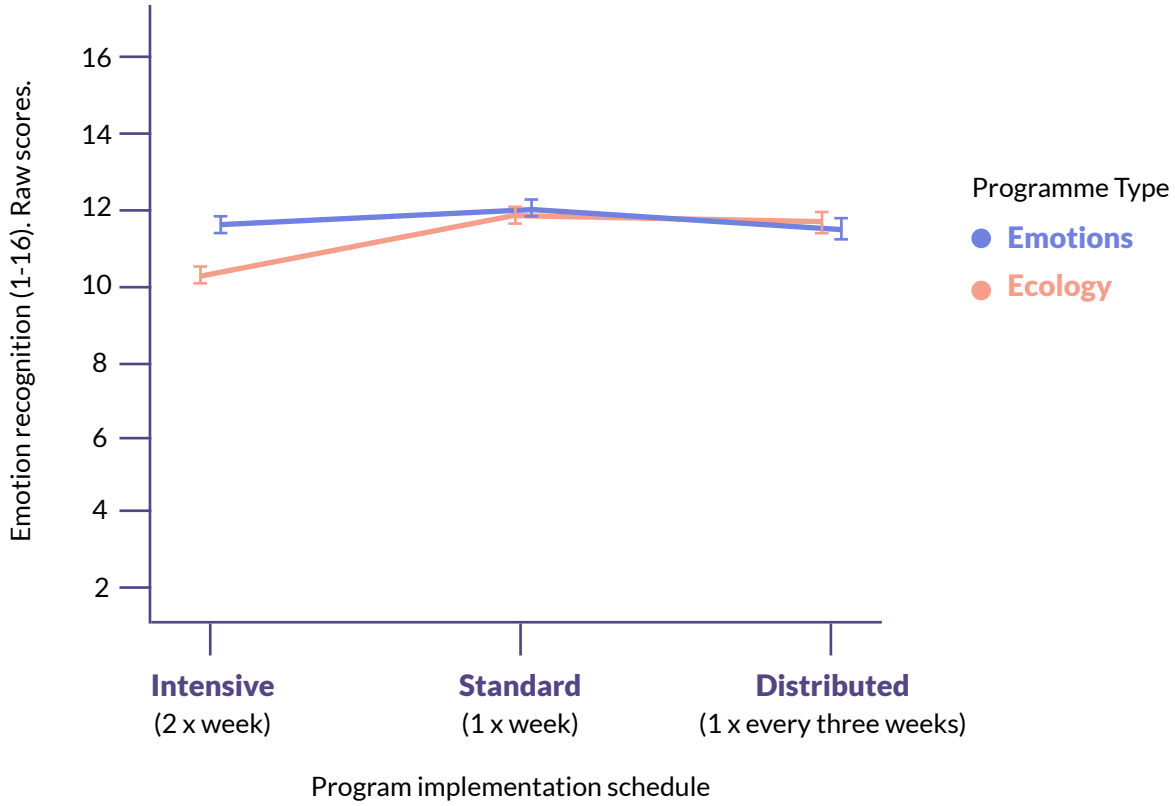
Figure 7 Average level of competence on the IDS-2 test subscale concerning emotion recognition (raw scores) in groups distinguished by programme type and frequency



Analysis of Standardised Scores on the IDS-2 Emotion Recognition Subscale Depending on Programme Type and Delivery Frequency

Analysis of the standardised scores obtained on the IDS-2 Emotion Recognition subscale confirmed the pattern observed for the raw scores. Significant main effects were found for programme type, $F(1, 552) = 6.10$, $p = .014$, $\eta^2_p = .01$; programme delivery frequency, $F(2, 552) = 13.49$, $p < .001$, $\eta^2_p = .05$; and measurement time, $F(2, 1104) = 83.70$, $p < .001$, $\eta^2_p = .13$.

The interaction between measurement time and programme type was not statistically significant, $F(2, 1104) = 0.95$, $p = .388$. Similarly, no significant interaction was found between measurement time and programme delivery frequency, $F(4, 1104) = 2.02$, $p = .090$, or between measurement time, programme type, and delivery frequency, $F(4, 1104) = 1.00$, $p = .408$. The only significant interaction was the interaction between programme type and delivery frequency, $F(2, 552) = 7.23$, $p < .001$, $\eta^2_p = .03$. This indicates that differences between the *Moving Stories about Emotions* programme and the *Moving Stories about Ecology* programme depended on the frequency at which the sessions were delivered. The estimated marginal means for this interaction are presented in Figure 8.

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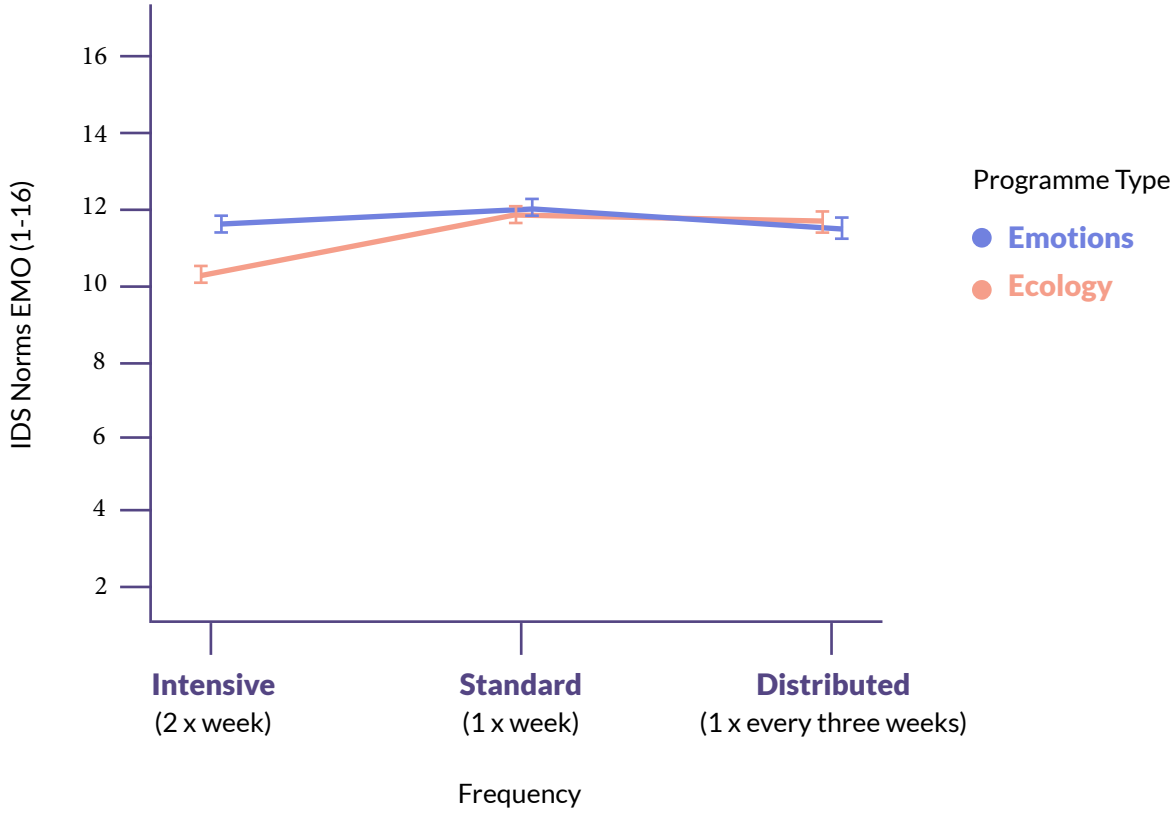
Based on the confidence intervals and mean values (see Figure 8), it can be concluded that, under the intensive delivery condition, children participating in the *Moving Stories about Emotions* programme demonstrated a higher level of emotion recognition competence compared with children participating in the *Moving Stories about Ecology* programme. At the other delivery frequencies, no statistically significant differences between the programmes were observed, indicating comparable levels of emotion recognition competence among children participating in the emotional and ecological programmes. When comparing the mean scores within the *Moving Stories about Emotions* programme, it can be observed that children participating in the distributed programme demonstrated a lower level of emotion recognition competence compared with children participating in the intensive and standard delivery conditions. In contrast, within the *Moving Stories about Ecology* programme, children participating in the standard and distributed conditions demonstrated higher levels of emotion recognition competence compared with children participating in the intensive condition.

Figure 8. Mean IDS-2 Emotion Recognition Subscale Standard Scores by Programme Type and Frequency



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Change in Environmental Knowledge Following the Intervention Depending on Programme Type and Delivery Frequency

The first aspect of environmental competence analysed was environmental knowledge. Changes in environmental knowledge were examined among children participating in both types of programme. Responses to the first four questions of the environmental knowledge questionnaire were scored dichotomously, with a correct answer receiving 1 point and an incorrect answer receiving −1 point, resulting in a possible total score ranging from −4 to 4 points.

A mixed analysis of variance (mixed ANOVA) with repeated measures revealed a significant main effect of measurement time, $F(2, 1112) = 133.31$, $p < .001$, $\eta^2_p = .20$, indicating significant changes in children's environmental knowledge across the three measurement times. A significant main effect of programme type was also observed, $F(1, 556) = 32.00$, $p < .001$, $\eta^2_p = .05$, suggesting differences in environmental knowledge levels between children participating in the two programme conditions.

A significant main effect of delivery frequency was also observed, $F(2, 556) = 20.72$, $p < .001$, $\eta^2_p = .07$.

The interaction between measurement times and programme type was statistically significant, $F(2, 1112) = 45.14$, $p < .001$, $\eta^2_p = .08$, indicating that changes in environmental knowledge over time differed between children participating in the two programme conditions.

The interaction between measurement times and delivery frequency was also statistically significant, $F(4, 1112) = 7.41$, $p < .001$, $\eta^2_p = .03$, indicating that changes in environmental knowledge over time differed according to programme delivery frequency. The interaction between programme type and delivery frequency was not statistically significant, $F(2, 556) = 2.44$, $p = .088$, and the three-way interaction between measurement times, programme type, and delivery frequency was also not statistically significant, $F(4, 1112) = 0.73$, $p = .570$.

The interaction between measurement times and programme type indicates that changes in environmental knowledge over time differed between children participating in the two programme conditions. The observed pattern showed a substantially greater increase in environmental knowledge among children participating in the Moving Stories about Ecology programme. In this programme, knowledge scores increased markedly from T1 to T2 and remained elevated or increased further at T3. In contrast, changes among children participating in the Moving Stories about Emotions programme were considerably smaller.

Importantly, children participating in the Moving Stories about Ecology programme demonstrated a greater increase in environmental knowledge between measurements than children participating in the Moving Stories about Emotions programme, resulting in higher scores at the final assessment (T3; see Figure 9). A significant main effect of programme type was also observed, with children who participated in the environmental programme achieving higher overall environmental knowledge scores compared with children who participated in the emotional education programme. Across measurement times and delivery-frequency conditions, the estimated

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marginal mean was M = 0.48 (SE = 0.10) for the environmental programme and M = −0.31 (SE = 0.10) for the emotional education programme.

Differences were also observed depending on the frequency of programme delivery. Children participating in the standard-frequency condition achieved the highest environmental knowledge scores, whereas children participating in the intensive condition achieved the lowest scores (see Figure 9). However, because the interaction between measurement time and delivery frequency was significant, these overall differences should be interpreted in the context of different patterns of change over time rather than as evidence of a simple linear effect whereby more frequent programme delivery produced greater environmental knowledge. (see Figure 10).

Figure 9. Average Level of Environmental Knowledge by Programme Delivery Frequency

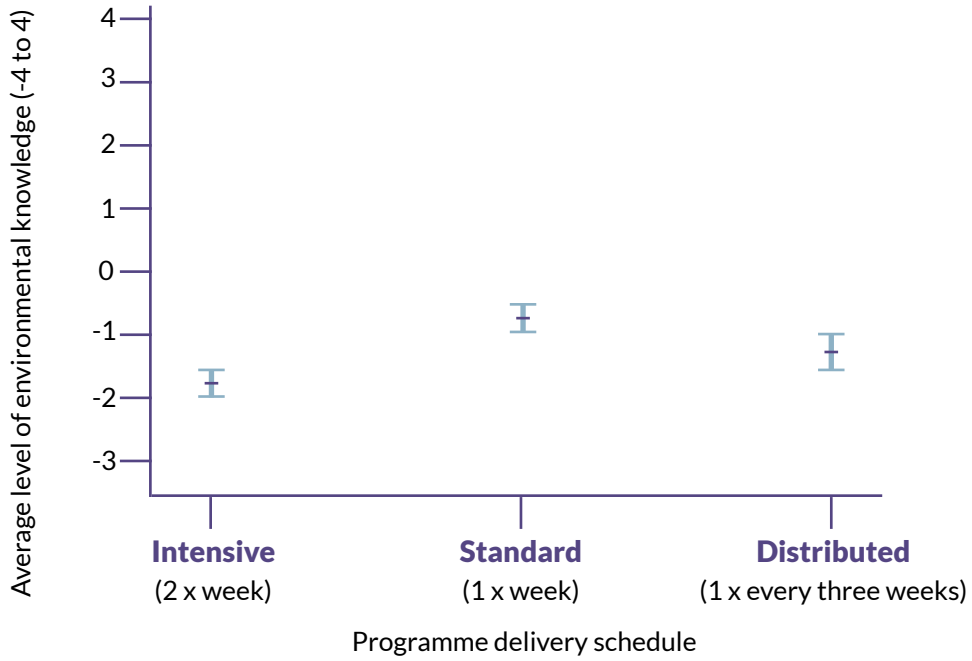
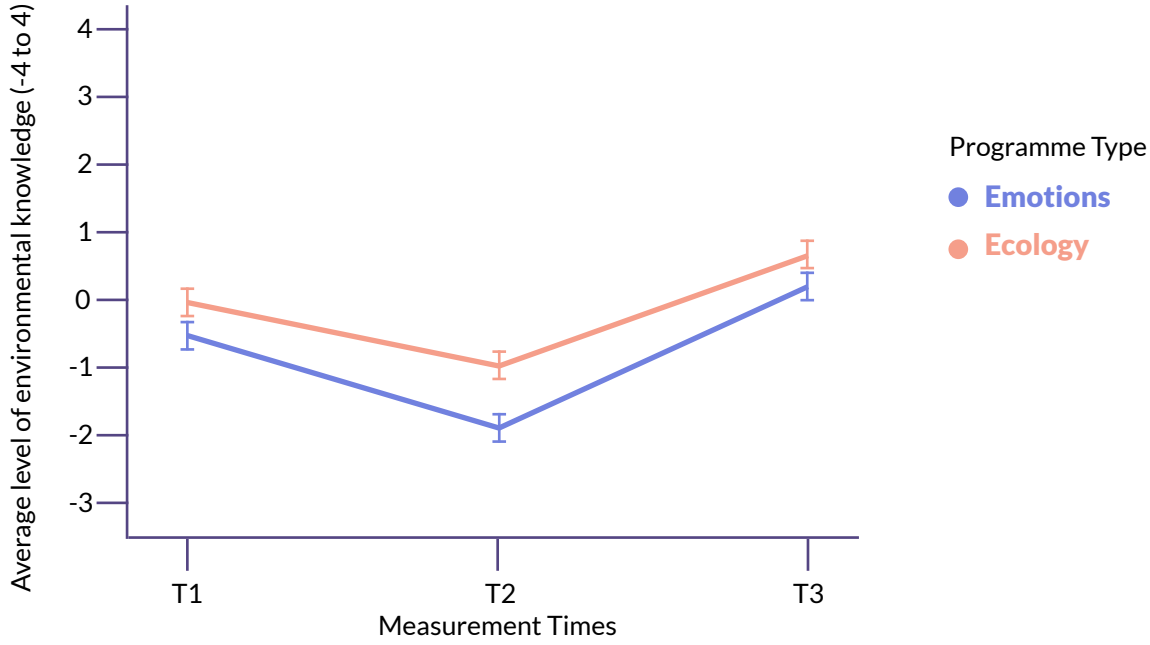


Figure 10. Average level of environmental knowledge in groups categorised by programme type for individual measurement points.



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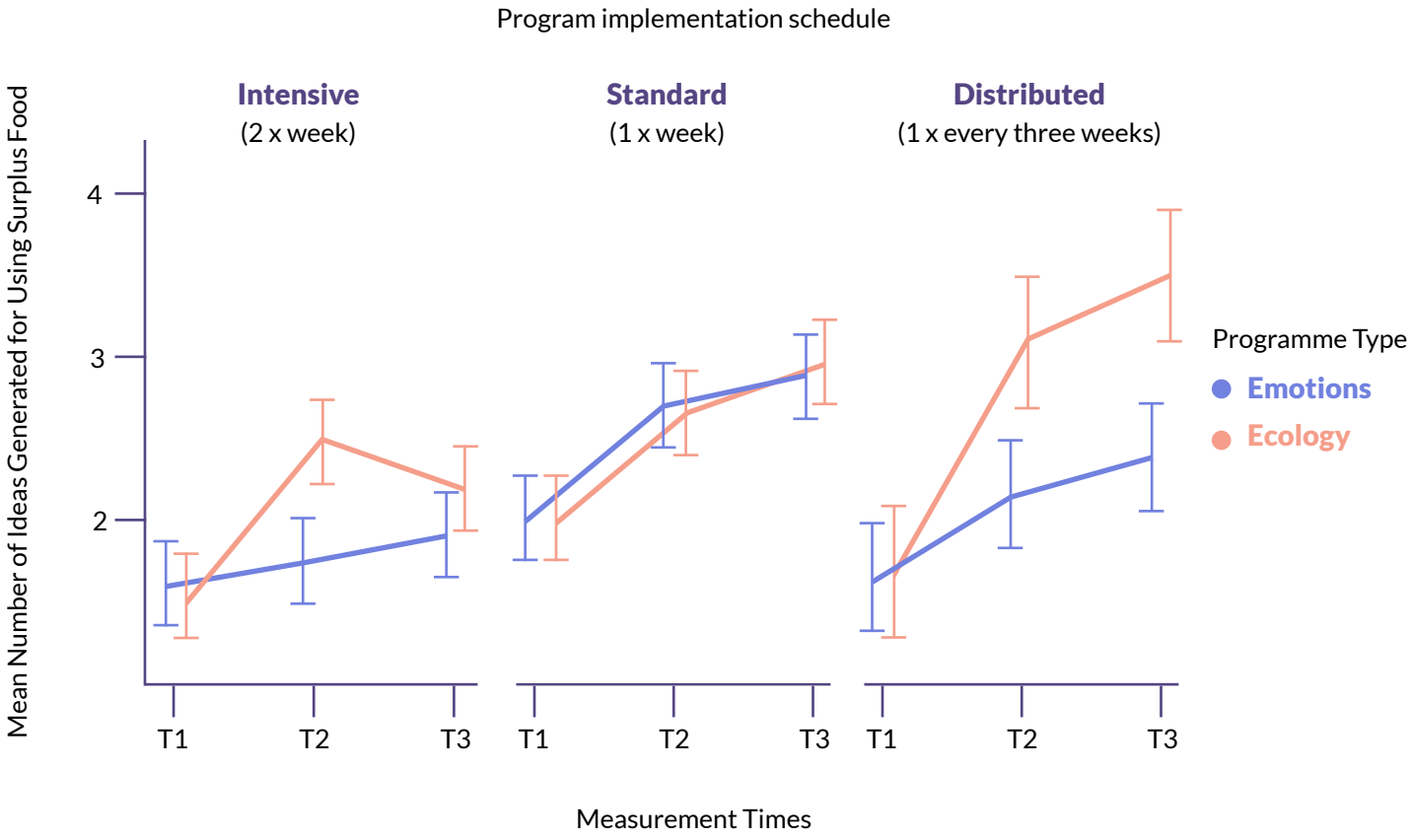
The second aspect of environmental competence concerned the number of ideas generated by children to solve a specific environmental problem. In the questionnaire, children were asked to generate as many ideas as possible for preserving surplus food. For the dependent variable determining the number of ideas generated to solve an environmental problem, a significant main effect of measurement time was also obtained, $F(2, 1172) = 82.42$, $p < 0.001$; $\eta^2_p = 0.12$; a main effect of frequency, $F(2, 586) = 14.65$, $p < 0.001$; $\eta^2_p = 0.05$, a main effect of programme type $F(1, 586) = 13.15$, $p < 0.001$; $\eta^2 p = 0.02$. Significant interactions were also found between measurement time and type of programme, $F(2, 1172) = 11.04$, $p < 0.001$; $\eta^2_p = 0.02$, between measurement time and frequency, $F(4, 1172) = 6.64$, $p = 0.001$; $\eta^2_p = 0.02$, and a significant three-way interaction of time, programme type and frequency, $F(4, 1172) = 4.44$, $p = 0.001$; $\eta^2_p = 0.01$.

The estimated marginal means indicated that both groups generated progressively more ideas across successive measurements, although scores were consistently higher among children participating in the *Moving Stories about Ecology* programme. This difference was particularly pronounced under the distributed delivery schedule (see Figure 11).

Figure 11. Mean Number of Ideas Generated for Using Surplus Food by Programme Type, Frequency, and Measurement Time



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In summary, children who participated in the *Moving Stories about Ecology* programme generally obtained higher scores on the environmental knowledge test and generated more ideas concerning environmentally appropriate ways of dealing with surplus food than those who participated in the *Moving Stories about Emotions* programme. The results also indicated an association between programme delivery frequency and environmental competence, with children participating in the distributed programme generally obtaining higher scores than those in the intensive programme. This pattern suggests that a more extended distribution of sessions may be associated with more favourable outcomes in the acquisition and application of environmental knowledge.

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Summary of Part II

The study findings indicate that the *Moving Stories about Emotions* programme was more effective than the *Moving Stories about Ecology* programme in developing children's social-emotional competences. Before the start of the sessions, the two groups of children did not differ significantly in their overall level of social-emotional competence, indicating comparable baseline performance in the two programme conditions (emotions vs. ecology) at T1. Importantly, both immediately following the intervention (T2) and at the delayed follow-up assessment (T3), children participating in the *Moving Stories about Emotions* programme obtained significantly higher scores in overall social-emotional competence, emotion regulation, and social strategies than those participating in the *Moving Stories about Ecology* programme. These findings provide substantial support for the main research hypotheses.

The pattern of changes in general social-emotional competences over time depended on the specific combination of programme type and frequency of sessions, indicating a complex relationship between these factors. The emotional education programme resulted in higher levels of competence than the environmental programme following the intervention, particularly under intensive and distributed delivery conditions, with the difference being most evident at the T2 measurement. This suggests that frequent sessions (twice a week) enabled the *Moving Stories about Emotions* programme to achieve and maintain a clear advantage over the environmental programme both immediately after the sessions and at the delayed assessment (T3). A similarly beneficial effect was observed under the distributed delivery schedule at T2; however, no statistically significant difference between the two groups was observed at the follow-up assessment (T3).

With regard to the ability to recognise emotions – a fundamental dimension of social-emotional competence – both the type of programme and the frequency of sessions proved to be significant. The significant interaction between these factors indicates that the advantage of the emotional education programme was most evident under the intensive delivery condition, where the differences between children in the emotions and ecology conditions were greatest. Importantly, no differences were found between the programmes under the standard and distributed conditions. Children participating in the emotional education programme achieved comparable results in emotion recognition under the intensive and standard conditions, whereas they obtained lower results under the distributed condition (sessions once every three weeks). This suggests that, to achieve the greatest improvement in emotion recognition, the programme should be delivered at least once a week. At the same time, it should be noted that children generally achieved high scores in this area, which is consistent with the developmental fact that emotion recognition at this age is already relatively well established, and the test itself may have been relatively easy for some children.

With regard to emotion regulation, the role of frequency proved to be crucial and more complex, as the effect of the emotional education programme over time depended on the frequency of sessions. No overall increase in the level of emotion regulation was observed across the subsequent measurements, indicating that improvement occurred only under specific conditions. The most noticeable increase occurred in the

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group participating in the emotional education programme at the standard frequency (once a week) and, somewhat unexpectedly, in the distributed condition (sessions once every three weeks). This may suggest that, with regard to emotion regulation, longer intervals between sessions could promote the consolidation of skills over time. It is worth noting, however, that the pattern of results varied across frequency conditions, and the observed differences should therefore be interpreted with caution. Overall, the findings suggest that the emotional education programme may enhance emotion regulation, but that the magnitude and persistence of this effect depend on the frequency of programme delivery.

For the ability to identify effective social strategies, the effect of the emotional education programme did not vary significantly according to delivery frequency. No significant main effect of delivery frequency was observed, indicating that changes in social-strategy competence did not differ significantly across the three frequency conditions. The *Moving Stories about Emotions* programme nevertheless yielded significantly higher scores than the *Moving Stories about Ecology* programme. Although the two groups demonstrated comparable levels of social-strategy competence at baseline (T1), children participating in the emotional education programme showed significantly greater increases in scores at both the post-intervention assessment (T2) and the follow-up assessment (T3). These findings indicate that the *Moving Stories about Emotions* programme was effective in developing children's social-strategy competence and that its effects did not vary significantly according to delivery frequency.

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Summary and conclusions

The main aim of the study was to examine the effectiveness of the *Moving Stories about Emotions* programme in developing social-emotional competences among preschool children. To this end, outcomes among children participating in the emotional education programme were compared with those of an active control group participating in the *Moving Stories about Ecology* programme. The study also examined whether the effects of the programme were evident immediately following its completion and whether they were maintained at a later follow-up assessment. In addition, the study investigated the role of session frequency, a factor of practical importance for programme implementation, in determining the effectiveness of the *Moving Stories about Emotions* programme. Several potential confounding variables were also assessed, including children's developmental difficulties, parents' social capital, and the quality of programme delivery, to assess their potential influence on the outcomes and the comparability of the study groups and conditions.

The study was conducted in 34 preschool groups across three Polish cities and comprised three measurements: pre-intervention (T1), immediately post-intervention (T2), and a delayed measurement (T3). The children were individually assessed using the standardised IDS-2 psychological test, which measures three components of social-emotional competence: emotion recognition, emotion regulation, and social strategies. In addition, the children's level of environmental knowledge was assessed. Parents completed the KPIKS-20 questionnaire, while teachers completed the SDQ questionnaire to determine whether the groups differed in terms of family background (social capital) and behavioural difficulties observed by preschool teachers (level of difficulties on the SDQ). Preschools were randomly assigned to either the experimental condition (emotional education programme) or the control condition (environmental education programme), with each programme delivered at one of three different frequencies.

Statistical analyses were conducted using a mixed-design analysis of variance (mixed ANOVA), which allowed changes over time to be examined as a function of programme type and delivery frequency. The process evaluation indicated that both programmes were implemented in accordance with the guidelines specified in the implementer's manual and that no substantial disruptions occurred that were likely to have affected the study results.

The results of the study showed that children participating in the *Moving Stories about Emotions* programme developed their social-emotional competences to a greater extent than children taking part in the environmental education programme. These differences were evident both

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immediately after the sessions and at the delayed assessment, particularly in terms of overall social-emotional competence and the use of effective social strategies.

The emotional education programme proved particularly effective when sessions were delivered intensively (twice a week) or at regular intervals. In terms of emotion recognition, the greatest benefits were observed under intensive and standard delivery conditions. Improvements in emotion regulation varied depending on the frequency of sessions, indicating that although the programme is effective, children may respond differently to different patterns of programme delivery.

Based on the data collected, the *Moving Stories about Emotions* programme can be considered effective. Children who participated in the emotional education sessions showed a significantly greater increase in social-emotional competences than children participating in the environmental education programme, both immediately after the programme ended and several weeks later. The strongest and most stable effect concerned the development of social strategies, which are crucial for children's everyday functioning within a peer group. The observed increase in competence was consistent and reproducible, and its dependence on programme type supports the conclusion that the changes were associated with the intervention rather than solely with external factors or natural developmental changes.

The study did not include observations of children's behaviour in natural social situations, which could have provided complementary evidence for interpreting the findings. Some differences in programme effectiveness depended on the frequency of sessions, suggesting that not all delivery formats are equally effective. However, the factors underlying the differences in outcomes across frequencies were not examined. At the same time, an increase in emotional and social competences was also observed in the control group, indicating that these competences develop gradually and are influenced by a range of developmental factors not accounted for in the present study. The analysis did not include evaluations of the programme provided by teachers and parents. Furthermore, no in-depth interviews were conducted with participants, which might have provided a deeper understanding of the differences associated with the frequency of sessions.

Despite these limitations, the study was successfully completed as a large, multi-centre investigation involving measurements at three time points and assessment of several important potential confounding variables. The findings provide evidence supporting the effectiveness of *Moving Stories about Emotions* in promoting children's social-emotional development. Taken together, the results suggest that the programme represents a promising evidence-based intervention with potential for broader implementation in educational settings.

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Bibliography

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Erlbaum.

Allen, J. G., Fonagy, P., & Bateman, A. W. (2014). *Mentalisation in clinical practice*. Jagiellonian University Press.

Appelt, K. (2025). Psychosocial risk factors and protective factors associated with risky behaviour among primary school pupils. Paper presented *at the 12th National Conference on 'Addiction – Policy, Science, Practice'*. https://www.youtube.com/watch?v=pFe02GNJq_I&list=PLDvJVQVubxVTH2L3B6OHMXX-0LbZbJj0ez&index=5

Bąbel, P. (2006). Placebo and nocebo. An attempt at integration. *Psychological Review*, *49*(2), 141–156.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.

Brzezińska, A., Appelt, K., & Ziółkowska, B. (2024). *Psychology of human development*. Gdańsk Psychological Publishing House.

Bryant, B. K. (1992). Conflict resolution strategies in relation to children's peer relations. Journal of Applied Developmental Psychology, 13(1), 35–50. https://doi.org/10.1016/0193-3973(92)90004-2

Butcher, N. J., Monsour, A., Mew, E. J., Chan, A. W., Moher, D., Mayo-Wilson, E., … Offringa, M. (2022). Guidelines for reporting outcomes in trial protocols: The SPIRIT-outcomes 2022 extension. *JAMA*, *328*(23), 2345–2356.

Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, 17(1), 57–89. https://doi.org/10.1207/s15566935eed1701_4

Deptuła M., Potorska A., Borish S. (2018). Early prevention of problems in psychosocial development and risky behaviours in children and adolescents. Warsaw: PWN Scientific Publishers.

Project co-financed by the Gambling Problem Resolution Fund,
commissioned by the National Centre for Addiction Prevention.

Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development*, *88*(2), 408–416. https://doi.org/10.1111/cdev.12739

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Erikson, E. H. (1950). *Childhood and society*. W. W. Norton.

Gajda, A. (2018). *Evaluation report on 'Moving Fairy Tales about Emotions'*. Unpublished research report.

Goodman, R. (2005). The *Strengths and Difficulties Questionnaire*: A research note. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x

Harwas-Napierała, B., & Trempała, J. (2000). *Psychology of Human Development* (Vol. 2). PWN.

Jaworowska, A., Matczak, A., & Fecen, D. (2018). IDS-2. *Intelligence and Development Scales for Children and Adolescents. Manual 1: Theoretical foundations, psychometric properties, interpretation*. Psychological Testing Laboratory.

Jones, S. M., Brush, K. E., Bailey, R., Brion-Meisels, G., McIntyre, J., Kahn, J., Nelson, B.,... Stickle, L. (2021). *Navigating SEL from the inside out: Looking inside & across 33 leading SEL programmes*. Harvard Graduate School of Education. https://wallacefoundation.org/sites/default/files/2023-08/navigating-social-and-emotional-learning-from-the-inside-out-2ed.pdf

Mishara, B. L., & Ystgaard, M. (2006). Effectiveness of a mental health promotion programme to improve coping skills in young children: Zippy's Friends. *Early Childhood Research Quarterly*, *21*(1), 110–123. https://doi.org/10.1016/j.ecresq.2006.01.002

Ostaszewski, K. (2014). *Risky behaviours among young people from the perspective of resilience mechanisms*. Institute of Psychiatry and Neurology.

Ostaszewski, K. (2016). *Prevention standards*. 'Pro-M' Youth Prevention Unit, Institute of Psychiatry and Neurology.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, *9*(3), 185–211.

Schaffer, R. H. (2005). *Child psychology*. PWN.

Project co-financed by the Gambling Problem Resolution Fund,
commissioned by the National Centre for Addiction Prevention.

Skoczeń, I., Rogoza, R., Maćkiewicz, M., Najderska, M., & Cieciuch, J. (2018). *Strengths and Difficulties Questionnaire – Polish Version (SDQ)* [Database record]. APA PsycTests.

Smogorzewska, J., Karwowska, M., & Wójtowicz, A. (2016). Children's narrative ability and theory of mind. *Early Child Development and Care*, *186*(11), 1825–1842.

Smogorzewska, J., Szumski, G., Grygiel, P., Bosacki, S., & Karwowski, M. (2024). Creativity, theory of mind and loneliness: The links between cognitive and social abilities of school-age children. *Learning and Individual Differences*, *115*, Article 102541. https://doi.org/10.1016/j.lindif.2024.102541

Smoktunowicz, E., Maciejewski, J., Lesnierowska, M., & Carlbring, P. (2024). Bridging the adherence gap in Internet interventions: A randomised controlled trial study protocol investigating context-specific self-efficacy. *Internet Interventions*, *35*. https://doi.org/10.1016/j.invent.2023.100697

Styła, R. (2009). Questionnaire for measuring individual social capital (KPIKS): A preliminary proposal based on Tom Snijders' resource generator. *Social Psychology*, *1–2*, 67–77.

Szwejka, Ł., Rewera, M., & Nowakowski, P. T. (2024). The effectiveness of programmes strengthening psychological resilience in the light of a synthesis of experimental research. *Education*, *4*(171). https://doi.org/10.24131/3724.240402

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. Child Development, 88(4), 1156–1171. https://doi.org/10.1111/cdev.12864

Wellman, H. M. (2014). *Making minds: How theory of mind develops*. Oxford University Press.

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Characters from the Moving Stories about Emotions **Program.**

Kalimba
Story 1 and 10. The Joy of Being Together

Dyzio the Miner
Story 2. Learning to Wait

Princess Charlotte
Story 3. When Anger Takes Over

Marta
Story 4. When Someone Is Feeling Sad

Silent Grass
Story 5. When Fear Holds Us Back

Louis
Story 6. When You Feel Too Shy to Join In

Mitka
Story 7. When Things Don't Go as Planned

The Green Prince
Story 8. When Someone Else Has What You Want

Grand Master
Story 9. When You Keep Going

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ul. Borsucza 7/78, 30-408 Kraków

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