Benefits of an out-of-school time program on social-emotional learning among disadvantaged adolescent youth

A retrospective analysis

Helms, R.; Fukkink, R.; van Driel, K.; Vorst, H.C.M.

DOI
10.1016/j.childyouth.2021.106262

Publication date
2021

Document Version
Final published version

Published in
Children and Youth Services Review

License
CC BY

Citation for published version (APA):
Benefits of an out-of-school time program on social-emotional learning among disadvantaged adolescent youth: A retrospective analysis

Rochelle Helms a, *, R. Fukkink b, K. van Driel c, H.C.M. Vorst d

a Amsterdam University of Applied Sciences, Wibautstraat 2-4, 1091 GM Amsterdam, the Netherlands
b Amsterdam University of Applied Sciences & University of Amsterdam, Wibautstraat 2-4, 1091 GM Amsterdam, the Netherlands
c IMC Weekendschool, Strawinskylaan 719, 1077 XX Amsterdam, the Netherlands
d PSI Testuitgevers, Keizersgracht 217, 1016 DT Amsterdam, the Netherlands

ARTICLE INFO
Keywords:
Out-of-school-time programs (OST)
Social-emotional learning (SEL)
Youth development
Retrospective study
Urban education
At-risk students, underprivileged neighborhoods
10–14 age group

ABSTRACT
Although it is assumed out-of-school time (OST) programs can have long term positive outcomes on the social-emotional learning (SEL) of youth, few studies have explored their benefits in a retrospective analysis. Based on retrospective accounts of 194 alumni (age 15–30 years), the present study assessed the self-perceived benefits on different dimensions of social-emotional learning (SEL) after completing the three years Weekendschool program for students between 10 and 14 years in the Netherlands. Alumni look back positively on the perceived benefits after having completed the program. The results of linear mixed models show that alumni report higher levels of self-management, self-awareness and future perspective when living in an urban area compared to those participating in provincial areas. Students from preparatory vocational secondary education were significantly more positive about their experiences compared to alumni from other school types. When alumni took part in a national follow-up program, they were more positive on all SEL dimensions.

1. Introduction

Children growing up in disadvantaged backgrounds generally do not experience the same benefits as do children from middle-class backgrounds, with parents not always being able to support their children academically or because they are unable to facilitate the kind of cultural enrichment known to enhance academic, social and personal development (Anthony, Alter, & Jenson, 2009; Hall, Williams, & Daniel, 2010). The term ‘disadvantaged youth’, also described as ‘at-risk’, can be defined as “young people whose potential for becoming responsible and productive adults is limited by challenges within the ecology of their lives” (Friezem, 2014). As such, it is a multi-dimensional concept; related to poverty, deprivation, and social exclusion, including a lack of resources regarding one or more of these three dimensions (Chapman & Carbonetti, 2011; Montoya, 2014).

Children from disadvantaged backgrounds have a higher chance of facing stressors within their homes, their communities and their schools (Frazier et al., 2015), and may lack positive role models to increase their self-esteem, social skills and future perspectives (Braster & Bronkers, 2013) and to role model upward mobility (Grant et al., 2003). Also, children from disadvantaged backgrounds more often face hostility and stigmatization at school, with teachers having lower expectations even when their test-scores are similar to their peers from middle-class backgrounds (Braster & Bronkers, 2013). The family environment of disadvantaged youth may not always offer a diverse social network where adults have been able to role model upward mobility (Grant et al., 2003).

The challenge to tackle the adverse conditions for positive youth development is particularly predominant in the urban context. It is in urban settings that youth from disadvantaged backgrounds are over-represented and where youth face an accumulated amount of risk factors (Bulanda & McCrea, 2013). Big cities have higher concentrations of poverty. In many Western countries such as the United States, Germany, Great Britain and the Netherlands, children from big cities have lower academic achievements than their provincial peers (OECD, 2015). Experimental research shows that urban youth can particularly benefit from OST participation (Guest & Schneider, 2003; Schwartz, Cappella, & Seidman, 2015). It is therefore especially important to facilitate urban youth from disadvantaged backgrounds with a supportive and enriching environment (Schwartz, Cappella, & Seidman, 2015), and OST programs can be one such environment where young adolescents can build positive relationships with other significant adults and peers.

* Corresponding author.
E-mail address: r.m.helms@hva.nl (R. Helms).

https://doi.org/10.1016/j.childyouth.2021.106262
Received 5 January 2021; Received in revised form 8 September 2021; Accepted 22 September 2021
Available online 24 September 2021
0190-7409/© 2021 Amsterdam University of Applied Sciences - Faculty of Education. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).
and where they can be empowered to develop social and emotional learning.

1.1. Out-of-School-time programs

Many out-of-school-time (OST) programs, defined as educational programs occurring out of school time, aim to provide disadvantaged, urban youth with safe and empowering learning environments to enhance academic success and personal development. OST programs can facilitate an environment where disadvantaged youth experience the motivational support and meet positive role models where they can experience enrichment, all leading to enhanced self-esteem, social skills and future perspectives (Durlak, Weissberg, & Pachan, 2010).

Research has shown the importance of enhancing social and emotional skills to increase children’s chances of success in their school and in their careers and lives. OST programs are known to positively enhance youth development, both academically as well as socially and emotionally (Durlak et al., 2010; Lauer, Akiba, Wilkerson, Apthorp, Billings, & Martin-Glenn, 2006; Taylor, Oberle, Durlak, & Weissberg, 2017). OST programs focusing on academic support for disadvantaged youth have shown positive effects on academic achievement, including reading and mathematics (Lauer et al., 2006), particularly for elementary school children. Participants of OST programs show an increased positive self-perception, positive social behaviors, bonding to school, school grades and levels of academic achievement as well as a reduction in risky behavior, depression and delinquency (Durlak et al., 2010).

1.2. Frameworks for the development of social-emotional skills

The interest in OST programs and their impact on adolescents’ socio-emotional development fit in with a shift that has been made from the deficit and risk-oriented frameworks for battling problematic social-emotional behavior to the attempt of defining positive social-emotional development and the essential skills necessary with the focus on preventative interventions. Different conceptual frameworks have been developed to foster children’s social-emotional wellbeing and the adaptation and ability over limitations and deficits, including Social Competence (SC), Positive Youth Development (PYD), Positive Psychology (PP) and Social and Emotional Learning (SEL). These frameworks share many similarities and Tolan, Ross, Arkin, Godine and Clark (2016) identified four overarching constructs as the common thread in all four frameworks, namely Self-control, Positive self-orientation, Engagement with others and Societal bonding/Moral ethical standards.

Regarding school and afterschool programs, SEL has been the most widely used framework for developing these skills. Within the SEL domain, different authors have used different and broad concepts (e.g., 21st century skills, soft skills or non-cognitive skills, see Jones & Doolittle, 2017). In addition, different frameworks emphasize more psychological or sociological perspectives. For example, PYD focuses on facilitating critical citizenship (see Jaggers, Rivas-Drake, & Williams, 2019 description of Transformational SEL). Where CASEL used to approach SEL mainly from a psychological perspective, a recent update of its definition pays closer attention to a caring and just educational system, however, making sure to include the marginalized in society. (e. g., ‘SEL can help address various forms of inequity and empower young people and adults to co-create thriving schools and contribute to a safe, healthy, and just communities.’; Niemi, 2020).

Five core competencies are distinguished in the SEL framework of CASEL: (a) self-awareness, defined as the ability to recognize one’s emotions and assess one’s strengths and weaknesses; (b) self-management, defined as the ability to regulate thoughts, emotions and behaviors; (c) social awareness, defined as the awareness of the culture, beliefs and feelings of the people and world around oneself; (d) relationships skills, defined as the ability to communicate effectively and work with peers as well as build meaningful relationships; and (e) responsible decision making, defined as the ability to make plans for the future while following moral and ethical standards that also contribute to the wellbeing of others. Extending the SEL framework, Elias et al. (1997) added two constructs in his New Haven Framework: Attitudes and values about Tasks, defined as the willingness to work hard, the motivation to solve practical and academic problems, the recognition of education and respect for property, as well as (g) Content, regarding the promotion of knowledge in regards to health, relationships and school and community. In this study, we build on CASEL’s framework, as well as that of Elias et al. (1997).

School-based SEL programs enhance the socio-emotional development (Durlak et al., 2010), showing effects across all school levels regardless of race and background. The recent meta-analysis of follow-up effects of Taylor et al. (2017) showed that participants of SEL programs have a higher level of wellbeing between 6 months and eighteen years after termination of the SEL intervention. However, this research focuses solely on school-based interventions and research regarding the specific effects of SEL when partaking in OST programs targeted at disadvantaged youth is still limited. Future research should increase our understanding of the impact of OST programs on the socio-emotional development in the long run. This study aims to deepen our understanding of the perceived benefits of youth looking back retrospectively over their participation in a three-year weekendschool program six months to fifteen years postintervention. This provides a unique insight into the long-term perceived benefits from the perspective of youth themselves.

1.3. OST in the Netherlands: IMC Weekendschool

The IMC Weekendschool is a Dutch, three-year enrichment program focusing on young adolescents from 10 to 14 years of age from disadvantaged backgrounds. The Weekendschool started in 1998 and offers the three-year program on nine different locations spread out through the Netherlands, targeting the neighborhoods with the lowest SES and recruiting children from schools with the highest concentration of disadvantaged backgrounds. Thirty Sundays a year, students participate in a program with interactive guest lectures, focusing on the development of social and emotional skills (SEL) and talent development. Many OST programs focus on developing social and emotional learning skills (Mahoney & Weissberg, 2018). Focusing on talent development by IMC Weekendschool is unique and has not been researched. Most talent development programs focus either on a specific field such as arts, sports, or science, or on gifted students. Rarely do broader defined talent development programs focus on a broad range of themes as IMC Weekendschool does, covering the justice system, the arts, politics, philosophy, medicine, media, and more. During these lectures explicit strategies are offered and practiced with in interactive group activities to help youth discover their strengths and visualize possible future perspectives (Gee et al., 2021). For every theme an excursion is organized, making sure children hear about possible fields of work and get introduced to them in person. Every group has one coordinating mentor who is always present and prepares, participates, and evaluates the Sunday program with the adolescents participating. After the three-year program students are invited to participate in alumni programs. Activities in the alumni program are organized on regional as well as national levels for different age groups and interests. Typical activities include acting as a coach at a local IMC Weekendschool, participating in a national ambassadors training, and a yearlong training focusing on presenting oneself, storytelling, marketing and sales. IMC Weekendschool also offers alumni trainings and workshops throughout the country focusing on a specific field of interest such as the arts or ICT.

The program characteristics of the Weekendschool are according to those found to be effective in the meta-analysis by Durlak et al. (2010). The Weekendschool adheres to the SAFE criteria, with its three-year program in which adolescents actively participate in a sequenced, focused, active and explicit program. With the Weekendschool’s three year program in which adolescents actively participate in the classes and
also have regular outings, it can be concluded that this OST program is promising in its objectives to enhance the lives of young adolescents from disadvantaged backgrounds by developing their future perspectives and their social-emotional skills.

1.4. Current study

Although research into the effects of OST programs on the socio-emotional development of adolescents has increased the last decade, less is known about the perceived benefits and personal experiences on the long term. To our knowledge, there is no retrospective study into the perceived benefits on the development of SEL competences as a result of OST programs for disadvantaged youth. The present study evaluated how alumni look back on the long-term perceived benefits of participating in a Dutch, three-year weekend enrichment program ranging from one to fifteen years post completion. This study investigated two questions. First, what is the general evaluation of Weekendschool alumni regarding the perceived benefits of their social-emotional competences after completing the program? Secondly, which characteristics of alumni moderate the perceptions of social-emotional competences?

Considering the fact that participation is in one group for the duration of three years, most activities are organized collectively and the guest lectures focus on developing future perspectives, we hypothesize that IMC Weekendschool program has the largest impact on the SEL competences focusing on social aspects as well as future goals including social awareness, relationship skills and responsible decision making skills, compared to self-regulation. Furthermore, we explore whether the impact of the program on SEL competences is moderated by high-school level of the students, urban versus rural participation and active involvement in follow-up programs of alumni. Furthermore, because research has shown OST programs can be especially beneficial for specific groups such as urban youth (Cappella, Hwang, Kieffer, & Yates, 2017), we hypothesize that the alumni respondents from urban IMC Weekendschool locations have the most positive perception of their SEL competences as a result of completion of the IMC Weekendschool.

2. Method

2.1. Sample

The sample included 194 Weekendschool alumni. These alumni members all graduated from the three-year program and participated between 1998 and 2015. The ages of the alumni at the time of the data collection ranged from 14 to 29 years old (M = 18, SD = 3.28). A higher proportion of the respondents is female, 61%.

The alumni members had all participated in one of the ten Weekendschool locations in the Netherlands; of which 63% of the participants (N = 123) went to a program in one of the four largest cities in the Netherlands (in Dutch: ‘G4’). The majority of the respondents (39%) went to Weekendschools in one of the three locations in North, West and South-East Amsterdam (N = 28, 24 and 24, respectively), 7% participated in The Hague, 8% participated in Utrecht and 11% participated in one of the two locations Rotterdam (N = 11, 17 and 19, respectively). The remaining alumni went to one of the other three non-urban locations, in Tilburg, Nijmegen and Groningen (N = 22, 22 and 27, respectively).

Children go to one of three different types of secondary education at the age of twelve (Nuffic.nl, 2021): either to preparatory vocational secondary education (in Dutch: ‘vmbo’), which is four years in duration, or to senior general secondary education (‘havo’), which is five years in duration, or to university preparatory education (‘vwo’), which is six years in duration. Of all the respondents, 42% went to preparatory vocational secondary education, 28% went to senior general secondary education and 19% went to university preparatory education. Nationally the averages for the different levels of secondary education between 2005 and 2006 were 58.7% preparatory vocational secondary education and 23.8% senior general secondary education and 17.5% university preparatory education (Central Bureau for Statistics, CBS, 2020).

2.2. Procedure

Recruitment for this study involved sending e-mails to members who are alumni of the Weekendschool. Two months prior to the data-collection staff from the IMC Weekendschool worked to retrieve up-to-date contact information of all its members. The Weekendschool was in the possession of 968 active e-mail addresses of its then (2016) 1823 members (53%). Members received an email and when interested were directed to a website to fill out the survey on the Qualtrics platform. Before the alumni participants filled out the survey it had been piloted by a panel and after minor adjustments it was distributed amongst the interested participants. When alumni had not filled out the survey within a week after receiving the link, a reminder was sent with a maximum of three repetitions. The Weekendschool also actively recruited alumni personally by contacting alumni members, using the telephone, Facebook messaging and WhatsApp-messaging. The survey took approximately 25 min to complete and it did not have to be completed in one session. After completing the survey participants received an e-mail with confirmation, thanking them for their participation. The study was approved by the national board of the participating institution, IMC Weekendschool in the Netherlands. All participants in the survey gave individual informed consent prior to participation. No identifying information was stored.

2.3. Measures

To date there is no report of a validated SEL instrument measuring all five SEL competences for young adolescents in OST-programs, although various instruments have been used to measure SEL outcomes in studies with heterogeneous interventions and a diversity of target groups (Coryn, Spybrook, Evergreen, & Blinkiewicz, 2009; Ross & Tolan, 2018). Borrowing from the CASEL model and the extension from Elias’ et al. (1997) New Haven Framework, a new instrument was developed by De Groot, Terwijn, Van Driel and Vorst (2016) to measure social-emotional learning for alumni of Weekendschools with the following SEL subscales. The New Haven framework was used to create items for eight different SEL domains. This framework was combined with a categorization of general curricular goals of the Weekendschool. Making choices (i.e., responsible decision-making skills), social skills, social awareness (i.e., connectedness) in particular were considered key curricular domains, complemented with motivation, self-confidence, future perspective, and curricular content related to professions. This resulted in a matrix, which was used for the construction of 10 items for each domain with curricular validity and a theoretical link to SEL. A principal component analysis with varimax rotation and Kaiser normalization revealed a dominant factor, which explained 47.9 percent of the variance. The grouping of items in the New Haven domains showed high consistency (see below). In addition, further analysis showed meaningful differences in mean scores between the different subscales (See Results).

Self-Management Skills (SM). This subscale focuses on the perceived ability to regulate thoughts, emotions and behaviors (i.e. “I learnt to actively participate during lessons at primary school”, “I learnt to make a plan when I want to reach a goal”). The scale, which includes 10 items, had a good internal consistency (Cronbach’s α = 0.91).

Responsible Decision Making (RD). This subscale (10 items, α = 0.91) measures the perceived ability to make plans for the future while following moral and ethical standards that also contribute to the well-being of others (i.e. “I learnt to look for alternative solutions when faced with problems”, “When deciding what to study I thoroughly check the options at hand”).

Relationship Skills (RS). This subscale (10 items, α = 0.93) aims to measure the ability to communicate effectively and work with peers as well as build meaningful relationship (i.e. “I learnt to collaborate
effectively with others”, “I learnt to form and express my own opinion”).

Self-Awareness (SA). The items from this subscale (10 items, α = 0.92) are related to the ability to recognize one’s emotions and assess one’s strengths and weaknesses (i.e., “I learnt to be myself”, “I learnt to choose a field of study that is closely linked to my talents”).

Social awareness (SO). This subscale (10 items, α = 0.90) measures the awareness of the culture, beliefs and feelings of people and community around oneself (i.e., “I learnt to respect others”, “I realized the importance of contributing to society”).

Attitude about Task (AT). This subscale (10 items, α = 0.89) is focused on the willingness to work hard, the motivation to solve practical and academic problems (i.e., “I learnt it’s okay to make mistakes” “I learnt to value education”).

Long-term Results Weekendschool (LTRE, 7 items, α = 0.88). This subscale aims to measure experienced long-term perceived benefits of the out-of-school program (i.e., “I learnt to apply my talents during secondary education”, “The weekendschool contributed to me choosing the right field of study”).

Future Perspective (FP). The items from this subscale (FP, 7 items, α = 0.87) are specifically related to how alumni view the perceived benefits of the Weekendschool in regards to their future perspective (i.e., “I am more aware now of my future opportunities”, “I learnt how a strong social network can help me in the future”). Items from each of the above-mentioned subscales (SM through RE) were selected if they were specifically related to this dimension.

A 5-point Likert scale was used for all constructs, ranging from 1. not at all applicable, 2. somewhat applicable, 3. applicable, 4. very applicable, and 5. completely applicable. All items contained the starting phrase ‘Because of the Weekendschool…’ (or a similar phrase) as a recurring element to clarify for the participants that the items referred to their specific Weekendschool experiences (i.e., not life experiences in general or primary school). The subscales were significantly related, as expected, with ‘explained’ variances (r²) ranging from 38 to 82 percent.

Control items. A newly developed subscale was added with control items. The content of the items was related to the SEL framework and the Weekendschool program but items were all negatively worded (i.e., “It’s unimportant to me to explore my interests”, “I am not capable of influencing my future to my benefit”). This scale (10 items, α = 0.85) was added to explore the discriminant validity of the SEL subscales. A preliminary analysis showed, as expected, very low and mostly non-significant correlations between the Control subscale and the SEL subscales, supporting their validity (r = –0.001, p = .986), RD (r = 0.034, p = .643), RS (r = –0.173, p = .016), SA (r = 0.009, p = .904), SO (r = –0.008, p = .911), AT (r = 0.005, p = .942), RE (r = –0.173, p = .016) and FP (r = 0.043, p = .554).

Background characteristics. Several questions from the survey were related to demographic, educational and program-related characteristics of the respondent, including age (see ref), gender (see ref), and level of secondary education. We also categorized the different Weekendschool locations as urban (Amsterdam, Rotterdam, the Hague and Utrecht) or non-urban (Tilburg, Nijmegen and Groningen) (see Bulanda & McCrea, 2013). The selection of these variables allowed a test of possible differences in the SEL outcome measures, based on the literature. We explored also whether participation in one of the national alumni programs was related to the outcomes.

2.4. Analysis

Considering the hierarchical data with alumni (level 1) nested in locations of the Weekendschool program (level 2), we analyzed the outcome measures with a linear mixed model using SPSS with maximum likelihood estimation (see Table 2). Considering the hierarchical data with alumni (level 1) nested in locations of the Weekendschool program (level 2), we analyzed the outcome measures with a linear mixed model using SPSS with maximum likelihood estimation (see Table 2). Intraclass correlations were generally low (ranging from 0 to 0.04), but there was some variation among our outcome measures. Although intraclass correlations were relatively modest, we decided to analyze all outcomes with a uniform analytical multi-level approach to control Type I errors for each SEL domain.

We explored for each SEL measure whether outcomes were moderated by participants’ age, gender, level of secondary education, participation in the national alumni program and urban/non-urban location. The fit of each model was evaluated by comparing the fit of the final model with the five predictors compared to a baseline model without predictors, indicated by the Akaike Information Criterion (AICsignificant – AICbaseline model = ΔAIC). The significance of the different predictors was determined at p < .01, taking into account the number of predictors from each model. The explanatory power of the models is indicated as the ‘explained’ variance, based on the squared correlation between observed and predicted scores (indicated with R²).

In a preliminary analysis, we checked multicollinearity of the predictors from our regression model. Correlations among the predictors were not significant (p values ranged from 0.187 to 0.921) with the exception of the association between attending the alumni program and urban locations of the Weekendschool, χ² (1) = 10.4, p = .001, CC = 0.23. At urban locations, 33.6% of all alumni had participated in the alumni program, compared to 12.1% for the other locations. We checked, therefore, the robustness of our models focusing on these two related predictors.

3. Results

Alumni were generally positive, in retrospect, about their Weekendschool experiences about their self-reported SEL competences (see Table 1).

Based on the curricular focus of the Weekendschool, we hypothesized the program to have the largest impact on three SEL subscales: Responsible decision-making skills, Social skills and Social awareness, as opposed to Self-management and Self-awareness. As expected, we found with a paired t-test three significant differences, favoring Responsible decision-making skills as opposed to Self-management skills, t = 3.20, df = 194, p = .002; favoring Responsible decision-making skills as opposed to Self-awareness: t (194) = 6.38, p < .000; and favoring Social skills as opposed to Self-awareness: t (194) = 4.31, p < .000. There was a significant difference favoring Self-management skills as opposed to Social-awareness, t (194) = –4.26, p < .000; hence, this was contrary to our expectations. No significant differences were found for Social skills vs. Self-management and Social awareness vs. Self-Awareness (p = .065 and 0.751, respectively). To conclude, there was partial support for the hypothesized differences (3 out of 6 expected differences), although not all expected differences were confirmed (2 non-significant findings, 1 difference in the opposite direction).

3.1. Moderators of SEL outcomes

Our moderator analyses revealed significant relationships between some of the characteristics of the Weekendschool alumni and their self-reports. First, membership of the national alumni program was related to more positive outcomes for all SEL measures. Second, urban

| Table 1 Descriptives for SEL outcome measures (N = 194). |
|----------------|-----|-------|-----|
|                | Min-max | M    | SD  |
| Self-management skills | 1-5 | 3.57 | 0.82 |
| Responsible decision-making skills | 1-5 | 3.66 | 0.82 |
| Relationship skills | 1-5 | 3.64 | 0.86 |
| Self-awareness | 1-5 | 3.48 | 0.86 |
| Social awareness | 1-5 | 3.43 | 0.82 |
| Attitude about task | 1-5 | 3.63 | 0.78 |
| Long-Term Results | 1-5 | 3.52 | 0.81 |
| Future perspective | 1-5 | 3.62 | 0.59 |
participants had generally more favorable self-reports and these differences with non-urban peers were statistically significant for Self-Management skills, Self-awareness and Future Perspective. Finally, participation in secondary preparatory vocational education were more positive about Long-Term Results, in comparison with participation in higher vocational or university preparatory education.

Gender was not related to differences in outcomes, indicating that boys and girls show no significant differences in their self-perceived benefits of the Weekendschool. A multivariate test with univariate follow-up tests showed no differences between male and female alumni for all SEL measures, Wilks’ $\Lambda = 0.956, p = .403$; univariate $p$ values ranged from 0.231 to 0.905 and were not significant either for any measure. Hence, gender appeared not to be related to the SEL measures (see Table 2). An explorative multivariate analysis did not show significant differences between the different locations, acknowledging that statistical power is relatively low for this analysis, Wilks’ $\Lambda = 0.665, p = .273$. It should also be noted that the average scores were relatively high for all Weekendschool locations.

We also analyzed a possible effect of participants’ age because the difference was large in our sample with alumni who were 15 through 30 years old. Although alumni reported slightly lower scores with increasing age, no significant fading out pattern was observed (see Fig. 1).

Table 2 shows increased model fit for each SEL measure. Compared to the baseline intercept-only models, adding the predictors improved fit with a statistically significant decrease of the log-likelihood measure (-2LL) and Akaike Information Criterion (AIC). The explanatory power of the models was medium for Self-Management, Responsible Decision Making, Relationship Skills, Self-awareness, and Long-Term Results, ‘explaining’ about 10 percent of the variance in SEL measures.

---

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>RD</th>
<th>RS</th>
<th>SA</th>
<th>SO</th>
<th>AT</th>
<th>LTRE</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>42.27**</td>
<td>40.75**</td>
<td>41.98**</td>
<td>38.94**</td>
<td>38.28**</td>
<td>39.49**</td>
<td>27.54**</td>
<td>27.82**</td>
</tr>
<tr>
<td>(3.28)</td>
<td>(3.36)</td>
<td>(3.53)</td>
<td>(3.45)</td>
<td>(3.37)</td>
<td>(3.27)</td>
<td>(2.86)</td>
<td>(2.44)</td>
<td></td>
</tr>
<tr>
<td>Gender (male)</td>
<td>–0.02</td>
<td>–0.15</td>
<td>0.01</td>
<td>0.51</td>
<td>0.46</td>
<td>–0.65</td>
<td>–0.23</td>
<td>–0.29</td>
</tr>
<tr>
<td>(1.14)</td>
<td>(1.17)</td>
<td>(1.23)</td>
<td>(1.20)</td>
<td>(1.17)</td>
<td>(1.14)</td>
<td>(0.94)</td>
<td>(0.85)</td>
<td></td>
</tr>
<tr>
<td>Age (yrs)</td>
<td>–0.26</td>
<td>–0.15</td>
<td>–0.26</td>
<td>–0.12</td>
<td>–0.01</td>
<td>–0.06</td>
<td>–0.28</td>
<td>–0.07</td>
</tr>
<tr>
<td>(0.20)</td>
<td>(0.20)</td>
<td>(0.21)</td>
<td>(0.21)</td>
<td>(0.20)</td>
<td>(0.20)</td>
<td>(0.17)</td>
<td>(0.15)</td>
<td></td>
</tr>
<tr>
<td>Preparatory</td>
<td>1.79</td>
<td>1.70</td>
<td>0.94</td>
<td>1.36</td>
<td>1.60</td>
<td>1.71</td>
<td>2.77**</td>
<td>0.82</td>
</tr>
<tr>
<td>(1.12)</td>
<td>(1.15)</td>
<td>(1.20)</td>
<td>(1.18)</td>
<td>(1.15)</td>
<td>(1.12)</td>
<td>(0.91)</td>
<td>(0.83)</td>
<td></td>
</tr>
<tr>
<td>Alumni Program</td>
<td>5.69**</td>
<td>5.10**</td>
<td>5.62**</td>
<td>5.99**</td>
<td>5.70**</td>
<td>3.43**</td>
<td>2.27**</td>
<td>2.54**</td>
</tr>
<tr>
<td>(1.30)</td>
<td>(1.33)</td>
<td>(1.40)</td>
<td>(1.37)</td>
<td>(1.34)</td>
<td>(1.30)</td>
<td>(1.07)</td>
<td>(0.97)</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>3.71**</td>
<td>2.85</td>
<td>2.87</td>
<td>5.35**</td>
<td>3.14</td>
<td>3.01</td>
<td>2.88</td>
<td>2.10**</td>
</tr>
<tr>
<td>(1.36)</td>
<td>(1.39)</td>
<td>(1.47)</td>
<td>(1.43)</td>
<td>(1.40)</td>
<td>(1.36)</td>
<td>(1.27)</td>
<td>(1.01)</td>
<td></td>
</tr>
<tr>
<td><strong>Random effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student residual</td>
<td>58.10**</td>
<td>60.89**</td>
<td>67.27**</td>
<td>64.30**</td>
<td>61.26**</td>
<td>57.74**</td>
<td>37.02**</td>
<td>32.14**</td>
</tr>
<tr>
<td>(5.93)</td>
<td>(6.21)</td>
<td>(6.87)</td>
<td>(6.56)</td>
<td>(6.25)</td>
<td>(5.89)</td>
<td>(3.63)</td>
<td>(3.28)</td>
<td></td>
</tr>
<tr>
<td>Student residual baseline</td>
<td>65.55**</td>
<td>66.56**</td>
<td>73.13**</td>
<td>70.39**</td>
<td>64.86**</td>
<td>61.12**</td>
<td>41.88**</td>
<td>32.76**</td>
</tr>
<tr>
<td>(6.78)</td>
<td>(6.76)</td>
<td>(7.58)</td>
<td>(7.04)</td>
<td>(6.73)</td>
<td>(6.29)</td>
<td>(4.36)</td>
<td>(3.24)</td>
<td></td>
</tr>
<tr>
<td><strong>Model fit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta$-2LL ($df = 5$)</td>
<td>39.79**</td>
<td>31.18**</td>
<td>32.49**</td>
<td>36.32**</td>
<td>30.89**</td>
<td>38.98**</td>
<td>36.60**</td>
<td>79.57**</td>
</tr>
<tr>
<td>$\Delta$AIC</td>
<td>29.79**</td>
<td>21.98**</td>
<td>22.49**</td>
<td>26.32**</td>
<td>20.89**</td>
<td>28.98**</td>
<td>26.60**</td>
<td>69.57**</td>
</tr>
</tbody>
</table>

Note: SM = Self-management; RD = Responsible Decision-making; RS = Relationship skills; SA = Self-awareness; SO = Social awareness; AT = Attitude about Task; LTRE = Long-Term Results; FP = Future Perspective; * = $p < .01$; ** = $p < .001$.

---

Fig. 1. SEL outcomes in retrospective for alumni 1–5 yrs ($N = 123$); 6–10 yrs ($N = 61$) and 11–15 yrs ($N = 10$).
Predictive power was more modest for the other SEL measures Social Awareness, Attitude about Task and Future Perspective.

A comparison between our multiple regression models with the four predictors combined and a univariate analysis with the SEL measures as outcome measures and the single predictors showed large similarities in the significance of the investigated relationships with each predictor. The urban factor was significant for SM, SA, RE and FP in a univariate analysis and this finding was replicated in the regression analysis with the exception of RE, which was not predicted by the urban factor. The alumni program was a significant predictor for each regression model, and also showed significant relationships at univariate level for five measures (SM, RD, RS, SA, SO). For the remaining variables AT, RE and FP univariate relationships only approached significance ($p = 0.068$, 0.107 and 0.053, respectively). Our final regression models with multiple predictors showed thus large similarities with univariate outcomes. In addition, leaving out either urbanicity or the alumni program (i.e., the two related predictors) in our regression models did not change the significance of results for the remaining predictors. Further, gender appeared unrelated to all SEL measures in both univariate and regression analysis. Further, the level of secondary education was related to RE only in both univariate and regression analyses, showing identical results. To conclude, our results from the regression analysis do not seem to be heavily influenced by multicollinearity of predictors.

4. Conclusion and discussion

The results of this study are, to our knowledge, among the first to voice the perceptions of alumni reporting on self-perceived out-of-school program benefits from a long-term perspective. Alumni respondents, from one to fifteen years after completion of the program, are largely positive about their Weekendschool experiences. This large and robust relationship within our study was found across all SEL dimensions for taking part in the Weekendschool program. As there are no other long-term research results published on Weekendschool results or other OST programs, our findings are a valuable addition to research published on long-term follow-up effects of school based SEL interventions, showing significant effects on social-emotional skills, attitudes and well-being, ranging from kindergarten to high school students (Taylor, Durlak, Oberle & Weissberg, 2017). Our results showed relatively high levels of perceived SEL benefits due to the IMC Weekendschool program and these findings are promising as research has shown a strong association between SEL skills and wellbeing on long-term follow-up effects (Taylor et al., 2017). Our hypothesized differences between the different SEL domains were partially confirmed. An unexplained finding is that alumni were more positive about their Weekendschool experiences, indicating that students need to strike a balance between regular school and weekendschool activities and they are frequently involved in coordinating their busy schedules.

Furthermore, our study also reveals significant moderators of the perceived benefits of the program. Results showed that participation in preparatory vocational secondary education was positively related to Long-Term Results, indicating that alumni who participated in the most practical level of secondary education experienced an increased effort into putting their talents to use at secondary education as a result of their Weekendschool participation and completion. They indicated to actively invest into their personal interests after school, more so than their peers participating in the more academic levels of secondary education. Further, urban students reported favorable results for different socio-emotional learning domains (i.e., self-management, self-awareness, future perspective). The urban and participatory vocational training moderators highlight the potential of out-of-school programs for disadvantaged youth who have lower academic achievements and who grow up in disadvantaged urban areas. Our study strongly suggests that these students-at-risk profit from the Weekendschool program and experience a higher level of socio-emotional learning. This finding is interesting in the Dutch context, because in the Netherlands the Education Inspectorate’s annual report on the state of education showed an increase in inequality regarding academic achievement for children with low SES (Inspectie van het Onderwijs, 2018). The founding of OST programs has been increasing to bridge the gap and create enriching learning environments for disadvantaged children with the objective to increase their opportunities of both academic success and their future perspectives. Although previous research into the follow-up effects of school based SEL interventions shows no moderation effects between groups, it is known that most interventions do target specific groups (Taylor et al., 2017). It is this targeting that makes interventions tailored to the needs of certain groups or individuals. The findings of our study suggest it is important to consider the possible different needs of groups and individuals, whether it is based on their academic levels or their location, and to develop a curriculum based on their needs.

Lastly, our study shows significant moderation for active participation in follow-up alumni programs. It is possible that active alumni were among the more positive alumni post-completion of the program and were therefore more likely to enroll into the national alumni activities. This could explain why active participation in the alumni program positively moderates the perceived benefits of SEL competences. This finding suggests that it is important to facilitate high quality OST programs with an active alumni programs. It also suggests that to maintain positive outcomes, post-intervention follow-up activities can contribute to maintaining long-term effects of an afterschool program for disadvantaged youth. However, further research into the effects of follow-up activities is necessary as well as long-term effects for OST programs.

Finally, we did not observe a significant fade out effect in our study and perceptions were equally positive for our sample, which included young adolescents who recently completed the Weekendschool program and adults who have finished it many years ago. No significant gender difference have been found in earlier meta-analysis of experimental studies regarding outcomes of out-of-school time programs (Durlak et al., 2010). Our retrospective study extends this finding and suggests that boys and girls are also similar when they look back on their out-of-school program experiences.

Our moderators at individual level complement the findings from experimental research. Previous experimental research has revealed different moderators at program level for SEL development, like children signing up and participating in an intake session to discuss students’ motivation (Mahoney, Cairns, & Farmer, 2003), a recreational design (Lauer et al., 2006) with a clear curriculum based on the SAFE principles (sequenced, active, focused and explicit) and a clear structure provided by adults (Durlak et al, 2010). Furthermore, research has shown positive relations between the duration and intensity of participation in organized afterschool activities and educational, civic and occupational success (Gardner, Roth, & Brooks-Gunn, 2008).

4.1. Limitations and future research

Our study has several important limitations. First, the participants in this sample may very well only represent participants who look back positively on program participation, as it is known that participants of programs who look back negatively don’t respond as often to sampling requests (Maruyama & Ryan, 2014). Second, our study involves self-reported perceptions of SEL measures, which were evaluated with a newly developed measure. The subscales from our measure were correlated, although it should be noted that they showed different relationships with the moderators in our explorative analysis. Lastly, a limitation of our study is that we cannot infer causal relationships from our retrospective study.

Future studies should evaluate the psychometric structure of SEL measures to gain more insight into the constructs from SEL and other related frameworks which have been proposed. This line of study should make clear whether the proposed constructs are strongly related
dimensions of a single core construct or whether the different components are empirically distinct components. Our study showed medium-to-strong correlations and uniform relationships for some moderators (i.e., the alumni program), but also differences between the different SEL measures (i.e., urban sites). These findings suggest a mixed pattern of both distinction but also relatedness for our SEL subscales, but it should be noted that all items were framed from a similar retrospective perspective on the Weekendschool. It is, therefore, important to evaluate the psychometric properties of SEL measures in adolescent samples, including non-experimental and experimental designs.

Experimental and longitudinal research is needed to demonstrate the effects of OST programs on SEL. This line of study should also make clear what the mechanism of change is for the observed positive relationship with taking part in the alumni program. Based on our study, it is not possible to conclude whether the alumni program has a positive effect on participants (i.e., an additional effect) or whether highly motivated students choose to take part in an alumni follow-up program (i.e., a selection effect). An experimental evaluation of an OST program with a structured alumni program with a follow-up measure may shed more light on which students participate and which effects this additional component may add to the effects of the regular curriculum.

Lastly, future research is needed to explore the benefits of follow-up activities such as alumni programs, as this could add to long-term beneficial outcomes on the development of SEL and future perspective.

In conclusion, our retrospective study showed that alumni generally had beneficial outcomes on the development of SEL and future perspective. In spite of its limitations, this study provides preliminary evidence that structured alumni programs may be beneficial for students choosing to participate. It is important to further investigate the sustainability and impact of such programs on students’ graduation and future outcomes.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests. The authors declare that they have no known competing financial interests.

Funding

This paper is part of the Dutch National Research Agenda (NWA): Equal Opportunities for a Diverse Youth [Gelijke Kansen voor een Diverse Jeugd] with project number 400.17.601, which is partly financed by the Dutch Research Council (NWO).

References