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## Exploring the coherence of the goals achieved through a youth development programme

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### Abstract

High goal coherence of a course has a positive effect on the participant's competence development. However, studies on the goal coherence of the youth development programmes are scarce. The participants were 153 teachers who attended to the LQ teachers' workshop. They filled in the questionnaire before and after the training. In addition, 61 teachers who comprised the comparison group answered also to the questionnaire twice but they did not participate in the LQ. The LQ questionnaire consisted of two elements, namely, how participants experienced the importance of the goals and their perceived competence in promoting the LQ goals. Four pairs of variables describing the participants' perceived importance of a course goal and the participants' perceived competence towards implementing it were produced in exploratory factor analysis. The coherence values for variable pairs using distance values were calculated by subtracting the perceived importance from the perceived competence for each goal. The coherence increased at the second measurement point among both the intervention and comparison groups. The LQ intervention resulted in a significantly increased coherence in the 'safe environment' and 'promoting SEL' variable pairs among training participants compared with the comparison group. Participating in the LQ training did not, however, increase the coherence significantly with regards to the 'help others' or 'healthy life' variable pairs compared with the comparison group. This piece of research highlights an interesting means of investigating the effectiveness of teacher training.

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## 1. Introduction

High-quality continuing professional development for teachers is important in many ways. Since teachers stand as professionals in teaching and learning, continuous training programmes should not underestimate their previous knowledge and experience. Solid learning sessions should build on the strengths of the teachers and the best teaching practices should be applied. It is, thus, important that deep-level learning takes place and that the content is update-to-date, appropriate and practical. The goals of the training should be transparent, coherent and clear. Teachers should find the training important and meaningful for their own work. After the course, they should feel competent and find the contents even more important than before.

During the last two decades, the promotion of social and emotional learning (SEL) has increased in schools. Comprehensive school teachers are offered a wide range of courses and materials to implement SEL as a part of teaching and learning at school. The organisation Collaborative for Academic, Social and Emotional Learning (CASEL) published criteria for high-quality SEL materials and trainings (Collaborative for Academic, Social and Emotional Learning, 2014). According to these criteria, initial training on implementing a particular SEL programme for teachers is essential. Indeed, according to our previous studies, teachers did not necessarily possess much knowledge on SEL when entering a course. However, after the training, teachers understood the central concepts of SEL and could apply the skills studied to specific situations (Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2013; Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2015). These findings mimicked similar results from studies by Barton-Arwood, Morrow, Lane and Jolivette (2005) and Jennings, Frank, Snowberg, Coccia, and Greenberg, (2013) in education and by Aspegren (1999) in medical education. Accordingly, attendees may learn the basic theory and skills of SEL during a short training programme. For instance, we found that a teaching workshop on SEL increased teachers' perceived importance and experienced competence regarding SEL skills, which affected the SEL implementation process (Talvio, Berg, Ketonen, Komulainen, & Lonka, 2015). That study focused on a teacher workshop from the Lions Quest programme (LQ), which is the focus of the findings we present here, too. Even though there is some research on the benefits for the *students* (Berkowitz, Battistich, & Bier, 2008; Eisen, Zellman, & Murray, 2003; Kidron, Garibaldi, & Osher, 2014; Matischek-Jauk & Reicher, 2014) research literature on *teacher* learning during LQ is surprisingly scarce.

LQ was originally developed to prevent drug and alcohol abuse and to reduce risky behaviour (Talvio et al., 2015). That is, the original objective of LQ aimed to prevent social exclusion. Today LQ serves as an SEL programme which has gained extensive international application. According to the LQ website, it is now available in 90 countries (Lions Quest, 2015). Since 1990, more than half a million teachers have participated in LQ workshops, and subsequently implemented LQ in their classrooms to more than 13 million pupils. The programme expanded its original goals and now primarily aims to support positive youth development in school settings through health promotion, strengthening SEL and emphasising service. In addition to teaching and studying SEL skills in the classroom, LQ promotes the creation of a safe learning environment, and encourages creating and maintaining solid connections to pupils' families and other networks associated with the school and its pupils. LQ also encourages the entire school community to learn in order to serve others. To maintain the quality of LQ, teachers must participate in the LQ teaching workshop which provides teachers with sufficient knowledge and skills to implement LQ in the classroom setting.

The primary goals of LQ teacher workshops worldwide aim at promoting positive youth development and a healthy and meaningful life. The workshops are designed to consist of the following: Learning to use specific materials to conduct an LQ lesson aimed at creating a safe learning environment in which it is possible to support pupils' self-esteem, preventing drug and alcohol abuse, promoting SEL and strengthening service. Specialists create the learning materials, which contain specific instructions for each LQ lesson. The materials also emphasise the goal behind each task, a game or a group discussion. For example, role plays are designed to target at providing pupils with the skills they need to prevent drug and alcohol abuse. However, the materials are designed so that the teacher does not necessarily need to have a deep understanding of the theory or the structure to which the LQ goals aim at. They become clearer with the systematic use of the materials. This demands placing value on the use of the lessons and the materials.

Workshop trainers qualify as professionals after participating in a multiphase training that includes practicing LQ workshop delivery and receiving guidance from an experienced trainer. Each LQ country selects a senior trainer

who is responsible for implementing international LQ curriculum appropriate to the national context. Hence, local circumstances, such as the school system, culture and legislation, represent important factors in the LQ implementation process.

LQ is one of many school programmes on SEL, for which its effectiveness and quality remains relatively unstudied (Humphrey, 2013; Lintunen, 2006; Talvio et al., 2015). Naturally, the learning results of participants typically reflect the quality of the training. Evaluating an increase in knowledge and competency towards applying such knowledge serves as a practical means by which to determine how learning occurs among course participants (Kirkpatrick & Kirkpatrick, 2006).

We may also assess quality from the perspective of the training goals. According to expectancy value theory, expectancies and values also play an important role in the learning process (Eccles & Wigfield, 2002; Wigfield & Eccles, 2000). If we expect the goals of continuous training programmes to remain interesting and important, participants should prepare by, for example, calming their lives in order to fully participate in the programme. In addition, if participants view the training as valuable and worthwhile, they will want to perform as well as they possibly can. Alternatively, if participants view the training programme as irrelevant, they will avoid any course-related work or not attend the course in its entirety. This may also happen if the course content is perceived as too incoherent or difficult. In this case, to address any anxiety caused by an inability to adopt the course content, participants may underestimate the value of the content studied.

Previous research demonstrated that self-efficacy beliefs affect learning success (Bandura, 2006; Bandura, 1977). Individuals with high efficacy trust themselves and view difficult tasks as challenges that can be mastered. For teachers, however, just getting through a workshop well is not enough. Thus, after training, they must feel that they possess the skills necessary to implement the course content in practice. In our previous study, we found that typically those who participated in the training considered the goals important, but felt incompetent in implementing the lessons practically. During the course, however, they perceived an increase in their competency towards applying the goals (Talvio et al., 2015).

Learning is indeed a very complex matter, and there is no generally accepted definition of the concept. On the contrary, a great number of more-or-less special or overlapping theories of learning are constantly being developed, some of them referring back to more traditional understandings, others trying to explore new possibilities and ways of thinking. Modern theories of learning emphasize the multifaceted nature of learning, the importance of coherent learning goals and the activation of previous knowledge of the participants (Bransford et al., 2000; Bruner, 1996; Illeris, 2009; Lonka, 1997). Thus, it is important that the training goals are clear and related to one another. According to Seidel, Rimmel and Prenzel (2005), a high coherence across training goals affects the self-determined motivation which, in turn, has a positive effect on learning. By analysing videos of classroom instruction and answers from students about their perceptions of supportive learning conditions, they found that, in classes with highly coherent goals, students more intensively learned the content compared with other classes.

Hence, if teachers perceive the importance of a course goal and feel that their competence in implementing it becomes more coherent, we may conclude that the course succeeded in offering a learning experience to participants and that the training is of a sufficiently high quality.

In this study, we examined the association between participants' perceived interest and their perceived competence regarding the course goals during their participation in an LQ workshop in Finland. The findings here form a part of a larger evaluation project of the LQ programme, aimed at investigating the quality of the teachers' LQ workshop. In our previous study, we found that teachers participating in the LQ teachers' workshop viewed the goals of the training as more relevant after the training than before it. In addition, teachers most likely learned the content studied well, since they rated their competence in skills related to the LQ goals higher after completing the training.

## 2. Method

### 2.1. Participants

The intervention group consisted of 153 Finnish comprehensive school teachers who attended the LQ teachers' workshop and 61 Finnish teachers who did not take part in LQ. Almost half (43%) of all participants were class teachers ( $n = 92$ ) mostly from elementary schools. In addition, 48 subject-matter teachers (23%) mostly from secondary schools, 38 special education teachers (18%) working mostly with learning difficulties and 36 other members of school staff (17%) comprised our study sample. Among the teachers in this study, 186 (87%) were women and 28 (13%) were men. We controlled for these background characteristics in the repeated measures analyses, finding that they carried no influence on other variables.

### 2.2. Ethical considerations

We informed participants about measures taken to protect their privacy, and that their information and responses would remain anonymous. In addition, we informed participants about their right to withdraw their responses from this study at any time without advance warning or explanation. However, none of the participants asked that their answers be removed from the database.

### 2.3. Measures

The LQ questionnaire consisted of two elements, namely, how participants experienced the importance of the goals and their perceived competence in promoting the LQ goals. Participants rated 16 statements developed using a seven-point Likert scale with response options ranging from 'totally disagree' (1) to 'totally agree' (7) or 'not at all important' (1) to 'very important' (7). Examples of statements used to measure participants' perceptions of the importance of LQ included 'It is the teacher's duty to create a safe atmosphere in the classroom' and 'It is the teacher's duty to support the student to take responsibility and to make sensible decisions.' We investigated teachers' perceived competence in promoting the LQ goals using statements such as 'I am very skilled at creating a safe atmosphere in the classroom' and 'I am very skilled at guiding my students to take responsibility and to make sensible decisions.' To condense the data, we conducted an exploratory factor analysis using data from the post-test responses. This analysis produced four pairs of variables describing the participants' perceived importance of a course goal and the participants' perceived competence towards implementing it. The pairs of variables are shown in Table 1 and Figure 1. A more detailed explanation of the data consolidation process is described elsewhere (Talvio, et al., 2015).

### 2.4. Study Procedure

Participants completed a questionnaire before and after the LQ workshops, which were organised in different parts of Finland in 2014. The two-day training workshops were roughly equivalent and held outside school during normal working hours.

### 2.5. Statistical Methods

We calculated the coherence values for variable pairs using distance values by subtracting the perceived importance from the perceived competence for each goal. Thus, the higher the score for the distance value, the smaller the coherence. In order to analyse any change in coherence, teachers' pre-test coherence scores for the paired variables were subtracted from the post-test scores. Finally, we used the one-way ANOVA to explore the differences between the changes in scores for the intervention and comparison groups for each pair of variables.

### 3. Results

Table 1 shows that, overall, the distance between the perceived importance of the goal and the perceived competence in implementing them decreased. Thus, the coherence increased at the second measurement point among both the intervention and comparison groups. Among the intervention group, the largest improvement in coherence was found for the ‘safe environment’ variable pair, while the smallest difference was found for the ‘help others’ variable pair. In the comparison group, the largest development for coherence was found for the ‘healthy life’ variable pair, while the weakest development for coherence was also found for the ‘help others’ variable pair.

Table 1. Mean values, standard deviations, F values, p values and effect sizes of the variable pairs in the intervention and comparison groups

Pair of Variable	<i>M(SD)</i>						<i>F(1,212)<sup>a</sup></i>	<i>p<sup>a</sup></i>	<i>d<sup>a</sup></i>
	Intervention group		Comparison group		Intervention group	Comparison group			
	Pre-test	Post-test	Pre-test	Post-test	Value change	Value change			
Safe Environment	1.64 (0.79)	1.12 (0.74)	1.36 (0.86)	1.18 (0.82)	0.52 (0.79)	0.18 (0.60)	9.1	0.003**	0.48
Promoting SEL	1.69 (0.69)	1.29 (0.69)	1.36 (0.74)	1.18 (0.74)	0.40 (0.63)	0.18 (0.55)	5.84	0.016*	0.38
Healthy Life	1.45 (0.97)	1.27 (0.85)	1.36 (0.87)	1.10 (0.83)	0.19 (0.88)	0.26 (0.66)	0.29	0.590	-0.09
Help Others	1.40 (0.96)	1.23 (0.92)	1.29 (1.10)	1.12 (0.88)	0.17 (1.03)	0.16 (0.80)	0.01	0.974	0.01

Note: <sup>a</sup> Calculated from the Value changes

Figure 1 shows that the change in coherence among the intervention group was larger for all pairs of variables except for ‘healthy life’. For the ‘safe environment’ and ‘promoting SEL’ variable pairs, the change was significantly larger among the intervention group (Table 1).

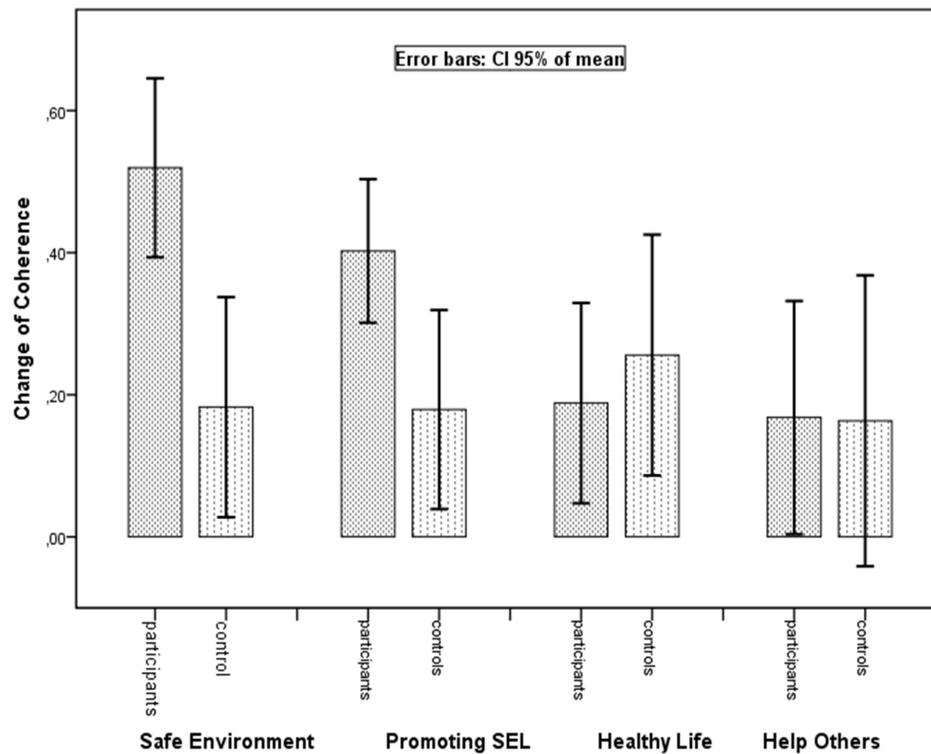


Fig 1. Change in coherence for pairs of variables in the intervention group and the comparison group

#### 4. Discussion

The coherence between the perceived importance of the course goal and competence in implementing it increased for every pair of variables among both intervention and comparison group participants. However, the difference in the increase for the coherence between those who participated in the LQ teacher workshop and the comparison group was significant for the 'safe environment' and 'promoting SEL' variable pairs, while we found no significant difference for the change in coherence between the intervention and comparison groups for the 'healthy life' and 'help others' variable pairs.

We found it interesting that the coherence increased among the comparison group as well. This finding revealed that simply completing a questionnaire serves as an intervention affecting participants. The teachers in the comparison group probably began to reflect upon the perceived importance they attached to course goals as well as any competence they experienced in implementing them. During the post-test, they rated the importance of the course goals and their competence in implementing them similarly.

The LQ intervention resulted in a significantly increased coherence in the 'safe environment' and 'promoting SEL' variable pairs among training participants compared with the comparison group. Participating in the LQ training did not, however, increase the coherence significantly with regards to the 'help others' or 'healthy life' variable pairs compared with the comparison group. It is possible that the LQ teaching workshop does not systematically support teachers' comprehensive development in mastering those goals. More research is needed to investigate whether the 'help others' and 'healthy life' module contents remain a bit unclear, do not stress the importance of the goals sufficiently or that teachers simply do not feel competent in implementing these goals in practice.

This piece of research highlights an interesting means of investigating the effectiveness of teacher training. If teachers view the goals of training as important, but do not feel sufficiently competent in implementing the goals in practise after the training, the course is useless, at least from the teaching point of view. In addition, if teachers feel competent in skills related to the course goal, but they do not value the goal itself, they will not spend time on teaching that specific content. It is, thus, important that the course simultaneously increases both the teachers' perceived importance of the course goals and their sense of competency in implementing what was learned. In particular, when a teacher provides instruction on social interaction skills, the perceived importance of the goals and their competence in implementing them must be coherent, since teachers are role models constantly observed by their pupils. As Seidel et al. (2005) state, an increase in coherence will increase the teachers' experiences of agency and participatory SEL. As a result, teachers will begin carrying out the goals of the SEL course as part of their life, and not simply transmit their knowledge to pupils without assimilating it.

However, as stated by others, this method alone does not explain the reasons for coherence or incoherence. Therefore, future studies should qualitatively investigate how teachers perceive an increase in the coherence related to the importance of and their competence in implementing goals and content of the LQ teaching workshop. Teachers' descriptions might provide an interesting view on the SEL process, which may be used to develop teachers' continuous training related to their social interaction skills.

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## References

- Aspegren, K. (1999). BEME guide no.2: Teaching and learning communication skills in medicine--a review.. *Medical Teacher*, 21(6), 563-570.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science (Wiley-Blackwell)*, 1(2), 164-180.  
doi:10.1111/j.1745-6916.2006.00011.x
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J: Prentice-Hall.
- Barton-Arwood, S., Morrow, L., Lane, K., & Jolivet, K. (2005). Project IMPROVE: Improving teachers' ability to address students' social needs. *Education and Treatment of Children*, 28(4), 430-443.
- Berkowitz, M. W., Battistich, V. A., & Bier, M. C. (2008). What works in character education: What is known and what needs to be known. *Handbook of moral and character education*, 414-431.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *How people learn: Brain, mind, experience, and school*. National Academy Press.
- Bruner, J. S. (1996). *The culture of education*. Harvard University Press.
- Collaborative for academic, social and emotional learning. (2014). Implementation » overview. Retrieved from <http://www.casel.org/implement/index.php>
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=6262852&site=ehost-live&scope=site>
- Eisen, M., Zellman, G. L., & Murray, D. M. (2003). Evaluating the Lions-Quest "Skills for Adolescence" drug education program: Second-year behavior outcomes. *Addictive behaviors*, 28(5), 883-897.
- Humphrey, N. (2013). *Social and emotional learning: A critical appraisal*. SAGE Publications Limited.
- Humphrey, N. (2013). *Social and emotional learning: A critical appraisal*. London: SAGE Publications Limited.  
<http://dx.doi.org/10.4135/9781446288603>
- Illeris, K. (Ed.). (2009). *Contemporary theories of learning: learning theorists... in their own words*. Routledge.
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*, 28(4), 374.
- Kidron, Y., Garibaldi, M., & Osher, D. (2014). Enhancing Elementary, Middle, and High School Students' Social and Emotional Learning: Year 2 Report of the Evaluation of Lions Quest in Wood County, WV. Washington, D.C.: American Institutes for Research..
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (Third ed.). San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Lintunen, T. (2006). Social and emotional learning in the school physical education context. In F. Boen, B. De Cuyper & J. Opdenacker (Eds.), *Current research topics in exercise and sport psychology in europe* (1.th ed., pp. 25-33). Leuven: Lannoo Campus.
- Lions Quest. (2015). Retrieved from <http://www.lions-quest.org/>
- Lonka, K. (1997). *Explorations of constructive processes in student learning*. Helsinki: Helsinki University Press.

- Matschek-Jauk, M., & Reicher, H. (2014). The role of life-skill-programs for school engagement: Results of an Austrian pilot-study implementing Lions Quest. In F. Veiga (Ed.), *Students' engagement in school: International perspectives of psychology and education* (pp. 783-794). Lisbon: Instituto de Educação da Universidade de Lisboa. Retrieved from [http://cieae.ie.ul.pt/2013/wp-content/uploads/2012/11/E-Book\\_ICIEAE.pdf](http://cieae.ie.ul.pt/2013/wp-content/uploads/2012/11/E-Book_ICIEAE.pdf)
- Seidel, T., Rimmel, R., & Prenzel, M. (2005). Clarity and coherence of lesson goals as a scaffold for student learning. *Learning and Instruction*, 15(6), 539-556.
- Talvio, M., Lonka, K., Komulainen, E., Kuusela, M., & Lintunen, T. (2013). Revisiting Gordon's teacher effectiveness training: An intervention study on teachers' social and emotional learning. *Electronic Journal of Research in Educational Psychology*, 11(3), 693-716.
- Talvio, M., Berg, M., Ketonen, E., Komulainen, E., & Lonka, K. (2015). Progress in teachers' readiness to promote positive youth development among students during the Lions Quest teaching workshop. *Journal of Education and Training Studies*, 3(6), 1-13.
- Talvio, M., Lonka, K., Komulainen, E., Kuusela, M., & Lintunen, T. (2015). The development of teachers' responses to challenging situations during interaction training. *Teacher Development*, 19(1), 97-115. doi:10.1080/13664530.2014.979298
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-Value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68-81. doi:<http://dx.doi.org.libproxy.helsinki.fi/10.1006/ceps.1999.1015>