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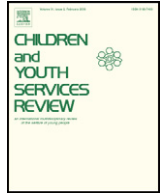
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Highlights

Evaluation of a group-based social skills training for children with problem behavior

Children and Youth Services Review xxx (2012) xxx–xxx
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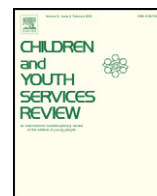
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- ▶ A social skills training was evaluated targeting reduction of problem behaviors. ▶ The children enrolled in the training were between 7 and 13 years of age.
- ▶ Effects were tested in a quasi-experimental study, with a 12 months follow-up. ▶ Only the experimental group showed a small and positive change in social anxiety. ▶ One year later, positive changes were still evident in the experimental group.



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Evaluation of a group-based social skills training for children with problem behavior

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ABSTRACT

This study evaluated a group-based training program in social skills targeting reduction of problem behaviors in $N=161$ children between 7 and 13 years of age. The effects of the intervention were tested in a quasi-experimental study, with a follow-up assessment 12 months after an optional continuation camp. At the post-test, both the experimental and control group showed less social problems and internalizing problems, whereas only the experimental group showed a small and positive change in social anxiety. After a 12 month follow-up, a subsample of the experimental group (children who followed a continuation camp) showed large positive changes for all outcome measures, except for externalizing problems, showing a small effect.

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1. Introduction

In the Netherlands, 11–28% of children below the age of 12 experience mild internalizing and/or externalizing problems. One to three percent of the children in this age group even show serious problem behavior (Zeijl, Crone, Wiefferink, Keuzenkamp, & Reijneveld, 2005). Internalizing as well as externalizing problems have been associated with social problems and a lack of positive peer relationships (Deater-Deckard, 2001; Hymel, Rubin, Rowden, & LeMare, 1990; Klima & Repetti, 2008; Ladd, 2006). Additionally, children with social problems, and poor peer relationships, not only show more problem behavior, but also perform less well at school (Elliot & Gresham, 1993; Henricsson & Rydell, 2006). On the other hand, positive peer relationships have shown to serve as a protective factor for the development of internalizing as well as externalizing problems (Deković, Buist, & Reitz, 2004; Lansford, Criss, Pettit, Dodge, & Bates, 2003).

Social skills training (SST) is an intervention that is frequently used for children with problem behavior. The aim of SST is to increase the child's social competences, which means that the child learns specific skills and learns to build and maintain positive relationships with its peers (Gresham, 1998; Maag, 2005). A child is socially competent when it can exercise important social skills with positive results in various social contexts (Prins, 1995). Examples of social skills are cooperating, standing up for oneself, being responsible, showing empathy and self-control (Elliot & Gresham, 1993). For

long-term effects it is necessary that children learn to identify social problems independently and to resolve them satisfactorily in real-life situations (Ten Dam & Volman, 1999).

In general, the effects of social skills training for children are only moderate. Meta-analyses by, for example, Ang and Hughes (2002), Cook et al. (2008), Losel and Beilmann (2003), Schneider (1992) and Quinn, Kavale, Mathur, Rutherford, and Forness (1999) report small to medium effects that are, moreover, short-lived. Additionally, the effect of SST depends largely on the type of problems present in participants. For instance, large effects of SST have been found in children who are socially deprived or withdrawn, moderate effects in children with internalizing and externalizing behaviors, and small effects in children with aggressive behavior and children with intellectual disabilities (Beilmann, Pfungsten, & Lösel, 1994; Schneider, 1992). Furthermore, interventions targeting mixed groups were more effective than interventions targeting relatively homogeneous groups of children with similar problems, suggesting that treatment providers should take notion of deviancy training effects when developing intervention programs (Ang & Hughes, 2002). As SST usually does not take place in a naturalistic setting or in the child's immediate surroundings, the effects of SST have limited generalizability (Maag, 2006). In addition, social validity is lacking in many cases, which means that the social skills the child has learned have little or no relevance for application in its everyday environment. Besides, parents are not sufficiently involved in the social skills training in order to support the child using the newly acquired social skills (see Beilmann et al., 1994; Kavale, Mathur, Forness, Rutherford, & Quinn, 1997; Maag, 2005, 2006). A number of studies found greater treatment effects when interventions had additional parenting components (Frankel, Cantwell, & Myatt, 1996; Frankel, Myatt, Cantwell, & Feinberg, 1997; Kazdin, 1990, 1997, 1998; Webster-Stratton, Reid, &

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Hammond's, 2001). Finally, there is empirical evidence showing that the effectiveness of SST can be enhanced by the inclusion of booster sessions that help maintain the newly acquired skills over time (Gresham, 1998; Michalski, Mishna, Worthington, & Cummings, 2003).

The idea of the developers of *Sterkamp* (Star Camp) and *Maankamp* (Moon Camp), a multi-component social skills program, including physical education and mentoring moments, was to offer the child a safe environment in which he/she can learn and practice social skills. The aim of the intervention is to increase the social skills of children with internalizing and externalizing problems by means of a 6-day camp (Star Camp), and an optional continuation camp (Moon Camp), 6 months later, which serves as a "booster." In addition, the developers addressed a number of the earlier made suggestions by researchers to improve the effectiveness of social skills programs by actively involving parents into their training, including children with both internalizing and externalizing behaviors to have diversity in group composition, and by practicing the social skills in a naturalistic setting.

This is the first study to examine the effectiveness of Star Camp and Moon Camp for children aged between 7 and 13 years with internalizing and externalizing problems. The study has four measurement points: before and after Star Camp, after Moon Camp and a follow-up assessment exactly 1 year after Moon Camp. Studies on effectiveness of social skills programs have demonstrated that the potential of these programs is much broader than the improvement of social skills alone. For instance, Bijstra and Jackson (1998) showed a social skills program for Dutch adolescents to decrease the participants' level of social anxiety, to increase their social activity behavior, and to improve their self-esteem as well as their coping strategies. Therefore, the current study examined not only the effects of the program on social skills, but also its effects on problem behaviors, social anxiety and the participant's self-perception. We expect children who attended Star Camp to have a stronger sense of self-worth after the intervention and a more positive perception of their competence in a number of areas, including school skills, social acceptance, sporting skills, physical appearance and conduct than children on the waiting list. The second objective of this study is to establish whether these effects remain for a period of 12 months after Moon Camp. We expect positive effects to remain or even increase.

2. Method

2.1. Participants

The research group comprised $N = 161$ children between the ages of 7 and 13 years. The experimental group comprised $n = 86$ children ($M_{\text{age}} = 9.97$, $SD = 1.18$), of whom $n = 48$ children went to Star Camp only and $n = 38$ children went to both Star Camp and Moon Camp. The control group comprised $n = 75$ children ($M_{\text{age}} = 9.73$, $SD = 1.29$) who were on the waiting list. The gender distribution was 48% boys and 52% girls in the experimental group and 56% boys and 44% girls in the control group. Seventy-five percent of the parents had higher education (at least higher vocational education), 23% had secondary education (senior secondary vocational education) and 2% had lower secondary vocational education. All children and parents had Dutch backgrounds. There were neither significant differences in background variables between the experimental group and the control group, nor between the group of children that only attended Star Camp and the group of children attending both Moon Camp and Star Camp.

The children and parents from the experimental and control groups were informed in advance about the study and signed an informed consent form. The questionnaires were sent by post to the participating children and their parents. The children filled out two questionnaires: the SAS-K and the CBSK. The parents completed the CBCL (see Instruments).

To be included in this study, children had to score within the clinical range on at least one of the following variables: social anxiety, social problems, internalizing problems, externalizing problems, school skills, social acceptance, sporting skills, physical appearance, behavioral conduct and/or self-worth. Moreover, the children had to have sufficient reading skills; they should be able to read trisyllabic words and sentences split over two lines.

The children were excluded from participation when at least one of three of the following criteria were met: (1) serious emotional and/or behavioral problems (e.g. children with separation anxiety or children whose behavior would be too disruptive for the group process); (2) a physical and/or mental handicap that restricts the child in his/her functioning to the extent that it would not be possible for the child to acquire sufficient successful experiences; and (3) an IQ below 80, with the risk of the program being too demanding for the child.

The children in the control group scored more favorably on self-worth ($t = -2.07$, $p < .05$) and physical appearance ($t = -3.24$, $p < .01$) than children in the experimental group. In terms of Cohen's d , the differences were small ($d = .34$) and moderate ($d = .55$), respectively.

2.2. Procedure

The measurement moments for the experimental group took place 6 weeks before and after Star Camp, 6 weeks after Moon Camp and 1 year after Moon Camp. The measurement moments for the wait-list control group were the same as for the children who attended Star Camp, namely, 6 weeks before and after the SST. No follow-up data were available for the control group.

2.3. Attrition

The assessment after Star Camp showed that attrition in the control group was significantly greater than in the experimental group (29% versus 8%, $\chi^2(1) = 10.79$, $p < .01$). There was selective attrition in terms of gender. Whereas a roughly equal number of boys ($n = 4$) and girls ($n = 3$) withdrew in the experimental group, more boys ($n = 17$) than girls ($n = 5$), $\chi^2(1) = 4.56$, $p < .05$ withdrew in the control group. There was no selective attrition with respect to the age of the children and the parents' level of education. Selective attrition, however, was found when looking at mean differences on the screening variables. In the control group, differences were found between the children who did and did not withdraw from the social skills training on social anxiety ($t(73) = 3.04$, $p < .01$) and internalizing problems ($t(73) = 2.14$, $p < .05$). The children who withdrew had lower average scores for social anxiety ($M = 11.50$, $SD = 7.74$) and internalizing problems ($M = 12.82$, $SD = 6.57$) than the children who did not withdraw (social anxiety: $M = 17.93$, $SD = 8.57$; internalizing problems: $M = 17.28$, $SD = 8.81$).

Inspection of the data at T2 showed that children who went to Moon Camp, compared to children who did not go to Mooncamp, had lower levels of social anxiety and scored more favorably on general self-worth as well as on four out of five domains of self-worth, namely school skills, sporting skills, physical appearance and conduct.

2.4. Star Camp

The participating children had been referred by a general practitioner (GP) or psychologist, or parents had contacted Star Camp themselves. Before the camp, volunteers were recruited to provide intensive supervision for a small group of children during the camp (one volunteer for two or three children). These volunteers included child and youth psychologists, actors and fitness experts. They received a short training before the start of the camp, which included

an explanation of the content and effective principles of the program. During the camp period the volunteers received intensive coaching by the GP. The GP was responsible for maintaining treatment adherence during the camp. All activities were logged and practiced each day together with the GP before the start of the training.

Aiming to create variation in the groups of children, the children were partnered with each other before the camp based on age, cognitive functioning and interests, taking into account the nature and seriousness of the children's problems. This was done to prevent children from reinforcing each other's problem behavior (Ang & Hughes, 2001; Gifford-Smith, Dodge, Dishion, & McCord, 2005). For example, children with fear of failure were partnered with children who find it less disturbing when they make mistakes. During the 6-day camp, there were joint activities each day, comparable to a conventional camp, such as hunts and searches, fashion shows, and an entertaining evening to conclude. In addition, 4 h a day were devoted to training the children's skills: 1.5 h of social skills training (five meetings), 1 h of role play (five meetings) and 1.5 h of physical education (five meetings). Each day (five meetings) the children had a 1 h meeting with their mentor in a subgroup of two or three children. During this hour the volunteer discussed the difficult situations with the child and reformulated the problems the child experienced into personal goals. Together with the other children, solutions to the problems of the child were sought for.

The social skills training under study uses various evidence-based methods and techniques based on cognitive behavioral and social learning theory. In addition to cognitive restructuring, the training involves exposure in vivo, in which the children practice their skills in increasingly difficult situations. Moreover, "reinforced practice" techniques are used in which desired behavior is rewarded and undesirable behavior is ignored. New skills are learned through participative modeling in which the trainers show how the child can use its skills in given situations. Last, children learned by observing how other children in the group deal with certain situations (Van Geldorp, Beerkens, Vanhees, Bruinsma, & Buttinger, 2008).

The children's parents were involved during and after the intervention in order to help children to develop and maintain social skills. One of the ways of achieving this was the follow-up day, 6 weeks after Star Camp, during which all the parents of children who participated in Star Camp were present. During this follow-up day, the diagnostic report from the intake was discussed with the parents, providing parents insight into their child's development with regard to social, internalizing and externalizing problems. In addition, parents were given individual advice how to deal with their children in the home situation, based on experiences from the camp. After the post-camp assessment parents received a report by post containing information about the areas in which their children had progressed and the aspects that still required attention. The developments were explained in a telephone consultation and parents were again given advice for the home situation. By way of additional support, parents could become members of the Sterpoli (an outpatient facility) for a 1-year period, which enabled them and their children to consult the pedagogical team and ask questions on the internet. The parents and children also received a practical guide for use at home, so-called "Advice by Kids for Kids." The book contains examples of difficult social situations experienced by children, and the children's own solutions to them. This provided parents with ways to encourage the child to practice and retain the newly learned skills at home (Kwadijk, 2008).

2.5. Moon Camp

After the post-Star-Camp period, when most children can experiment with their newly acquired skills at home, they have the opportunity to attend a 6-day continuation camp that serves as a booster (Moon Camp). The intervention follows on from what has been

learned at Star Camp to broaden and deepen earlier learned skills. The aims of Moon Camp are the same as those of Star Camp, but target more advanced social skills, such as how to deal with peer pressure, exclusion and bullying, and how to set physical, emotional and social boundaries.

2.6. Instruments

2.6.1. Social Anxiety Scale for Children (SAS-c)

The SAS-c is a Dutch self-reporting list for children from 7 to 13 years of age, compiled by Dekking (1983). The aim of the questionnaire is to measure the degree of social anxiety in children. The list consists of 46 Yes/No items, where the child has to indicate whether the statements apply or do not apply to him/her in situations in which outward appearance is an issue, situations requiring social, intellectual and physical competences, and situations in which the child is in an isolated position. The reliability of the total score for social anxiety varied between .69 and .88 at the four measurement points.

2.6.2. Child Behavioral Check List (CBCL) 6–18

The original American version of the CBCL (Achenbach & Edelbroch, 1983) has been translated into Dutch and was standardized for the Dutch population (Verhulst, van der Ende, & Koot, 1996). The version for the 6–18 age group was used for this study. The aim of the CBCL is to identify competences and problems in children, as observed by their parents/caregivers. The questionnaire has two parts: one relating to the child's competences and the other relating to the child's emotional and behavioral problems. In this study, only the data from the second part were used. This part consisted of 118 items with specific behaviors for which the parents can indicate on a 3-point scale whether – and if so, how often – the specified behavior occurs. Completion of the questionnaire results in various scale scores, three of which were used for this study: the syndrome scale for social problems and the broad-band scales for internalizing and externalizing problems. The reliabilities were as follows for the four measurement points: social problems ($.66 \leq \alpha \leq .68$), internalizing problems ($.86 \leq \alpha \leq .87$) and externalizing problems ($.86 \leq \alpha \leq .88$).

2.6.3. Self-Perception Profile for Children (CPSK)

The Dutch version of this scale (Harter, 1982) was developed by Veerman, Straathof, Treffers, van den Bergh, and Ten Brink (1997). The CPSK assesses how the child perceives his/her own skills in a number of specific domains. This instrument can be used for children from 8 to 12 years of age. The CPSK comprises 36 items divided into six sub-scales of six items. Five scales represent the specific domains of self-worth, namely school skills, social acceptance, sporting skills, physical appearance and conduct. The sixth scale, self-worth, measures the child's general self-esteem. The scale scores can be converted into percentile scores. All the sub-scales were used for this study. The reliabilities varied as follows at the four measurement points: school skills ($.64 \leq \alpha \leq .78$), social acceptance ($.64 \leq \alpha \leq .80$), sporting skills ($.52 \leq \alpha \leq .87$), physical appearance ($.71 \leq \alpha \leq .87$), conduct ($.56 \leq \alpha \leq .80$) and sense of self-worth ($.71 \leq \alpha \leq .84$).

2.7. Data analysis

First, analyses of variance were carried out to test short-term effects of the Star Camp by comparing the results of the experimental group and the control group for the pre and post-camp assessment. Second, repeated measures ANOVAs were used to study the changes within the experimental group over the four assessment waves: the Star Camp pre- and post-test, the post-test after Moon Camp and the follow-up test after 1 year.

3. Results

3.1. Star Camp evaluation

Table 1 shows the means before and after Star Camp for all outcome variables for the experimental group ($n=86$) and the control group ($n=75$). A series of repeated measures ANOVAs of (condition) \times (time) were used to examine intervention effects. A small but significant intervention effect for social anxiety was found: $F(1, 27) = 4.69, p < .05, d = .23$. Children in the experimental group exhibited less social anxiety ($d = .26$) after Star Camp, while there was no observable difference in the control group ($d = -.01$). Significant decreases were also found in social and internalizing problems for both the control group ($d_{\text{social}} = .45, d_{\text{intern}} = .37$) and the experimental group ($d_{\text{social}} = .25, d_{\text{intern}} = .30$), but no significant condition \times time interaction effects, indicating that the effects for both groups were comparable. No significant changes were found for other measures, neither in the experimental nor in the control group.

3.2. Changes in the experimental group over four assessment stages

After Star Camp, 38 children went on to Moon Camp. Table 2 shows the means and standard deviations for the group of children from the experimental group for whom data were available for all

Table 1
Means, standard deviations and effect sizes.

	Pre-camp assessment		Post-camp assessment		<i>t</i>	<i>d</i>
	M	SD	M	SD		
<i>Social anxiety</i>						
Exp	18.29	6.75	16.27	8.39	3.08**	.26
Con	17.40	8.28	17.49	8.70	-.14	-.01
<i>Social problems</i>						
Exp	6.53	3.35	5.70	3.21	2.95**	.25
Con	7.17	3.46	5.64	3.35	3.76***	.45
<i>Internalizing</i>						
Exp	15.11	8.32	12.78	7.20	3.59***	.30
Con	17.28	8.81	14.06	8.35	3.45***	.37
<i>Externalizing</i>						
Exp	9.88	6.28	9.41	6.56	1.06	.07
Con	11.25	8.76	9.91	8.89	1.97	.15
<i>School skills</i>						
Exp	15.45	3.70	14.78	3.30	-1.79	-.19
Con	15.48	3.88	16.05	3.71	1.11	.15
<i>Social acceptance</i>						
Exp	14.04	3.38	14.44	3.33	1.03	.12
Con	13.58	4.30	14.54	4.03	1.80	.23
<i>Sporting skills</i>						
Exp	15.65	3.05	15.95	3.62	0.79	.09
Con	16.83	4.11	16.23	4.36	-1.49	-.14
<i>Physical appearance</i>						
Exp	16.14	3.31	16.43	3.53	0.80	.08
Con	18.23	4.50	18.38	4.31	0.34	.03
<i>Behavioral conduct</i>						
Exp	15.58	3.05	15.59	3.21	.04	.00
Con	15.68	3.51	16.43	4.06	1.51	.20
<i>Sense of self-worth</i>						
Exp	15.65	3.50	16.06	4.13	1.09	.11
Con	16.50	4.03	16.28	4.56	-.47	-.05

Note. Exp = experimental group ($72 < n < 79$); Con = control group ($40 < n < 53$).

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

four measurement points: the Star Camp pre- and post-test, the post-test after Moon Camp, and the follow-up assessment after 1 year. A series of repeated measures ANOVAs showed significant effects for all outcome variables. Effect sizes were calculated based on dependent *t*-tests of the differences in means between the preliminary and follow-up assessment. The largest effect size of $d = 2.55$ was found for social anxiety. Also large effect sizes were found for social problems ($d = 1.09$) and internalizing problems ($d = .78$), whereas a small effect size was found for externalizing problems ($d = .24$). Large effects sizes, ranging from .96 to 1.54, were found for general self-worth as well for all five domains of self-worth.

4. Discussion

In this study the effects of a multi-component social skills training program were examined for children aged between 7 and 13 years with problem behavior. At the Star Camp post-test, both the experimental group and the control group showed small to moderate improvements in social and internalizing problems, while a small and positive change in social anxiety ($d = .23$) was found only in the experimental group. At the 1 year follow-up, large and positive changes were found in social anxiety, social problems, internalizing problems, and self-perception in the children who also attended the continuation camp (Mooncamp). Moreover, a small and positive effect was found for externalizing problems.

The social skills training under study affected a range of behaviors, including social skills. This result is in line with the study of Bijstra and Jackson (1998), who found their social skills program for Dutch adolescents to decrease the adolescent's level of social anxiety, to increase their social activity behavior, and to improve their self-esteem as well as their coping strategies.

From various review studies it appears that the effects of social skills interventions often diminish at follow-up (Gresham, Cook, Crews, & Kern, 2004; Maag, 2005, 2006; Quinn et al., 1999). This is in contrast to the present intervention, for which the positive changes were greatest at the follow-up assessment 12 months later. However, the effect for externalizing problems was small. This result is in line with studies showing smaller effects of intervention programs on externalizing problems (Beelmann et al., 1994; Schneider, 1992). It should be noted, however, that the data of the control group were not available at the time of the follow-up assessment, which means that, in the long-term, the link to the training program cannot be established.

In their study of a summer-camp program in Toronto, Michalski et al. (2003) reported the children, between the ages of 10 and 18 years with internalizing and externalizing problems, who attended the camp for the second time to achieve substantially better results than children attending the camp for the first time. This supports the results of the present study for the continuation camp (Moon Camp). It can also be concluded from the overview study by Gresham (1998) that continuation camps can enhance the effects of social skills training programs because they prevent already existing behavior patterns from interfering with newly acquired skills. However, it should be noted that the children who attended Moon Camp, compared to those who did not, already scored more favorably on social anxiety and self-perception. Moreover, at time of assessment a control group was lacking, and thus it cannot be deduced that the social skills training under study caused the positive changes in the group of children attending Moon camp. The developers of Star- and Mooncamp should pay special attention to children with high levels of social anxiety and lower levels of positive self-perception who did not attend Mooncamp, as this group of children could benefit most of the social skills training.

Because a homogeneous group composition in group interventions can lead to the reinforcement of problem behavior (Ang & Hughes, 2001; Dishion, McCord, & Poulin, 1999), which in turn can

t2.1 **Table 2**

t2.2 Means and standard deviations in assessments before and after Star Camp and Moon Camp, and in the follow-up assessment.

t2.3		Preliminary assessment		Assessment after Star Camp		Assessment after Moon Camp		Follow-up		F(3,29)
		M	SD	M	SD	M	SD	M	SD	
t2.4										
t2.5	Social anxiety ¹	20.84 ^a	5.40	19.30 ^a	6.16	5.90 ^b	5.96	5.16 ^b	5.37	55.31***
t2.6	Social problems ²	6.88 ^a	3.25	5.78 ^b	3.09	3.66 ^c	2.55	3.41 ^c	2.78	11.22***
t2.7	Internalising ²	14.91 ^a	7.88	12.97 ^b	7.82	9.06 ^c	5.83	8.72 ^c	7.24	13.06***
t2.8	Externalising ²	9.48 ^a	6.43	9.88 ^a	7.41	6.91 ^b	5.46	7.91 ^b	6.45	5.85**
t2.9	School skills ³	15.15 ^a	3.98	14.38 ^a	2.77	17.83 ^b	3.71	18.67 ^c	3.42	13.86***
t2.10	Social acceptance ³	13.67 ^a	3.47	14.68 ^b	2.74	16.83 ^c	4.76	17.70 ^c	3.71	7.28***
t2.11	Sporting skills ³	15.30 ^a	2.37	15.55 ^a	2.63	18.33 ^b	4.21	19.50 ^c	3.79	16.88***
t2.12	Physical appearance ³	15.79 ^a	2.35	15.67 ^a	2.62	20.23 ^b	3.75	20.37 ^b	3.26	14.19***
t2.13	Behavioral conduct ³	15.40 ^a	3.16	14.80 ^a	2.30	18.30 ^b	3.26	18.70 ^b	3.20	11.70***
t2.14	Sense of self-worth ³	15.52 ^a	3.05	15.40 ^a	2.84	20.33 ^b	2.37	20.60 ^b	2.76	17.81***

t2.15 Note. The various superscripts indicate means that differ significantly from each other. For example: the scores for 'sense of self-worth' in the post-Moon-Camp and follow-up assessments are significantly higher than in the assessments before and after Star Camp.

t2.16 $n = 33$.t2.17 $^{\dagger}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

419 lead to negative intervention effects, Star Camp and Moon Camp
 420 aimed for diversity in group composition, so that the children
 421 would not reinforce each other's problem behavior, but learn from
 422 each other in a positive way. Because children with internalizing
 423 problems were over-represented in this study, the question remains
 424 whether Star Camp and Moon Camp, as group interventions, have
 425 sufficient guarantees to exclude negative intervention effects given
 426 that heterogeneity is thought to protect against reinforcement of
 427 problem behavior (Ang & Hughes, 2001; Gifford-Smith et al., 2005).
 428 During the admission of children to the program, the treatment
 429 providers should warrant the diversity claim by including children
 430 with a range of problems behaviors: both internalizing as well as
 431 externalizing behavior. It is in any case true that the experimental
 432 group in this study showed no deterioration of internalizing and
 433 externalizing problems compared to the control group, which
 434 means that no indications of negative intervention effects were
 435 found. Furthermore, the large decrease in internalizing and external-
 436 izing problems during the follow-up assessments is indicative of the
 437 absence of negative intervention effects.

438 This study has a number of limitations. First, a control group was
 439 missing for the continuation camp (Moon Camp) and the follow-up
 440 assessment. Therefore, changes in terms of improvement in problem
 441 behavior, social anxiety and self-perception cannot be attributed to
 442 the social skills program (D'agostino & Kwan, 1995). However, the
 443 effects of Star Camp could be assessed in a controlled study. Secondly,
 444 there was selective attrition (children in the control group who with-
 445 drew scored lower for social anxiety and internalizing problems than
 446 the children who did not withdraw), although attrition in the exper-
 447 imental group was lower (8%) than the control group (29%). On the
 448 one hand, attrition makes it difficult to attribute positive differences
 449 in social anxiety to the experimental group. On the other hand, it
 450 should be noted that the intervention effect on social anxiety was
 451 discovered by comparing the positive changes in the experimental
 452 and control group. Whereas the experimental group showed a small
 453 and positive change in social anxiety, this was not the case in the
 454 control group.

455 With regard to the parents, it must be reported that they all had a
 456 Dutch background (autochthonous) and a medium to high socioeco-
 457 nomic status (SES). It should therefore be kept in mind that the inter-
 458 vention was carried out in a select group of children and parents,
 459 which means that the results cannot be generalized to, for example,
 460 children with a non-western cultural background or from lower
 461 socioeconomic backgrounds. Further research is required into the
 462 external validity in order to establish to what extent similar results
 463 can be obtained with children from a non-western cultural back-
 464 ground or families with a lower SES.

The social skills training under study could be considered a
 multi-component program including social skills training, psychical
 education and mentoring moments, which makes it difficult to estab-
 lish which of the components are responsible for the change in
 behavior. At this point, the effects can only be ascribed to the combi-
 nation of these components into one program. As the three compo-
 nents are very much interwoven and children used the learned
 skills in the various components of the program, it is plausible to
 suggest that the combination of these components leads to the
 desired change.

This is one of the first studies examining the effects of multi-
 component social skills training for a group of children with
 internalizing and externalizing problems that is repeated after a
 period of time. Future research into Star Camp and Moon Camp
 should use a randomized controlled trial in order to examine
 whether the substantial reduction in problem behavior after
 Moon Camp can be attributed to the group-oriented training in
 social skills, or whether children with internalizing and externaliz-
 ing problems can also exhibit large and positive changes without
 therapy. Finally, future evaluation research should also focus
 upon the effects of this social skills program for children from
 non-Native Dutch and/or lower socioeconomic backgrounds.
 Despite the fact that Star Camp aims to be available for a heteroge-
 neous group of participants, mainly higher SES native Dutch chil-
 dren participated.

Therefore the program needs to be made more attractive and
 accessible for these groups of children. However, as it is known that
 children of non-native Dutch families find it more difficult to find
 their ways to mental health providers (Bellaart & Pehlivan, 2011),
 the treatment providers of the Star- and Moon Camp might need to
 reach out to this particular group of children and bring this program
 under attention of health care professionals who are familiar with
 these groups of children.

5. Uncited reference

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