Building bridges in the classroom:

Strengthening social bonds through the SterkWerk intervention

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Abstract

Prosocial behaviour is essential for creating a positive and inclusive classroom environment. Encouraging prosocial behaviour may enhance children's social-emotional development, improve peer relationships, and counteract antisocial behaviours such as bullying. The current study researched the effectiveness of the SterkWerk intervention on prosocial behaviour and explored the possible presence of relatedness as a mediator. SterkWerk is targeted to promote prosocial behaviour in children through meaningful roles and positive peer interactions. The study sample consisted of 2,121 children from 42 primary schools, aged 7 to 13 years (M = 9.56, SD = 1.21), evenly divided between the intervention and control group. The effectiveness was measured using a longitudinal design with three measurement points, before, during, and after the intervention. The data were obtained through self-report questionnaires completed by the participants. The hierarchical regression with bootstrapping did not show a significant effect of the SterkWerk condition on prosocial behaviour compared to the control group. Furthermore, relatedness did not mediate the intervention's effect on prosocial behaviour, although a positive association was found between relatedness and prosocial behaviour. These results suggest that the SterkWerk intervention did not promote prosocial behaviour. Future research could benefit from a later follow-up measurement and the consideration of implementation fidelity.

Keywords: prosocial behaviour, relatedness, effectiveness of intervention

Introduction

Prosocial behaviour – voluntary actions intended to benefit others, such as sharing, cooperating, comforting, and helping – is essential for creating a positive and inclusive classroom environment (Martins et al., 2022; Spinrad & Gal, 2017). Fostering prosocial behaviour in primary schools can enhance children's social and emotional development and strengthen peer relationships. Additionally, prosocial behaviour contributes to a classroom environment that discourages antisocial behaviour and encourages group cohesion (Roth et al., 2010). Bullying, which remains common in Dutch primary classrooms, underscores the importance of promoting prosocial behaviour from an early age (Ministerie van Onderwijs, Cultuur en Wetenschap, 2024, p. 76). Victims often experience social, emotional, and academic difficulties (Armitage, 2021; Gini & Pozzoli, 2009; Samara et al., 2021; Vanderbilt & Augustyn, 2010). Encouraging prosocial behaviour may counteract antisocial tendencies, which contributes to a more supportive classroom environment. Such environments are associated with improved peer relations, greater school well-being, and enhanced academic motivation and achievement (Caprara et al., 2000; Oberle et al., 2011; Roth et al., 2010). A positive school climate can foster tendencies toward prosocial behaviour in students (Ivanec et al., 2021; Raskauskas et al., 2010).

The Self-Determination Theory

Considering the importance of encouraging prosocial behaviour, it is necessary to understand the psychological mechanisms underlying these behaviours. The Self-Determination Theory (SDT) provides a helpful framework for comprehending these mechanisms. According to SDT, children’s behaviours and overall well-being improve when intrinsically motivated rather than merely responding to external pressures or rewards (Ryan & Deci, 2000). Intrinsic motivation is enhanced when three fundamental psychological needs are fulfilled: autonomy, competence, and relatedness. When children genuinely wish to engage in prosocial behaviour, feel capable of doing so, and feel connected to those they are helping, they are more likely to consistently engage in these behaviours (Ryan & Deci, 2019; Peetz & Milyavskaya, 2021). By addressing these three needs, interventions can encourage children to consistently engage in prosocial behaviours, leading to positive social outcomes.

Interventions

School-based interventions offer a unique opportunity to support children's positive social and emotional development, as nearly all children attend school during crucial developmental years (Schonert-Reichl et al., 2011). The current study focuses on SterkWerk, a Dutch school-based intervention designed to promote prosocial behaviour among primary school children (Van Loon & Kaufman, 2023). The intervention is based on the American Meaningful Roles program and seeks to improve the classroom climate (Ellis et al., 2016).

To place SterkWerk in the broader literature, it is valuable to examine comparable school-based interventions that aim to enhance prosocial behaviour. Meta-analyses show that such interventions can be effective: Mesurado et al. (2018) conducted a meta-analysis of ten interventions with a primary goal of promoting prosocial behaviour in children between eight and eighteen years old. They included only interventions with an experimental design. The results showed that these interventions effectively promote prosocial behaviour and simultaneously reduce aggression. Similarly, Shin and Lee (2021) demonstrated in their meta-analysis that adolescents' prosocial behaviour interventions led to consistent improvements in social outcomes, particularly when implemented in school settings and grounded in structured frameworks. It is important to note that while these meta-analyses provide strong support for prosocial behaviour interventions, most of the studies focused on adolescents rather than primary school children.

At the individual study level, Caprara et al. (2014) implemented an intervention similar to SterkWerk. A school-based intervention for early adolescents, to enhance prosocial behaviour and reduce aggression, was implemented by teachers who received training prior to implementation. The results indicated a significant positive change in prosocial behaviour, decreased verbal and physical aggression, and improved academic performance. An important contrast between this intervention and SterkWerk is that this research primarily focused on behavioural changes, whereas SterkWerk also targets group dynamics. Moreover, the Italian educational and cultural context differs from that of the Netherlands; this may limit the generalizability of its findings to context-specific interventions such as SterkWerk. Cheon et al. (2019) conducted an intervention based on SDT, implemented by physical education teachers of early adolescents. As a result, students reported increased autonomy, competence, and relatedness, as well as an improved social climate. This study demonstrates that interventions aimed at fulfilling the three needs can positively impact group dynamics and social behaviour, even in educational settings other than the classroom. However, the fact that the intervention took place in another educational setting and the fact that the participants were adolescents limit the direct comparability to SterkWerk.

Mediating factor

Relatedness is one of the three psychological needs in the SDT and is defined as the need to feel a sense of belonging and connection with others (Ryan & Deci, 2000). According to SDT, when children feel related, they are more likely to exhibit positive behaviours, as it promotes the intrinsic motivation to show prosocial behaviour. Therefore, relatedness may serve as a mediating factor, explaining how SterkWerk influences prosocial behaviour.

The first part of the mediation is between the SterkWerk intervention and relatedness. Research suggests that children who feel accepted and valued in their social environment are more likely to demonstrate helpful behaviours and contribute to a positive classroom climate (Ivanec et al., 2021; Raskauskas et al., 2010). These feelings contribute to satisfying the need relatedness (Ryan & Deci, 2000). SterkWerk actively aims to promote feeling accepted and valued through the act of giving compliments, assigning meaningful roles, and weekly classroom meetings. Therefore, it is plausible that these elements of SterkWerk contribute to the fulfilment of children's need for relatedness.

The second part concerns the relation between relatedness and prosocial behaviour. According to SDT, a feeling of relatedness intrinsically motivates children to show prosocial behaviour (Ryan & Deci, 2019). This statement is supported by the findings from the intervention ROE, which aimed to strengthen empathy and relatedness, leading to more prosocial behaviour and less aggression (Schonert-Reichl et al., 2011). This supports the notion that when relatedness is enhanced, prosocial behaviour increases.

Given these findings, it is plausible that relatedness mediates the effects of SterkWerk, with stronger relatedness leading to greater prosocial behaviour.

Current study

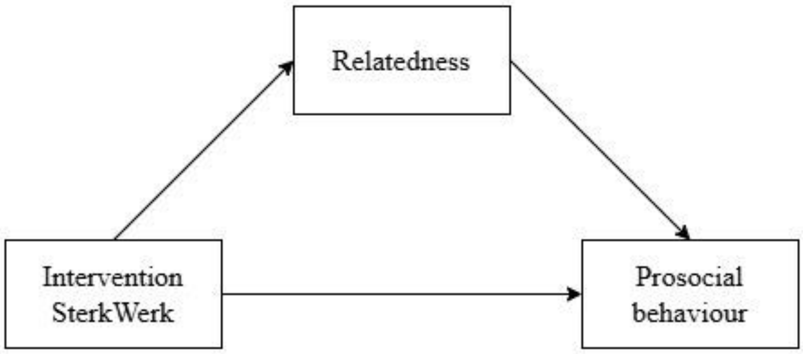
Although there is a growing body of evidence supporting school-based interventions to promote prosocial behaviour, the majority of studies focus on adolescents and are conducted outside the Dutch educational context (Caprara et al., 2014; Cheon et al., 2019; Mesurado et al., 2018; Shin & Lee, 2021). Because of the cultural and structural differences in educational systems, there is a need for evidence-based interventions specifically designed and evaluated for Dutch primary schools. The current research addresses this gap by researching the effectiveness of the SterkWerk intervention. The following research question is proposed: "What is the effectiveness of the SterkWerk intervention in promoting prosocial behaviour in children? And does relatedness mediate the effectiveness of the SterkWerk intervention?" The research question is visually presented in Figure 1. The hypotheses are:

H_1: Children aged eight to twelve who receive the SterkWerk intervention will show higher levels of prosocial behaviour post-intervention than children in the control group.

H_2: Relatedness mediates the relationship between the effect of the SterkWerk intervention and prosocial behaviour in children; the intervention promotes relatedness, subsequently enhancing prosocial behaviour.

Figure 1

Path model of the research question.



Method

Design and procedure

The study uses a cluster randomised controlled trial design to assess the effectiveness of the SterkWerk intervention. Schools were randomly assigned and equally divided between two groups: one that started the intervention immediately (intervention group) and one that started it after one year (control group). The data were collected during one school year.

Primary schools in the Netherlands were contacted through various methods, including in-person visits, e-mails, and telephone calls, primarily facilitated by the existing contacts of the intervention and research teams. Schools interested in participating in the intervention were provided with detailed information about the study during an online orientation meeting. Schools that decided to participate signed a cooperation agreement.

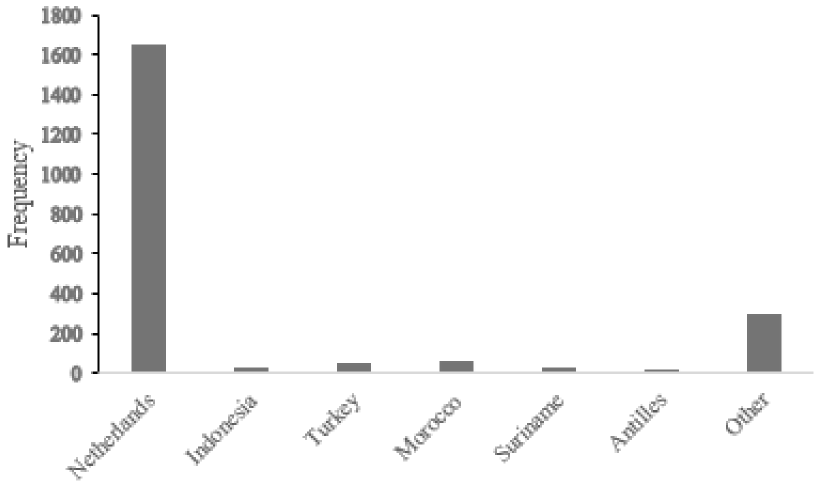
Parents or caregivers were informed through school by e-mail, information sessions, or phone calls. They were asked to provide written informed consent for their child's participation. Additionally, informed consent was also obtained from children aged twelve years or older. All participating children were informed that their involvement was voluntary. Teachers and school administrators also provided informed consent for their participation. Children who did not have consent to participate were not given the research questionnaire but still received the SterkWerk intervention. The ethics committee of the faculty of Social and Behavioural Sciences of Utrecht University approved the study (number 242402).

Participants

The study sample consisted of 2,121 children, in grades five through eight, from 42 primary schools across the Netherlands. The children were evenly distributed between the intervention group (1,067 participants) and the control group (1,054 participants). The children's ages ranged from 7 to 13 years (M = 9.56, SD = 1.21). Regarding gender, 48.2% of the participants were boys, 48.2% were girls, and 3.6% were classified as other or did not know. The national identity of the participants is shown in Figure 2.

Figure 2

Bar chart of the distribution of countries children feel most connected to.



Program

The Dutch adaptation of the Meaningful Roles program is a classroom-based intervention facilitated by teachers who received two three-hour training sessions. The program is aimed at primary school students in grades five to eight. Its primary objective is to create a positive classroom atmosphere and foster supportive peer relationships.

The program has three core components: meaningful roles, weekly class meetings, and regular compliment practices. Each component supports the development of autonomy, responsibility, competence, and prosocial behaviour among students, as outlined by SDT.

First, in the meaningful roles component, students take on roles such as class news reader, plant caretaker, and class greeter. These roles offer students autonomy and responsibility. Each role is assigned with consideration for the child’s abilities, aiming to encourage confidence by providing opportunities for success in helping others. Second, weekly classroom meetings allow students to lead discussions about classroom rules, personal feelings, and the general atmosphere. This encourages connection and interaction among peers, fostering a sense of competence, autonomy, and social responsibility. Finally, the program teaches students to give and receive constructive compliments. This strengthens mutual trust, builds self-assurance, and fosters positive feelings towards peers.

Data collection

The data were collected at three time points: prior to the intervention (T1), at the midpoint (T2), and at the end of the intervention (T3). At T1, children completed an online questionnaire assessing demographics (e.g., age, gender), prosocial behaviour, and relatedness. At T2 and T3, children completed the same questionnaires as at T1 to measure prosocial behaviour and relatedness.

Instruments

Prosocial behaviour

The prosocial behaviour variable was measured using the Dutch version of the Strengths and Difficulties Questionnaire (SDQ) subscale prosocial behaviour, adapted for this study (Van Widenfelt et al., 2003). Four items were used (e.g., “I try to be kind to others”), rated on a four-point Likert scale from 1 (never) to 4 (always). The SDQ-Dutch demonstrates adequate psychometric characteristics, with a Cronbach’s alpha of 0.78 for the overall scale and 0.62 for the prosocial subscale (Muris et al., 2003). The Cronbach’s alpha for the subscale measured using the data was 0.69. Higher scores indicate more prosocial behaviour. A confirmatory factor analysis (CFA) showed that the construct validity of the SDQ-Dutch is adequate (Van Widenfelt et al., 2003).

Relatedness

The variable relatedness is measured using the Classroom Peer Context Questionnaire (CPCQ) comfort and cohesion subscales. The comfort subscale consists of four items (e.g., “In this classroom, I feel comfortable”). The cohesion subscale consists of four items, of which the following two are used: “In this classroom, everybody likes each other” and “In this classroom, everybody belongs to the group.” The items are rated on a five-point Likert scale from 1 (not true) to 5 (completely true). The CPCQ demonstrates satisfactory psychometric properties, with Cronbach’s alpha 0.83 for the comfort subscale and 0.68 for the cohesion subscale (Boor-Klip et al., 2014). The combined subscales using the data yielded a Cronbach’s alpha of 0.89. Increased scores on the combined scale indicate more relatedness. A CFA showed that the construct validity of the CPCQ is adequate (Boor-Klip et al., 2014).

Plan of analysis

Variables

The dependent variable is prosocial behaviour, which is measured as the mean score of the four items on the individual prosocial behaviour scale on T3. The independent variable is the condition, coded as a dummy variable: 1 for the SterkWerk intervention group and 2 for the control group. The mediator is relatedness, which is measured as the mean score of the six items from the relatedness scale at T2. Prosocial behaviour at T1 will be used to control for pre-existing differences.

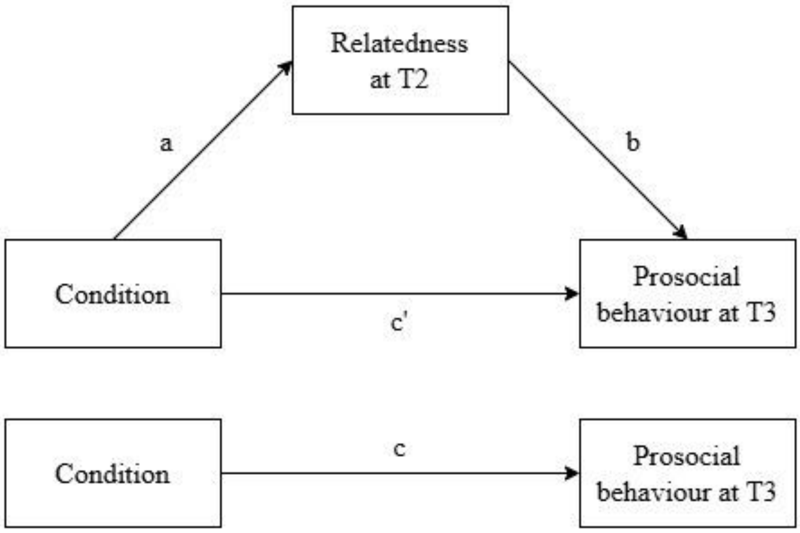
Analyses

First hierarchical regression. The first analysis will be a hierarchical regression to examine whether the condition effectively enhances prosocial behaviour. The analysis has two hierarchies: prosocial behaviour at T1 will be included in the first hierarchy to account for baseline differences. The variable condition (intervention vs. control) will be added in the second hierarchy to research the effect of the intervention on prosocial behaviour at T3.

Mediation analysis. The second analysis will be a hierarchical regression analysis to test whether relatedness acts as a mediator in the relationship between the condition and prosocial behaviour. The analysis has three hierarchies: path a with relatedness at T2 as the dependent variable and the intervention as the independent variable, path b with prosocial behaviour on T3 as the dependent variable and relatedness on T2 as the independent variable, and path c and c’ with prosocial behaviour on T3 as the dependent variable and the intervention and relatedness on T2 as the independent variables. Path c represents the total effect of the intervention on prosocial behaviour, while path c’ shows the direct effect after accounting for the mediator relatedness. Figure 3 illustrates the various paths.

Figure 3

Path model with path names.



Assumptions

The assumption of linearity will be examined using scatterplots. Given the large sample size, the assumption of normality was considered met based on the Central Limit Theorem (CLT). According to the CLT, the distribution of sample means becomes normal as the sample size increases, typically observed for sample sizes greater than 30 (Kwak & Kim, 2017). The presence of outliers will be assessed using boxplots. The assumption of homoscedasticity will be visually evaluated by creating scatterplots of the variance of residuals. Finally, multicollinearity will be checked using the Variance Inflation Factor (VIF).

Results

Missing data

Missing data were addressed using Little's MCAR test (Chi-square = 1.717, *DF* = 2, *p* = .424). As the *p*-value was above .05, the null hypothesis was rejected, indicating that the data is missing completely at random (MCAR; Kang, 2013; Newman, 2014). The percentage of missing data for the prosocial behaviour variable is 4.8%, and 5% for relatedness. These percentages are relatively small. Although the missing data is MCAR and the percentages are low, using Expectation-Maximization (EM) may not be appropriate in this case, as participants either answered all questions or none at all for the scales (Graham, 2007). Therefore, it was decided to remove participants through listwise deletion for the variables at any of the considered time points. Before listwise deletion, the dataset included 2,356 participants. However, 235 participants were removed because they lacked data on one or more required time points or variables for the analyses. As a result, the final dataset comprised 2,121 participants.

Assumptions

Upon reviewing the data, it was evident that only the multicollinearity and linearity assumptions were met. Furthermore, the assumption of normality was presumed to be met through the CLT. The following section explains how the other assumptions were violated and presents a possible solution for these violations.

Homoscedasticity and outliers

The assumptions of homoscedasticity and outliers were violated. The homoscedasticity assumption was evaluated using a scatterplot of the residuals, which showed a funnel-shaped pattern. This indicates that the assumption was violated. A review of the standardised residuals identified eleven outliers. It was chosen to retain these outliers to maintain the sample's integrity.

For both assumptions, a suitable solution was to use bootstrapping. Bootstrapping is less sensitive to these three violations and increases the reliability of estimates without requiring the satisfaction of these assumptions (Field, 2017). Bootstrapping was used with 5,000 resamples, providing enough statistical stability while maintaining computational feasibility (Preacher & Hayes, 2008).

Descriptive statistics

Table 1 presents the descriptive statistics of the three variables used in the analyses, divided by intervention and control group, excluding the dummy variable condition.

Table 1

Descriptive statistics of the used variables, divided into the intervention (n = 1,067) and control (n = 1,054) group.

		Min	Max	*M*	*SD*
Intervention	Prosocial behaviour at T1	1	4	2.806	0.499
	Prosocial behaviour at T3	1	4	2.840	0.520
	Relatedness at T2	1	5	4.041	0.755
Control	Prosocial behaviour at T1	1	4	2.882	0.513
	Prosocial behaviour at T3	1	4	2.886	0.529
	Relatedness at T2	1	5	4.069	0.773

Analyses

Correlation analysis

A correlation analysis was performed prior to the hierarchical regression analysis. Table 2 shows that the correlations are either weak or moderately strong. However, all of the correlations are significant. This supports the rationale for testing the mediation model.

Table 2

Correlation matrix.

	Prosocial behaviour at T1	Prosocial behaviour at T3
Prosocial behaviour at T1	-	
Prosocial behaviour at T3	.491**	-
Social relatedness at T2	.238**	.332**

*Note. **. Correlation is significant at the 0.01 level (2-tailed).*

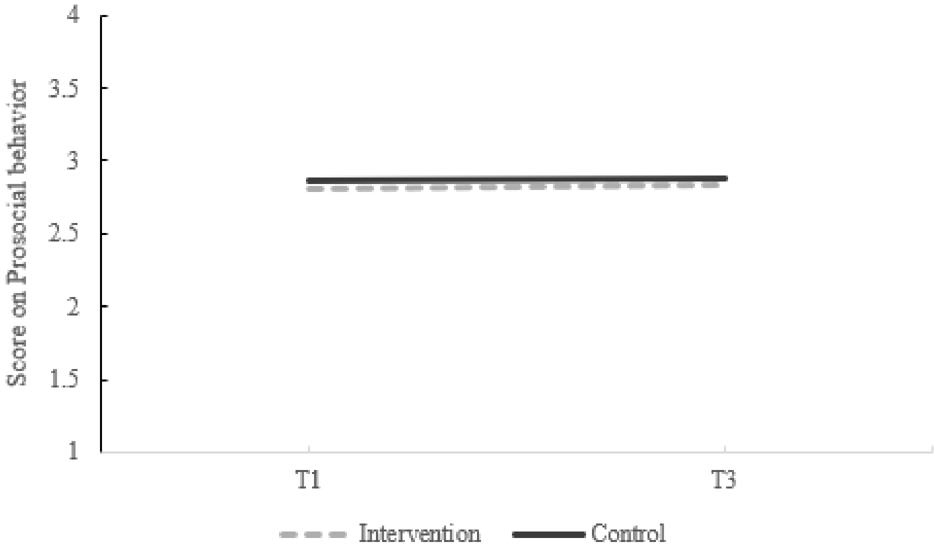
Effectiveness of the SterkWerk intervention on prosocial behaviour

A hierarchical regression analysis with bootstrapping was conducted to examine whether the condition effectively enhanced behaviour.

In the first model, prosocial behaviour at T1 was used to account for baselines. Prosocial behaviour at T1 significantly predicted prosocial behaviour at T3, B = .508, SE = .020, p = <.001. In the second model, the condition was added as a predictor but did not explain additional variance, B = .007, SE = .020, p = .709. The change in explained variance was not significant, ΔR^2 = .000, $F(1, 2118)$ = .139, p = .709. These results suggest that the condition did not significantly influence prosocial behaviour compared to the control group. Figure 4 shows the difference in prosocial behaviour score for the control and intervention group at T1 and T3.

Figure 4

Mean score on the prosocial behaviour scale for the intervention and control group.



The mediating role of relatedness

A hierarchical regression analysis with bootstrapping was conducted to assess whether the effect of the condition on prosocial behaviour was mediated by relatedness. The result of this analysis is presented in Table 3.

Table 3

Table of hierarchical regression analysis.

				95% C.I.		
	B	SE	*t*	Lower	Upper	*p*
Path a	.028	.034	.835	-.039	.094	.404
Path b	.226	.014	16.221	.195	.256	<.001**
Path c’	.040	.021	1.866	-.002	.081	.062

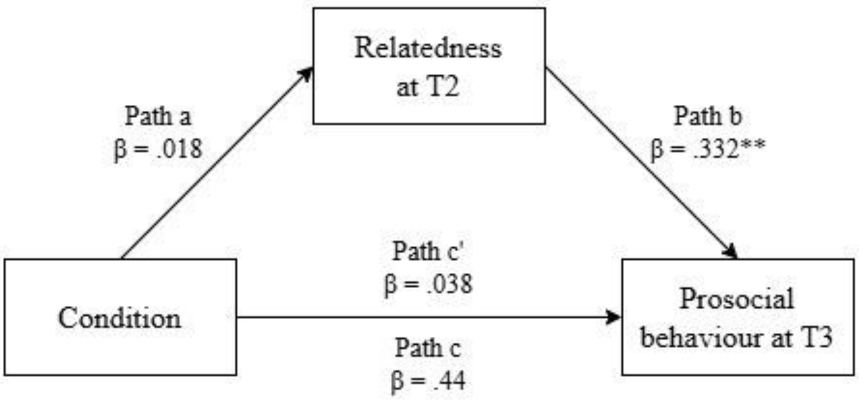
*Note. ** is significant at the 0.05 level.*

Table 3 shows the mediation paths of the hierarchical regression. Only path b, the relation between relatedness at T2 and prosocial behaviour at T3, was significant. These results suggest that while the intervention did not directly influence prosocial behaviour, relatedness at T2 was positively associated with prosocial behaviour at T3.

The indirect effect (path a x path b) had an effect size of 0.0063, with a 95% confidence interval of [-0.0084, 0.0212]. Since the interval contains 0, the indirect effect was not significant. Therefore, the results do not support mediation. Figure 5 illustrates the findings of the analyses in a path model.

Figure 5

Path model with standardised estimates.



*Note. ** is significant at the .05 level.*

Discussion

It is essential to understand how programs like SterkWerk have the potential to promote prosocial behaviour, as they could foster a supportive and inclusive classroom environment. These positive classroom climates are essential because they could strengthen peer relationships and support children’s social-emotional development. They could also help reduce antisocial behaviour like bullying and promote greater school well-being, motivation, and academic engagement. The present study aimed to examine the effectiveness of the SterkWerk intervention in promoting prosocial behaviour among primary school children aged eight to twelve. Additionally, it examined whether relatedness acts as a mediator in this relationship. While the results showed no significant effect of the SterkWerk condition on prosocial behaviour, relatedness at T2 significantly predicted prosocial behaviour at T3 in the mediation analysis.

Findings and expectations

Firstly, the analysis revealed no significant effect of the SterkWerk condition on prosocial behaviour compared to the control group after accounting for baseline levels. This contradicts the first hypothesis and suggests no evidence of SterkWerk's effectiveness in enhancing prosocial behaviour within the current sample and measurement moment. These findings contradict previous studies on similar school-based interventions, which did find positive effects on prosocial behaviour (Caprara et al., 2014; Cheon et al., 2019; Mesurado et al., 2018; Shin & Lee, 2021).

Secondly, the analysis did not support a mediating role for relatedness in the relationship between the intervention and prosocial behaviour. It was presumed that SterkWerk would increase relatedness, thereby promoting prosocial behaviour. This expectation was based on prior research showing that children who feel socially connected are more likely to help others (Ivanec et al., 2021; Raskauskas et al., 2010) and that strengthening relatedness can foster prosocial behaviour (Schonert-Reichl et al., 2011).

However, the path between relatedness at T2 and prosocial behaviour at T3 (path b) of the mediation analysis was significant, indicating a positive association between relatedness and prosocial behaviour. This shows that relatedness does matter in the classroom and suggests that enhancing students' sense of relatedness could contribute to a more prosocial environment. This aligns with the SDT, which indicates that relatedness is one of the psychological needs and a driving force for intrinsic motivation and prosocial behaviour (Ryan & Deci, 2000).

Alternative explanations

One possible alternative explanation for the absence of a significant effect for SterkWerk on prosocial behaviour is implementation fidelity. The varying levels of fidelity in implementing the intervention across different schools may have influenced the effectiveness of SterkWerk. Research shows that such inconsistencies in program implementation may reduce the expected effects, as the success of interventions depends heavily on the extent to which they are implemented correctly and consistently (Durlak & DuPre, 2008; Fernández-Martínez et al., 2021; Jantzer et al., 2023). In this study, the deviations from the intended implementation across schools could have contributed to the absence of an overall effect.

Another explanation to consider is the timing of measurements. Behavioural changes, such as increases in prosocial behaviour, may require more time to become apparent. Research has shown that the time it takes for individuals to form new, consistent behaviour can vary significantly between people (Lally et al., 2009). In the current research, the effects of the SterkWerk intervention are evaluated at three time points. However, it is possible that these time intervals were not optimal for capturing change in prosocial behaviour. Therefore, a follow-up measurement after the intervention could reveal a sleeper effect, where an effect of an intervention only becomes apparent after some time has passed (Van Aar et al., 2017). Additionally, since T2 took place at the midpoint of the intervention, it is possible that behavioural change had not yet been sufficiently established to show measurable effects. At the same time, it is possible that any short-term effects of the intervention were visible at T2 but weakened again by the time of measurement at T3, particularly in schools where implementation fidelity declined over time.

Strengths and limitations

A limitation of the current study is the use of child self-report measures. Although this approach could offer insightful information, it could also be susceptible to forms of bias. For example, social desirability may impact responses when children provide answers they believe adults or peers will find favourable. Furthermore, age and cognitive development could impact children's capacity to appropriately reflect and report on their behaviour (Bevans et al., 2020; Varni et al., 2007).

Another possible limitation is that only 65% of the students or parents at the participating schools gave permission to participate in the SterkWerk intervention. This could lead to selection or response bias, as the group that gave permission could potentially deviate from the actual student population. For example, students or parents who were more motivated, showed higher involvement, or experienced fewer external challenges may have given permission more often than those who did not. This could potentially lead to results that give a more positive image than reality, and could limit the extent to which the findings can be applied to the broader student population.

A strength of the current study is its longitudinal design, which made it possible to assess prosocial behaviour at three different time points. This approach allows for understanding of prosocial behavioural changes over time, rather than relying on a single measure after the intervention.

Furthermore, the study included a sample of 2,121 participants, which increases the likelihood that the sample accurately represents the population. Figure 4 shows the distribution of countries to which the participants felt a connection. According to the data, the sample broadly represents the primary school population in the Netherlands in terms of ethnic background, with 77% of children having a Dutch background, and the remaining 23% showing a similar distribution to that of children with backgrounds other than Dutch (CBS, 2024). A representative sample enhances statistical power and increases the generalizability of the findings to the population.

Implications and follow-up research

Although the current study did not find a significant effect of the intervention on prosocial behaviour, it still provides valuable insight into the possibilities of implementing prosocial behaviour interventions in primary school settings. Because the SterkWerk intervention was implemented in real classroom environments by teachers, the results are relevant for educational practice. Evidence-based work is considered increasingly important but is not yet consistently applied in practice (Jepma et al., 2024). The fact that this intervention is not currently effective is a valuable finding that helps to make informed choices regarding its implementation.

First, including an additional follow-up moment might be helpful. The current study measured prosocial behaviour before, during, and directly after the intervention. However, behavioural changes often take time to establish. Therefore, the sustained effects of the intervention might have been missed in the current measurement window (Van Aar et al., 2017). A later follow-up measurement could provide valuable information on the long-term impact of the SterkWerk intervention on prosocial behaviour.

In future research, it is important to focus more on the quality of intervention implementation. In this study, there may have been variation in implementation fidelity among the schools, which could have impacted the potential effectiveness of SterkWerk. Therefore, future research could benefit from measuring implementation fidelity and investigating it in combination with the effectiveness of the intervention.

Conclusion

This study demonstrated that although the literature showed that school-based interventions aimed at enhancing prosocial behaviour among children could work, SterkWerk did not demonstrate this effect. The study provided valuable information by employing a longitudinal design and a large sample. The insignificant result could be caused by the study's limitations, such as the timing of the measurements, selective attrition, the use of self-report measures and implementation fidelity. These limitations show the importance of follow-up research to examine the long-term effects of the intervention.

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