Evaluating the implementation of the Empowering Coaching™ program in Norway

Margaret L. Søvik



Thesis for the degree of philosophiae doctor (PhD) at the University of Bergen

2017

Date of defence: April 7th

© Copyright Margaret L. Søvik

The material in this publication is protected by copyright law.

Year:	2017
Title:	Evaluating the implementation of the Empowering Coaching [™] program in Norway
Author:	Margaret L. Søvik
Print:	AiT Bjerch AS/University of Bergen

Scientific environment

The research presented in this thesis was carried out within the research group SIPA (Social Influence Processes on Adolescent Health), in the Department of Health Promotion and Development (HEMIL), at the Faculty of Psychology, University of Bergen. The study presented here employed data collected as part of an EU-funded project, called 'Promoting Adolescents' health through an intervention aimed at improving the quality of their participation in Physical Activity' (PAPA). PAPA was a collaborative project between England, France, Greece, Norway and Spain, involving eight universities.

The Graduate School of Human Interaction and Growth (GHIG), at the Faculty of Psychology, University of Bergen, provided the doctoral training.

Professor Torill Larsen, from HEMIL, was my main supervisor. Hege Eikeland Tjomsland, Associate Professor at Hedmark University of Applied Sciences, and Professor Oddrun Samdal, also from HEMIL, were my co-supervisors.

Acknowledgments

There are so many people who have contributed to this thesis and made my time as a PhD candidate inspiring and fun. I sincerely appreciate all their contributions and support, and therefore my gratitude goes to:

- My main supervisor, Professor Torill Larsen, for believing in me and encouraging me to get involved in this project. I am so impressed by your knowledge of implementation research, methods and health promotion, and grateful for your insightful and valuable input. Thank you for inspiring discussions, sharing your knowledge, always responding quickly, and for being supportive and positive, as well as motivating me. It has been great working with you in so many ways!

- My co-supervisor, Associate Professor Hege Eikeland Tjomsland, for inspiring discussions, as well as offering valuable and clear feedback, which have contributed to improvements in my work, and for always being so positive and motivating me.

- My other co-supervisor, Professor Oddrun Samdal, for valuable discussions and input in relation to the thesis and the papers, and for sometimes bringing other perspectives into the papers. You have also encouraged me to do my best. I am amazed by your knowledge and work capacity!

- Professor Bente Wold, head of the SIPA research group, for your valuable input on my thesis and the last paper. Being part of SIPA, as well as GHIG, has contributed to interesting discussions and knowledge on several topics and aspects relevant to both my teaching duties and my research. Additionally, the social happenings have been great.

- Aurélie van Hoye, co-author of my second paper, for clear and concise suggestions and for always providing feedback so quickly. It was a pleasure working with you. - The PAPA Consortium (Prof. Isabel Balaguer, Prof. Jaume Cruz, Prof. Joan L. Duda, Prof. Yngvar Ommundsen, Prof. Athanasios G. Papaioannou, Prof. Philippe Sarrazin, and Prof. Bente Wold), along with Prof. Lars Tore Ronglan (NIH) for his contributions to the training of the Norwegian coach educators, and the Norwegian Football Association (NFF). In addition, I would like to acknowledge the Norwegian coach educators and grassroots coaches for attending the PAPA project, and the European Commission's Seventh Framework Programme FP7/2007-2013 under the grant number 223600.

- Lise Augustson and Jørn Hetland for helping me figure out some basic statistics and take 'control' of the data set.

- The Faculty of Psychology, University of Bergen, and HEMIL for giving me this opportunity. The work environment at HEMIL has been so supportive and stimulating. Special thanks to my colleagues Helga, Anne-Siri, Marte, Elisabeth Å., Annegreet, Ellen S., Frida and Olin. It has been great getting to know you! I will miss you all and your smiles, as well as our small talks in the kitchen area, during coffee breaks and lunches, along with the academic and private discussions and updates. I hope to stay in touch with you!

- The 'Kappe-group', in particular, Helga, Rouven, and Anne-Siri. I really appreciate being included in the group. You helped me to get started and complete my thesis, as I got 'pushed' by our deadlines, through your encouragement, input and support. Our meetings were also great social happenings.

- The guys who included me in 'Tuesday soccer', namely, Jørn, Mads, Sigurd, Tony, Samuel, Rune, Ådne, Olav and the rest of you who joined over the years. You cheered me up, made me laugh and made my challenges go away for an hour! It was so much fun and I wish I could have kept on playing with you guys.

- My dear friends who have not given up on me, even though my social life suffered the last year. Special thanks to: Linda for always being able to meet me for coffee or

dinner when I had the time, for great talks and for sharing ups and downs; Anne B. for taking me hiking and trying to arrange 'play-dates' with our kids; Monica N. for being so positive and supportive and taking such good care of Mads when our afternoon logistics did not work; my friends in Haugesund – Elisabeth, Kathrine, Diana, Ingun, Anne and Birgitte – for always inviting me and my family to social happenings, surprising me with great family lunches and believing in me.

- My parents-in-law, Norma and Per, for always being supportive and positive, as well as helping with the kids. I really appreciate having you nearby.

- My parents, Inger and Martin, for always having encouraged me to do the things I really wanted to and given me the possibilities to develop in several ways. You are always positive about helping with the kids as well, which I deeply appreciate.

- Last, but not least, I want to thank my family. Rune, you have always let me follow my dreams and been positive about my desires for developing. You never see problems, only opportunities, and encourage me to do so, too. You are great at surprising me, by arranging babysitters and taking me out when I really need a break. Thank you for being so supportive and patient, believing in me and taking such good care of our boys, Mads and Tobias. You all constantly remind me of the important things in life, cheer me up and make me happy. You are simply the best! To Mads and Tobias: I promise you that I will have more time with you, be more patient, and that I will be part of our future holidays!

Abstract

Leisure sport is considered an important health promoting arena, where coaches play a crucial role, as they can help foster athletes' motivation for long-term sports participation and reduce dropout. Youth sports coaches are often voluntary parents with little coaching experience. Therefore, previous research has emphasized the need for coach education programs, which help develop coaches' sports-related skills and knowledge on how to enhance players' motivation for sustained sports participation. However, there are inconsistent findings as to whether coaches use the knowledge acquired from coach education programs. Thus, a need for studying the pedagogical approach employed in these programs has been considered necessary, in addition to gaining an understanding of how a program is implemented by educators and responded to by the attending coaches. Therefore, the current thesis aimed to explore the implementation of the Empowering Coaching[™] program in Norway, which was delivered to grassroots coaches (GCs) in youth soccer as a one-day workshop by trained coach educators (CEs). The program was developed within the PAPA project and builds on two theories of motivation; namely, self-determination and achievement goals. It aims to develop GCs' knowledge of and competence in enhancing players' motivation for sustained sport participation through creating motivational climates. Such climates rely on GCs being autonomy and relatednesssupportive, as well as task-focused, thereby emphasizing development rather than results.

The thesis comprises three papers, which try to capture program implementation on two levels: CEs' program delivery to GCs, and GCs' reported use of the program.

Paper I applied qualitative and quantitative data to explore the CEs' program implementation, which in turn are aligned with a convergent parallel mixed methods design. The aim was to appraise the extent to which the CEs implemented the program with fidelity and to gain knowledge on what adaptations were made. The findings revealed that the program was delivered with moderate to high fidelity and that many positive adaptations were made, which mostly aligned with the program's aims and theoretical foundation. The GCs were found to appreciate the program.

Paper II applied a convergent parallel mixed methods design, including qualitative and quantitative data to explore both the CEs' quality of delivery and the GCs' responsiveness to the program in depth. Through observational methods, the CEs were found to demonstrate high-quality delivery, employing an empowering delivery style (i.e., modeling program principles) as well as, facilitating active engagement among the GCs. The GCs' responsiveness was positive, indicated in terms of reporting to be highly satisfied with the CEs' delivery quality and actively participating in the workshop.

Paper III also employed a convergent parallel mixed methods approach, by applying self-reported questionnaire data to explore the GCs' perceptions and use of the program six months after the workshop, while interviews were conducted in order to gain knowledge on perceived implementation barriers. The findings showed that, although the GCs had a positive perception of the program and found it easy to apply, only a few GCs often or always used program principles in their coaching practices. This seemed to relate to barriers perceived in terms of both individual and contextual factors that seemed to influence their use of the program, such as: lack of time, collaboration challenges with co-coaches, as well as lack of support from co-coaches and club leadership. Additionally, a need for follow-up sessions with CEs was reported.

The findings from this thesis show that, although the Empowering Coaching[™] program was well implemented by the CEs and met with positive responsiveness by the GCs, the GCs found it challenging to use the program principles in practice due to several barriers. The barriers were mainly related to contextual aspects, such as lack of support from co-coaches and club officials, and facilitation strategies in terms of follow-up by program providers. This indicates that program implementation ought to

be explored through several levels of participants and within an ecological perspective in order to gain a more complete picture of how a program is implemented, as well as knowledge on how to enhance future program implementation. Furthermore, a one-day workshop does not seem comprehensive enough to change the GCs' coaching behavior.

List of publications

The thesis is based on the following three papers:

- Paper I: Søvik ML, Larsen T, Tjomsland HE, Samdal O. (2016). Evaluating the implementation of the Empowering Coaching[™] programme: balancing fidelity and adaptation. *Health Education*, 116(3), 238-258. doi: 10.1108/HE-07-2014-0077.
 Paper II: Søvik ML, van Hoye A, Larsen T, Tjomsland HE, Samdal O. Implementation research: a mixed-method study exploring delivery quality of and participant responsiveness to the Empowering Coaching[™] workshop. To be resubmitted to *Research for All*.
- Paper III: Søvik ML, Larsen T, Tjomsland HE, Samdal O, Wold B (in press). Barriers in implementing coach education in grassroots youth football: a convergent parallel mixed methods study. *International Sport Coaching Journal*.

"The published paper is reprinted with permission from Emerald. All rights reserved."

Contents

SC	CIENTIFIC	ENVIRONMENT	I
A	CKNOWLE	DGMENTS	II
Al	BSTRACT		V
LI	ST OF PUB	LICATIONS	VIII
C	ONTENTS		IX
1.	INTROI	DUCTION	1
	1.1 BACK	GROUND	1
	1.2 Defin	NING CONCEPTS	2
	1.3 Why	STUDY PROGRAM IMPLEMENTATION?	2
	1.3.1	Why study implementation in coach education?	3
	1.4 Desc	RIPTION OF THE EMPOWERING COACHING TM PROGRAM	4
	1.4.1	Purpose	
	1.4.2	Content	
	1.4.3	Coach educator training	7
	1.4.4	Program delivery	7
2.	THEOR	ETICAL FRAMEWORK	9
	2.1 WHAT	T IS IMPLEMENTATION?	9
	2.2 FACT	ORS AND DIMENSIONS RELATED TO PROGRAM IMPLEMENTATION	11
	2.2.1	Organizational level	
	2.2.2	Individual level	
	2.2.3	Program characteristics	
	2.3 CONC	CEPTUAL FRAMEWORK FOR PROGRAM IMPLEMENTATION	19
	2.4 SUMN	MARY AND RESEARCH OBJECTIVES	
3.	MATER	RIALS AND METHODS	24
	3.1 CASE	STUDY DESIGN	24
	3.1.1	Mixed methods	
	3.2 STUD	Y CONTEXT	

	3.3	STUD	Y PARTICIPANTS AND SAMPLING PROCEDURES	27
	3.	3.1	Sampling of coach educators	27
	3.	3.2	Sampling of soccer clubs, teams and grassroots coaches	28
	3.	3.3	Ethics	31
	3.4	DATA	COLLECTION	31
	3.	4.1	Quantitative data and measures	32
	3.	4.2	Qualitative data	36
	3.5	Data	ANALYSIS	39
	3.	5.1	Analysis of quantitative data	39
	3.	5.2	Analysis of qualitative data	41
4.	F	INDIN	GS	44
	4.1	PAPE	R I	44
	4.2	PAPEI	R II	45
	4.3	PAPEI	R III	46
	4.4	Merc	JED FINDINGS	47
5.	D	ISCUS	SSION	48
	5.1	DISCU	JSSION OF MAIN FINDINGS	48
	5.	1.1	From theory to practice: the challenges of implementing a program in a coach educator setting	48
	5.	1.2	The complexity of implementing a program at two levels in a sports club setting	57
	5.2	Мет⊦	IODOLOGICAL CONSIDERATIONS	62
5.2.1		2.1	Strengths and limitations	63
	5.	2.2	Reflections on the study's internal validity	68
6.	IN	APLIC	CATIONS AND CONCLUSIONS	72
	6.1	Impli	CATIONS FOR PRACTICE	72
	6.2	Impli	CATIONS FOR FUTURE RESEARCH	73
	6.3	CONC	CLUSION	74
7.	R	EFERI	ENCES	77
PA	APER	S 1-3		
A	PPEN	DICES	5	

1. Introduction

1.1 Background

The leisure sport setting has been emphasized as an important health promoting arena, as a large number of youth voluntarily engages in sports, which may lead them to enjoy positive health effects [1]. However, it is well known that youth often drop out of sports during adolescents [2-5] and that preventing dropout and increasing youth's level of sustained physical activity can be challenging [6]. In this regard, youth sports coaches have been considered to play a vital role [7, 8], given that they, as significant others, can act as role models for athletes, as well as foster players' motivation in terms of long-term sports participation [9], provided that the players have fun and enjoy the sport in which they participate [10]. Thus, competent coaches may create supportive team climates, which enhance the athletes' learning [11, 12] and positive experiences of sports [6, 8, 9, 13, 14]. Therefore, coaches may be perceived as important implementation agents within the field of health promotion [13, 15, 16]. As most youth coaches are volunteers, and often parents, with no formal training, competence or experience as coaches, coach education is a critical target for coach development [14, 17, 18]. Thus, the implementation of coach education programs is important to study in order to assess coach learning and program impact [19, 20]. Furthermore, to gain knowledge on how to contribute to enhanced competence among youth sports coaches, there is also a need to explore how coaches perceive the content and delivery of coach education programs [14, 19, 21].

Therefore, the overall aim of the current thesis is to add new knowledge to the research on implementation from the field of leisure sports and coach education. The current thesis comprises an evaluation of the implementation of a community-based coach education program, which was implemented in Norway, as part of a collaborative project in five European countries. The program is understood to be a prevention and health promotion intervention, such that implementation will, in the

current thesis, be described based on previous research on the implementation of prevention and health-promotion interventions.

1.2 Defining concepts

Within the field of implementation research, there is an inconsistent use of terms for some of the concepts applied [e.g., 22, 23-27]. In line with the terms applied by Durlak and DuPre [25] and Berkel and colleagues [22], the current thesis will apply the terms *implementation* when referring to the processes related to program delivery, and *fidelity* when referring to how the program was implemented in comparison with the intended program delivery. A broader description of the terms will be provided in chapter 2.

1.3 Why study program implementation?

As implementation of programs in real-world settings implies complex processes, which are often conducted by, and as an interaction between, several levels of participants [22], implementation seldom develops as intended [25, 28, 29]. Therefore, there is a need to study this process in order to understand whether a program was implemented as intended or not [24, 25, 28, 30-34]. Implementation, which is completely in accordance with program protocols (i.e., 100% fidelity), is not expected, as some modifications occur [25, 35]. Further, the necessary level of implementation fidelity in order to achieve the intended program effects has not yet been revealed, while there is an ongoing debate on what constitutes and how to measure the core elements of a program [25].

Knowledge of what has been implemented and the quality of delivery, as well as what aspects of a program were left out during implementation, may contribute to an understanding of a program's effectiveness or lack thereof [25, 30, 31]. Thus, studying program implementation can provide information on how and why a program works in a real-life context and, in turn, an understanding of the program outcomes [25, 36-40]. Therefore, studying program implementation may help avoid conducting a Type III error, which mistakenly implies that the program did not obtain the expected effect, when in reality this was due to poor implementation, rather than the quality of the program itself [25, 31]. Monitoring implementation may contribute to future improvements of programs, which are necessary to increase the likelihood of reaching intended outcomes [25, 28, 30, 33, 41]. Furthermore, monitoring and feedback on implementation efforts may also lead to better replications and sustainability of a program [29, 42].

Dane and Schneider [24] also emphasize that implementation may be challenged by contextual factors, such as training and barriers. Studying the quality of training of the participants who are expected to use the program can contribute to an understanding of why a program achieves different outcomes when implemented in different contexts [30, 37]. Furthermore, due to the potential influence of the contexts (e.g., organizational capacity, support and resources) on program implementation, studying barriers for implementation in natural settings has been recommended [32, 43]. Successful implementation of evidence-based programs relies on a supportive context, competent and skilled providers (e.g., CEs), and receptive participants (i.e., the ones who receive training and are supposed to apply a program in practice) [44]. To capture the complex process of implementation knowledge on how to document implementation, is important, in terms of both when and which data to collect, as well as who can provide the relevant data [44, 45].

1.3.1 Why study implementation in coach education?

Previous research suggests that the effects of a coach education program on players' motivation, perceptions of climate and continued participation in sports are mediated through changes in the coaches' behavior [9]. However, there are inconsistent findings regarding the coaches' use of program content after attending coach education [19]. Some suggests that coaches who have attended coach education programs apply more positive behaviors than those who have not [14]. Others suggest

that knowledge from coach education programs is not applied in practice because the knowledge has not been internalized [46, 47], especially on short-term education programs [14, 18, 19] or because programs are not implemented as intended [20]. Therefore, recent research has emphasized the importance of looking into the pedagogical approach applied when implementing coach education programs, together with the educators' skills and qualities [21, 48, 49]: all factors that may influence effective quality implementation. Up to now, there has been a focus on the participants' (e.g., coaches') fidelity (delivery or use of a program) in their practical contexts. However, few studies have assessed the educators' fidelity of implementation and whether programs and delivery methods applied were valued by the attending coaches [14, 19]. These are all important aspects that may lead to increased understanding of how the implementation of coach education programs can be improved.

1.4 Description of the Empowering Coaching[™] program

To understand the relevance of the theoretical perspectives of implementation and how the implementation of the Empowering Coaching[™] program has been assessed, an elaboration of the program is required.

The Empowering Coaching[™] program was developed within the EU-funded PAPA project in 2009/10 [50]. Researchers from the University of Birmingham, UK, developed the program, which was then translated and culturally adapted by researchers to be delivered to youth soccer coaches in France, Greece, Norway and Spain, in addition to England, in 2011. The PAPA project, which lasted from 2011 to 2014, entailed two phases: a) training of CEs by a PAPA team (i.e., in Norway, researchers from the Norwegian School of Sport Sciences) and b) training of GCs by CEs.

1.4.1 Purpose

The Empowering Coaching[™] program was developed [51] as a response to the increased levels of inactivity and being overweight among European youth [1], as well as research suggesting that GCs can be important health promotion agents [13, 15, 16]. The program aims to enhance GCs' competence with regard to creating a motivational (i.e., enjoyable, engaging and supportive) team climate within youth soccer in order to enhance the players' motivation for and likelihood of long-term engagement in sport [51]. It aims to teach GCs specific strategies to apply in their coaching practices, to foster a more empowering and less disempowering coaching behavior, after having attended the Empowering Coaching[™] workshop. An empowering behavior implies an autonomy- and relatedness-supportive, as well as task-focused approach to coaching, whereas a disempowering behavior reflects a controlling and ego-focused competence approach [51-53].

1.4.2 Content

The program's theoretical foundation is based on self-determination theory (SDT) and achievement goals theory (AGT) [51]. There is an extensive body of literature supporting the tenets of SDT [e.g., 7, 14, 54-56] and AGT [e.g., 57] in the sports realm, due to their positive impact on the players' intrinsic motivation for sport and their perceived well-being, through the satisfaction of their basic needs of autonomy, relatedness and competence.

The theoretical foundation and the program principles are presented in the first part of the workshop. From AGT [58], the Empowering Coaching[™] program particularly draws on the distinction between task involvement and ego involvement related to the development of competence. Task-involving goals, which refer to an emphasis on positive development through learning and mastering tasks, are based on one's perceptions of effort (i.e., doing one's best) and self-referenced development. On the contrary, ego-involving goals, which refer to one's attempts of demonstrating skills

by outperforming others (i.e., being superior with minimal effort), are appraised in reference to others' performances. Hence, one's perception of competence is related to a distinction between mastery and performance [59], which implies that one's approach to competence influences how we think, feel and act while engaged in activities. Furthermore, within sports, the environment is considered to influence athletes' perception of their own competence, through significant others' (e.g., coaches) attitudes and behaviors. For instance, a task-involving climate seems to positively influence athletes' enjoyment and satisfaction with sports, whereas an ego-involving climate may produce greater anxiety among the players and increase the number of athletes who drop out of their sport [60].

SDT [61] emphasizes the importance of satisfying an individual's needs for autonomy, relatedness and competence in order to achieve intrinsic or quality motivation, as intrinsic motivation seems to positively influence one's learning, performance and well-being. Autonomous engagement, feeling competent and having a socially supportive and empowering environment are important in order to be intrinsically motivated. The satisfaction of these needs can, however, be positively or negatively influenced by significant others, in that they may be controlling in terms of providing feedback that results in a feeling of incompetence and, hence, is not perceived as supportive. The thwarting of needs may decrease an individual's intrinsic motivation and, in turn, the enjoyment and interest in an activity. This may be of great importance in grassroots sports, as GCs' behavior may influence athletes' intrinsic motivation towards sustained sports participation.

The main focus of the program is on intrinsic versus extrinsic motivation, the ABC principles comprising Autonomy support (e.g., the players are 'given a voice and a choice'), Belonging or relatedness support (e.g., all players feel respected and part of the team), and task- versus ego-oriented Competence (e.g., doing their best, not being the best). The rest of the workshop concerns how the GCs can develop a motivational climate through the application of seven strategies, which seek to enhance the

players' intrinsic motivation, as well as their satisfaction regarding the basic psychological needs of autonomy, relatedness and competence. CLIMATE is an acronym for the seven strategies, which draw on aspects of both SDT and AGT, and focus on: Cooperative contribution, Learning emphasized, Intrinsic focus, Mastering the task, Authority with autonomy, Taking perspective, and Evaluation [51].

1.4.3 Coach educator training

Trying to ensure a consistent workshop delivery (i.e., content and delivery style) in the main trial, PAPA researchers from the Norwegian School of Sport Sciences provided the CEs with 34 hours of pre-implementation training. This comprised an introduction to the theoretical background of the Empowering Coaching[™] program, CEs observing the PAPA researchers when delivering a 'training' workshop to pilot GCs, as well as CEs themselves delivering two training workshops to other pilot GCs. Furthermore, after having delivered their training workshops the CEs' received individual tutoring from the PAPA researchers. Figure 1 illustrates the process of program implementation.



Figure 1. Overview of program delivery, including pre-implementation training.

1.4.4 Program delivery

The CEs were expected to deliver two one-day workshops each before the 2011 soccer season started. The workshop is considered a non-formal coach education approach, due to the time format and the fact that it does not result in a certification [19, 62]. In total, 17 workshops were implemented, as one CE delivered three workshops, while another delivered four. The 'pre-packaged' workshop was delivered using a delivery protocol, a PowerPoint slideshow and a workbook. Individual and group tasks, in addition to video clips illustrating empowering and

disempowering coaching behaviors, were applied. The group tasks comprised discussions on relevant program topics and a game based on the ABC principles, which addressed Autonomy support, Belongingness (i.e., relatedness support) and Competence, through GCs discussing if exemplified coaching behaviors were perceived to be empowering or disempowering. The individual tasks comprised writing down notes concerning one's own (i.e., GCs') coaching philosophy, as well as specific plans for how to apply program principles in the next training session and match.

The delivery protocol was developed and applied in order to ensure that the workshops were delivered as intended by the program developers. This implies that the CEs were expected to apply the program principles when conveying the workshop, meaning that they should demonstrate an empowering behavior. Furthermore, an interactive program delivery was emphasized, where the CEs were expected to encourage the GCs to provide their own examples, experiences and reflections concerning their coaching behavior and attitudes regarding the program principles and strategies [51]. Eight e-learning modules were released close to the end of the soccer season in Norway, due to translational procedures taking time, instead of at the beginning of the season.

2. Theoretical framework

Implementation is a complex process, which often includes several levels, dimensions and participants [23, 28, 45]. Adding to the complexity, there are several definitions relating to implementation, including how and what to measure in order to capture this process [e.g., 22, 24, 25, 28, 32, 41, 63]. To break down the complexity, this section will address what is meant by implementation, as well as how and what to study in implementation research, followed by an outline of different dimensions and factors related to the implementation process, including organizational factors, individual factors and program characteristics. This section ends with a presentation of a model based on Hasson [26], which shows the relationships between organizing factors, individual factors and program characteristics.

2.1 What is implementation?

During previous decades, implementation research was emphasized as an important aspect of effectiveness studies [25, 28, 30, 32, 41, 64], while several, somewhat inconsistent, terms and definitions have been suggested to describe implementation [e.g., 22, 24, 25, 28, 32, 63]. In general, implementation concerns the way in which a program is delivered (i.e., what it consists of when it is implemented), compared to how the program was designed to be delivered [22, 25, 31, 41]. This implies that the program content or components, the activities delivered and the methods applied need to be evaluated [31, 41, 44].

Dusenbury and colleagues [64] claim that no clear or unique definition exists for the multidimensional concept of implementation and encourage future studies to clearly define the terms applied, as well as be specific with regard to which dimensions are being studied. Implementation dimensions are also referred to as the 'black box' of implementation [26, 44]; Durlak and DuPre's [25] conceptualization of implementation comprises the following eight dimensions: fidelity (i.e., the extent to

which program components were delivered as intended), dosage (i.e., the amount of program delivered), the quality of delivery (i.e., how well a program was delivered), participant responsiveness (i.e., satisfaction and engagement among participants), program differentiation (i.e., the uniqueness of the program compared to similar programs), the monitoring of control or comparison groups, the program reach (i.e., rates and representativeness of participants), and adaptations (i.e., changes and modifications to the program).

Previous research has not reached any consensus about which, and how many, dimensions are necessary to measure when studying the implementation of prevention and health promotion programs [25, 28]. Most studies seem to measure only one of the dimensions [22, 23], usually fidelity or dosage [25, 64, 65]. However, the general recommendations found in the literature on implementation underlines the importance of studying several dimensions in order to gain comprehensive knowledge of how a program is implemented [23, 25, 26, 28, 66]. In line with previous research suggesting relations between fidelity, quality of delivery, adaptations and participant responsiveness [22, 23, 26], these dimensions will be explored in the current thesis concerning CEs' program use will be explored, as context has been considered to influence program implementation [25, 26, 67-70].

Program implementation usually involves several participants who influence how a program is implemented in a real-world setting [22]. These participants can also represent several levels including persons providing training (e.g., researchers), program providers (e.g., CEs) delivering or implementing the program, and participants receiving the program (e.g., GCs) [22, 30]. Thus, ideally and as intended in the current thesis, implementation studies should involve measures of dimensions, which reflect the aspects that relate to several levels of participants.

2.2 Factors and dimensions related to program implementation

According to previous research [25, 32, 33, 71], successful program implementation is influenced by several contextual factors, which impact on an organization's (e.g., soccer club's) capacity to implement and maintain a program in practice. Furthermore, successful implementation implies that a program is implemented with high quality [64]. In a systematic review [25], 23 contextual factors were considered as highly relevant for successful implementation. Some of these factors seem to interact within or across different implementation levels, as well as relate to different dimensions and stages of the implementation process [25, 32, 33, 72]. Hence, successful implementation needs to be considered in terms of an ecological approach [25, 73], including both individual and contextual factors [25, 32, 33, 66, 72]. Therefore, factors that appear to influence implementation will, in the following, be presented in relation to: a) an organizational level, b) an individual level, representing both program providers (e.g., CEs) and the participants receiving the program (e.g., GCs), and c) the characteristics of the program, including strategies to facilitate program implementation.

2.2.1 Organizational level

Context

Factors described as influential at the organizational level of an implementation process [25, 32, 33] seem to overlap with aspects, which are often reported as contextual factors influencing program implementation [26, 38, 68, 70, 74]. Hasson [26] operationalizes context as factors related to levels of politics, finances, organizations, and groups of participants. Such factors are considered to influence program implementation, and hence, outcomes, as programs are always implemented within a given context [25, 26, 67-70].

Previous research suggests that an organization's (e.g., soccer club's) readiness to implement a program, along with the effectiveness with which a program is implemented, is influenced by the organization's politics [25, 32]. This relates to whether or not the program seems to align, for instance, with a soccer club's goals, needs and current practices. The same has been suggested in terms of an organization's culture (i.e., how things are done) [74] and history [75], which may affect why and how a program is implemented. This implies that the social norms and processes within a context, as well as the participants (e.g., CEs, GCs and club officials), will influence program implementation [69, 75]. Thus, if a program is implemented across multiple sites (e.g., different soccer clubs), the context is likely to have had an impact on how the program was implemented, if desired outcomes were achieved [31, 40, 68, 70, 75, 76], as well as how the different participants (e.g., GCs) perceived the program and its delivery [76].

Program adoption should be rooted at the leader level, as adoption often relates to a club's politics and, thus, the effort that will be invested when implementing a program. Adoption may be reflected through strong and supportive leadership, active leadership participation in program training and implementation, and an emphasis on building a positive working climate [25, 32, 33]. These behaviors are indications of an organization's capacity to implement a new program [25, 73], as supportive leadership is suggested to enhance participants' sustained motivation towards engaging in program implementation. In this regard, prioritizing resources, such as time and money, in order to facilitate successful program implementation is important [25, 31-33].

Leadership's willingness to meet and solve occurring challenges during program implementation is crucial. It may also increase staff (e.g., GCs') stability, which seems to result in more effective program implementation than if there is a high staff turnover [32, 33]. Involving the staff who are expected to use a program when making decisions, as well as enhancing a shared vision regarding a program's aims,

has also been considered important in terms of sustained engagement, motivation and staff willingness to change their practice [25, 32, 33, 77]. In addition to supportive leadership, implementation seems to be enhanced by having one or more program champions at the implementation site, preferably rooted at the level of administration [25, 32].

The contextual factors are, in the current thesis, important aspects related to program implementation at the GC level, as different factors may influence the GCs' program use.

2.2.2 Individual level

At the individual level, implementation dimensions related to both providers (i.e., fidelity, adaptations and quality of delivery) and participants (i.e., participant responsiveness) may influence program implementation [22, 23, 26]. The providers are defined as the staff who implement a program [25], such as CEs, whereas participants are the persons receiving a program [22], who, in the current thesis, are the GCs. Provider characteristics that seem to be essential for successful implementation concern the provider's perception of the program [25, 32], which may influence their attitudes towards it and their motivation to fully implement it [32, 33]. The extent to which a program is implemented as intended is further related to the provider's judgments about, and confidence in, having the skills required for implementing the program [25, 32, 33].

Fidelity

Fidelity, often also called adherence [23, 24, 26, 28], to the content delivered is, in the current thesis, referred to as the level at which the core program elements were delivered as planned by the program developers [24, 25, 28, 31] and as outlined in the delivery protocol. To assess fidelity of delivery, a specific understanding about the program is required [45] in order to gain detailed knowledge about which program elements were delivered as intended and which were not, instead of only appraising

the overall fidelity of program delivery [25, 31, 45, 78]. This knowledge may later help identify which program elements are critical in terms of implementing with high fidelity in order to achieve the desired outcomes [25, 28]. Previous reviews of the implementation of prevention and health promotion interventions found that high levels of fidelity seem to positively influence program outcomes [24, 25, 28, 30, 31], whereas low fidelity levels may result in poorer outcomes [24, 28, 31, 33]. As suggested by Hasson [26], this thesis refers to the fidelity of the CEs' program delivery as a measure of coverage (i.e., number of key points delivered), as well as a description of frequency (i.e., whether the program was delivered as often as intended) and duration (i.e., whether the workshop lasted for the intended amount of time), in addition to measuring fidelity to the content of the core elements.

Adaptations

An aspect often related to fidelity is the level of adaptations that occur during program delivery [23, 24, 28, 35, 42, 72]. This is sometimes considered to be a separate dimension of implementation [22, 25]; this is also the case in the current thesis. Adaptations refer to positive or negative additions or modifications of program content, processes or methods related to the implementation of a program [22, 35], which commonly occur to some extent during program implementation [25, 29, 30, 35]. The adaptations most often reported are modifications to program content, procedures or dosage [35, 42], which seem to occur even when a program protocol is employed [35]. In the current thesis, adaptations are explored in terms of content added, skipped or modified by the CEs when delivering the workshop to the GCs, along with whether they are considered to be positive or negative adaptations.

Adaptations that align with a program's underlying theoretical foundation are therefore considered to be positive adaptations. Negative adaptations are considered to be those that do not align with a program's foundation or goals, whereas neutral adaptations neither align nor conflict with the goals and content [35, 45]. In schoolbased implementation research, correlations between high fidelity and positive adaptations, together with low fidelity and negative adaptations, have been suggested. Furthermore, the most experienced teachers are also found to make most positive adaptations [64]. Some researchers consider adaptations, in general, to result in poor program implementation, which lead to low levels of program effectiveness [42]. Others consider adaptations to local settings to enhance the possibilities of achieving high levels of adoption, quality program implementation [25, 28] and high levels of program effectiveness [79]. Thus, there are inconsistencies in the literature regarding the impact of adaptations on program outcomes, such that further research is needed to capture when, where and to what extent adaptations positively influence program outcomes, or otherwise [28, 30, 33, 35].

Quality of delivery

Quality of delivery seems to be defined in several ways [28, 45]; in general, however, it relates to how well a program is delivered [23, 25, 31, 32]. This is an important aspect of implementation, as only replicating program content is not an indication of successful implementation [30]. This implies that quality of delivery concerns other aspects than content delivery, such as the educator's enthusiasm [22, 24], knowledge and understanding of the program theories. The latter may reflect the educator's skills of guidance, responding to and discussing contributions from the participants in compliance with the program's underlying theoretical assumptions and goals [24, 25, 28, 65], which comprise one of the aspects related to CEs' program delivery in the current thesis.

An educator's competence and skills at teaching, as well as employing the intended methods and procedures during program implementation, are considered critical to ensuring quality program delivery [22, 32, 43, 80]. The use of interactive methods and processes has particularly been emphasized, as this may facilitate participant engagement, which has been considered to increase learning and positively influence program outcomes [22, 25, 81, 82]. The facilitation of active engagement may also rely on the educator's abilities to create safe environments where all participants feel

included [80, 83]. Thus, the CEs' facilitation of active engagement and their creation of motivational climates will also be explored in the current thesis. Although studying delivery quality is recommended [64, 82], measuring this dimension is a difficult and time-consuming process, which ought to be studied through observational methods. Therefore, this dimension has rarely been explored [45, 84]. However, a recent study by Pettigrew and colleagues [82] found that the delivery quality of a drug prevention intervention, which was delivered in a school setting, influenced the program outcomes in terms of less substance use when the intervention was well delivered, compared to when it was poorly implemented.

Participant responsiveness

Different aspects have been suggested to reflect participant responsiveness [24, 28, 83, 85]. Recently, the following two have particularly been emphasized: 1) behavioral aspects and 2) subjective aspects [22, 83, 86]. Active participation in the program and its activities [22, 24, 28, 30, 83, 85, 86], program attendance, home practice completion and participants' self-reported use of skills learned on the program have been suggested as reflecting the behavioral dimension of responsiveness [22, 83, 86]. The subjective dimension comprises measures of participants' satisfaction with a program [22, 24, 30] related to whether the program skills were perceived to be useful, as well as how the group environment was perceived when the program was delivered [86].

There seems to be inconsistent findings regarding whether participant responsiveness, and what aspects thereof, influence outcomes [22, 86]. For instance, in their review, Berkel and colleagues [22] refer to several studies that found outcomes to be associated with attendance, home practice completion, active participation and satisfaction with program, whereas Schoenfelder and colleagues [86] found none of these associations. However, previous studies have indicated that research on participant responsiveness is rare [23, 31]. Thus, the current thesis will explore the GCs' responsiveness to the Empowering Coaching[™] program in terms of their active

16

participation in the workshop and their satisfaction with the program, as well as the CEs' delivery quality.

2.2.3 Program characteristics

Complexity

In school-based research, program complexity is suggested to be related to whether or not a program is described in detail, as well as includes well-known methods and materials that are easy to use and perceived to be attractive by the providers [26, 33]. As such, an intervention's complexity (i.e., the comprehensiveness of a program) seems to influence program implementation [23, 28]. That is, less complex programs are more likely to be fully implemented than complex programs, such that simpler programs are usually more easily adopted and result in more successful program outcomes [29]. Therefore, a program's complexity has been considered to influence its flexibility and thus the likelihood of it being implemented with fidelity in real-world settings. This relates to the possibilities of adapting flexible programs to local needs and contexts, suggesting that flexible programs are more attractive for real-world implementation [25].

The program that has been evaluated in the current thesis is a pre-packaged program. The program providers (i.e., CEs) were trained to implement the program according to a detailed delivery protocol, which they were expected to apply when delivering the program. Furthermore, the complexity of this program relates to the implementation process, where the program is delivered at two levels (i.e., CEs and GCs) and expected to produce outcomes at a third level (i.e., players) [51].

Facilitation strategies

Program complexity also influences the need for facilitation strategies [23]. This implies that complex programs may require more supportive approaches to obtain high levels of fidelity and quality than more simple programs do. Hence, facilitation

strategies are suggested to moderate the level of fidelity with which a program is implemented [23, 26]. Several studies refer to the benefits of providing educators with pre-implementation training, detailed delivery manuals or guidelines, ongoing support or supervision, and feedback on their own delivery during program implementation [23, 25, 30-32, 72, 77]. These facilitation strategies may enhance program implementation and use [73], while the provision of educator training and delivery protocols may ensure a consistent program delivery among the educators. Furthermore, it is suggested that effectiveness, fidelity, quality of delivery and sustained use are enhanced through sufficient facilitation strategies [23, 24, 31, 32, 77]. In particular, the combination of training and technical assistance has been considered to enhance implementation quality and learning outcomes [27].

Pre-implementation training, most often conducted in the form of face-to-face workshops [33], is recommended in order to facilitate active forms of learning for program providers so that the skills required for carrying out the program are more effectively developed. Additionally, the provider's motivation, confidence and expectations related to program implementation should be focused on [25]. Training and technical assistance, in terms of different forms of follow-up support (e.g., booster sessions and telephone- or e-mail contact) for educators and participants, may help them deal with challenges and barriers that may occur throughout program implementation, as well as encourage sustained motivation, engagement and commitment [25, 32, 33]. Feedback on program implementation involving low levels of fidelity may also enhance the level of fidelity in future program implementation [23]. The need for facilitation strategies seems to relate to the educators' and participants' experiences, implying that inexperienced educators have greater needs for training, technical assistance and feedback than more experienced ones [64].

In the current thesis, the CEs were supported by pre-implementation training, including practical delivery and tutorial feedback, whereas the GCs received a oneday workshop and a workbook, as well as being expected to follow the e-learning modules that were released towards the end of the season.

2.3 Conceptual framework for program implementation

Recent research [22, 23, 26] has suggested associations between some of the implementation dimensions. Training and facilitation strategies may impact the educators' quality of program delivery, for instance, in terms of a more enthusiastic program delivery. Quality of delivery may further affect the participants' responsiveness to the program, as a program delivered with quality may enhance interest and engagement among the participants, along with their acceptance of or satisfaction with the program [22, 23]. Quality of delivery and participant responsiveness may, in turn, positively influence the fidelity with which a program is implemented [23, 26]. Another relation between these dimensions is suggested by Berkel and colleagues [22], who consider quality of delivery as a mediator between fidelity and program outcomes, and participant responsiveness to mediate the effect of quality of delivery on program outcomes. To illustrate possible relations among different implementation dimensions and program outcomes, some conceptual frameworks and models for program implementation have been suggested [22, 23, 26].

The dimensions described in the previous section of the thesis may be illustrated as a model, aiming to enhance the understanding of the black box of implementation and how to measure relevant implementation dimensions [26]. Figure 2 is inspired by Hasson's [26] modified conceptual framework for implementation fidelity, which builds upon and extends Carrol and colleagues' [23] framework. However, as the implementation of the Empowering Coaching[™] program involves two levels (i.e., CEs and GCs), through which the outcomes at the player level are expected to be mediated, the conceptual framework in Figure 2 has been extended to include the implementation levels of both CEs and GCs. Thus, a 'double-looped' model is

illustrated, based on the dimensions explored in the current thesis. Both Hasson [26] and Carrol and colleagues [23] suggest relations among the implementation dimensions, such that they recommend studying all dimensions included in their frameworks. Ideally, all dimensions should have been explored at both levels, but this was not within the scope of the current thesis, due to the comprehensiveness of such an exploration.

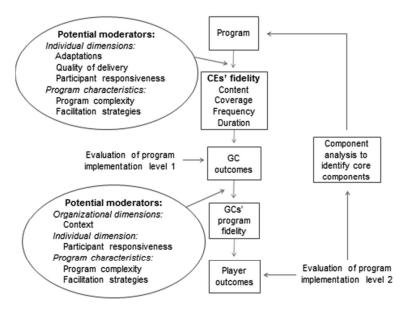


Figure 2. A conceptual framework illustrating the implementation of the Empowering Coaching[™] program at two levels, with possible moderators explored and described (based on Hasson [26]).

In Hasson's [26] framework, the measure of implementation reflects to what extent the program providers deliver the program as intended through studying the fidelity of program delivery (e.g., at both CE and GC level). Furthermore, the following dimensions are suggested as possible moderators, which may interact with each other and, positively or negatively, influence the level of fidelity achieved: participant responsiveness, quality of delivery, intervention complexity, facilitation strategies and context [26]. The model illustrated in Figure 2 also includes a separate dimension of adaptations, based on Durlak and DuPre's [25] and Berkel and colleagues' [22] conceptualization of implementation. Furthermore, in Figure 2, the possible moderators have been divided into organizational dimensions, individual dimensions, and dimensions related to program characteristics.

As illustrated in Figure 2, the relationship between a program and its outcomes (e.g., at both GC and player level) is suggested to be influenced by how the program is implemented, in particular, by the extent to which program providers adhere to the content, activities and processes, which are expected to be implemented. Furthermore, organizational, individual and program characteristic dimensions have been suggested to moderate the fidelity of program delivery [23, 26]. An analysis of which program components are most essential when seeking to achieve the expected outcomes are further emphasized once an assessment of the main outcomes has been conducted [23, 26, 84]. This aligns with an assessment of program differentiation [23-25], which may enhance knowledge on which are the most critical components to implement with fidelity in order to achieve the desired effect [23, 25, 26].

When applied to a study of the implementation of a coach education program, the conceptual framework for implementation can contribute to greater knowledge about the extent to which CEs adhere to the delivery protocol when implementing the program content (i.e., fidelity) and the GCs' program use. Furthermore, participant responsiveness may reflect the participants' (i.e., GCs') active participation in the workshop, as well as their satisfaction with the program content and the program delivery. At level 2, participant responsiveness can reveal knowledge about how co-coaches and parents respond to GCs' use of the program. Quality of delivery measures may reflect the CEs' skills and competence in which they deliver the program, as well as their abilities to facilitate engagement among the participants during program delivery. An appraisal of facilitation strategies may reveal whether training of CEs, prior to program delivery, and their use of delivery protocols, was successful. Additionally, it may provide knowledge about relevant strategies to support the GCs' use of the program in practice. The need for facilitation strategies

can be seen in relation to an evaluation of the program's complexity, which also relates to the use of delivery protocols. In addition, the context's influence on GCs' program implementation can reveal factors, which seem to enhance or inhibit their use of the program. In the current thesis, the GC outcomes refer to what the GCs learned from the workshop. Thus, player outcomes of the Empowering Coaching[™] program are supposed to be mediated through program implementation by both CEs and GCs (i.e., their program use), which, ideally, implies a need for exploring all these implementation dimensions at both the CE level and the GC level.

2.4 Summary and research objectives

To sum up, the importance of studying the implementation of health promotion and prevention programs has been emphasized in order to understand how and why a program works in real life. Since several factors, along with both educators and participants, seem to influence program implementation, several dimensions of implementation need to be studied to obtain a comprehensive picture of how a program is implemented. Therefore, the current thesis aims to add knowledge to the field of implementation research through exploring several dimensions related to the implementation of a coach education program. Furthermore, the thesis aims to examine the feasibility of combining measures, in terms of video recordings, qualitative interviews and questionnaire data, in order to highlight how the Empowering Coaching[™] program unfolds in a practical setting. In addition, the generated knowledge may shed light on how to improve the implementation of the program in order to enhance positive program outcomes in future implementations. The objectives for this thesis were:

- 1) To explore the CEs' adherence to the program protocol and the adaptations made when implementing the program (Paper I).
- 2) To explore CEs' quality of program delivery (Paper II).

- 3) To explore the participant responsiveness in terms of GCs' satisfaction with the program content and program delivery, as well as their active participation in the workshop (Papers I and II).
- 4) To explore GCs' use of the program and perceived implementation barriers when applying the program to their coaching practice (Paper III).

3. Materials and methods

Ideally, multiple or mixed methods may capture different aspects and dimensions relevant for an in-depth study of program implementation [22, 25, 35, 39, 40, 76, 77]. This approach may also capture the providers' and participants' perceptions of program implementation, which further validate data from one source against data from another source [25, 28, 35, 45]. Thus, the current thesis comprises mixed methods in order to explore the implementation of the Empowering Coaching[™] program in the Norwegian arm of the PAPA project in depth.

In the following, the methodological approaches applied in the three studies comprising this thesis will be presented.

3.1 Case study design

Employing a case study design provides the possibility of exploring different aspects of a situation in order to gain a general impression of the situation through triangulating multiple sources of data, such as observations, interviews and questionnaire data, as well as conducting different analyses and triangulating the results reported [87-89]. The triangulation of several data sources, which has been considered to strengthen the quality of the data collected in order to answer the research questions, has been reported as one of the main advantages when employing case studies [89]. In the current thesis, this implies the possibility of assessing the CEs' program delivery from an observational perspective, as well as including measures of the participating GCs' perceptions of the program and the CEs' program delivery. Furthermore, a multiple case study approach also allows for a comparison between the different cases, (i.e., the seven CEs) [87, 89] in order to explore possible differences related to their program delivery.

In the current thesis, a case is defined as one CE (level 1), the GCs they trained (level 2) and who should use the program principles when coaching their players (level 3)

(see Figure 3). The current thesis has, however, only examined research questions related to the implementation process at levels 1 and 2, while the in-depth interviews at level 2 were only conducted for three out of the seven cases (i.e., 12 of the GCs). Sampling more than one case provided the opportunity to both vertically and horizontally compare and contrast the implementation process across and within levels [89].

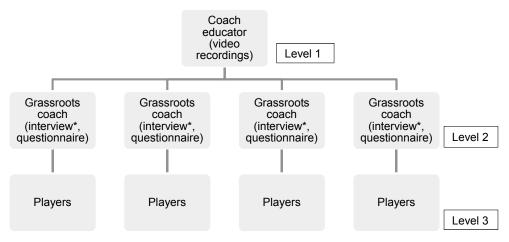


Figure 3. Case study design, illustrating levels and data sources applied at level 1 and 2 in the current thesis. *Interviews conducted with the GCs included in three cases (3x4 GCs=12 GCs).

3.1.1 Mixed methods

According to Creswell [87], the methods applied when conducting research are guided by the study's research questions. To gain in-depth knowledge on different aspects of program implementation, mixed methods were applied in the current thesis, as previous research has considered this approach to be sufficient in order to understand how a program is implemented in a real-world setting [90-92], as well as gain knowledge on coaches' perceptions of a program's content and delivery [93]. As suggested by Johnson and colleagues [91], this approach may provide knowledge that elaborates, illustrates and indicates convergence or contradictions to a greater extent than if applying only one method for studying each dimension.

Combining qualitative and quantitative data implies a reliance on different paradigms and, hence, different ontologies (the nature of reality), epistemologies (how reality is known) and methodologies [87, 94, 95]. Thus, a pragmatic approach [91, 95] was considered appropriate to the current thesis, as it allows for the collection of data from several sources based on what works to solve a problem [95]. By employing different methods or tools, as well as conducting different kinds of data analyses, mixed methods research can capture both contextual in-depth qualitative data (e.g., interaction data) and quantitative data illustrating a phenomenon through numbers, which represent a larger sample [94, 95].

The manner in which mixed methods are applied in the papers included in the current thesis aligns with a convergent parallel mixed methods design [95]. The qualitative and quantitative data were collected at the same time in order to highlight several aspects of a topic. The two different data approaches were given approximately the same weight, in that they were equally important in answering the research questions. Furthermore, the qualitative and quantitative data were analyzed separately, then merged in the discussion and interpretation of the findings. In Papers I and II video recordings were analyzed both qualitatively and quantitatively, while the questionnaire data were collected at the same time as the observational data. In Paper III, the interviews were conducted shortly after the collection of questionnaire data, but before the questionnaire data were analyzed. Thus, the manner in which the data were collected and analyzed aligns with the convergent parallel design, despite some more attention given to the qualitative data, especially in Paper III.

3.2 Study context

In Norway, the Empowering Coaching[™] program was implemented in three regions: a northern region, an eastern region and a western region. The Empowering Coaching[™] workshop was delivered to 17 groups of participating GCs, with the number of GCs participating in each workshop ranging from two to 17. The workshops were delivered in local soccer club houses in the three regions. Specific soccer clubs were sampled as clubs organizing the practicalities related to the workshop delivery (see section 3.3.2).

The context differed in each workshop, regarding both the persons involved and the location. When conveying the workshops, the CEs recorded their own delivery on video by locating the camera in a fixed position in order to film themselves and their PowerPoint slideshow. This was agreed upon within the Norwegian PAPA research teams. One of the reasons behind this decision was to make sure that members of the research teams did not influence the CEs' program delivery, which would have been possible had they been present during the workshops. Another reason was more of a practical concern, that is, to avoid spending resources on traveling to the 17 workshops in three different regions. However, having the CEs record the workshops themselves resulted in some negative consequences. Some placed the camera in a poor position, such that the PowerPoint slideshow was not captured in the recordings. The sound quality was sometimes poor (i.e., because of the distance from the camera to the CE), while sometimes none of the GCs was captured in the recordings at all.

3.3 Study participants and sampling procedures

Papers I and II were based on data from both CEs and GCs, whereas Paper III was based on data from GCs only. The sampling procedures applied in the Norwegian arm of the PAPA project followed the same criteria as in the other countries involved in the project. Some flexibility was allowed, however, in order to obtain the intended size of the GC sample [50].

3.3.1 Sampling of coach educators

In the Norwegian arm of the PAPA project, the recruitment of expert coaches to be trained as CEs was conducted in collaboration with the Norwegian Soccer (Football) Association (NFA) through purposeful sampling [96]. As the intervention was to be

implemented in three regions suggested by NFA, each of the regional soccer associations suggested three expert coaches, who were assumed to fulfil the following inclusion criteria: (1) having significant experience as a soccer coach and (2) having completed or currently participating in training for the UEFA B diploma, which is the third-highest coach education level [97]. Nine male expert coaches were recruited six months prior to the main trial intervention to participate in the CE training. However, two of these coaches withdrew from the project before the training started, due to obligations elsewhere. Therefore, seven expert coaches completed the CE training (i.e., two each from the northern and eastern regions, plus three from the western region).

All the seven CEs were included in Papers I and II, as the focus of these two papers concerned the CEs' program delivery (i.e., fidelity and delivery quality). However, due to the amount of data when conducting qualitative analyses, only one workshop per CE was included in the thesis.

3.3.2 Sampling of soccer clubs, teams and grassroots coaches

The main PAPA trial was conducted as a cluster-randomized study in all five countries. The purpose of cluster-randomization was to avoid 'contamination' between teams (i.e., coaches and players) within a club. Hence, the sampling was based on clubs, instead of individuals, as described by Duda and colleagues [50].

The Norwegian sampling of *clubs* was conducted in collaboration with the regional soccer associations in the three regions, which were asked to help identify suitable clubs. Two categories of clubs were sampled from each of the three regions: a) organizing clubs (OCs), which were expected to organize the workshops (i.e., localities, suitable equipment and an available contact person to help with practicalities on the day of the workshop), in addition to having teams and coaches sampled for the intervention arm, and b) clubs geographically close to the organizing

clubs (i.e., neighborhood community clubs (NCCs)), from which more teams and coaches were sampled.

The OCs were expected to be quite large within the respective regions, have both boys and girls teams in the selected age group, have experience arranging workshops, and represent both urban and rural areas in the region. Thirty-six OCs were identified, with five clubs in each region randomly selected and invited to participate in the intervention arm of the PAPA project. Fourteen of the 15 invited OCs were willing to participate in the study, while another OC was randomly selected and successfully sampled from the eastern region. However, one of the OCs did not have any GCs participating in the workshop (see Figure 4).

Furthermore, in total 85 NCCs were identified in the three regions, with 39 clubs randomly selected and invited to participate in the intervention arm. Ten NCCs from each region agreed to participate in the intervention. Finally, 23 of these NCCs were actually represented at the intervention workshop. For details regarding the sampling of clubs, see Figure 4.

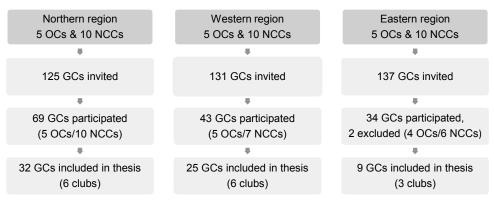


Figure 4. Flow chart of sampling of OCs, NCCs, and GCs.

When sampling *GCs* from the clubs, which had agreed to participate in the intervention arm of the study, attempts were made to fulfill the following inclusion criteria: the teams should a) have a maximum of two coaches, b) provide a minimum

of one training session per week and c) take part in at least one formal game per week. However, there was a need for some flexibility when sampling GCs, as some of the teams included in the intervention arm of the project appeared, for instance, to have more than two coaches involved in the team.

In total, 393 GCs were registered as coaches for the 175 youth teams (i.e., those aged 11-14 years) identified by the clubs, which agreed to participate in the intervention arm. They were all invited to participate in the intervention. One hundred and ninety GCs accepted the invitation, of which 146 finally attended the workshop (see Figure 4 for details). However, two of the 146 GCs only participated in parts of the workshop and were therefore excluded from the GC sample because they did not receive the entire intervention. The 144 GCs who completed the intervention workshop represented 83 teams from 37 clubs.

In the current thesis, 68 of these GCs attended the seven included workshops and were, therefore, included in the GC sample in Papers I and II. However, two of these GCs did not complete the post-workshop questionnaire at the end of the workshop, meaning that they were excluded from the sample due to the lack of data applied in the analyses. Hence, 66 GCs constitute the GC sample in Papers I and II. However, when conducting a factor analysis in Paper II, an expanded sample was applied to increase the validity of the analysis by having sufficient power [98]. This means that all the GCs who had attended the 17 workshops (n=144) and completed the postworkshop questionnaire applied in the study were included, resulting in an expanded sample of n=135 GCs.

Paper III included two GC samples. The first sample comprised the GCs who had completed a (supplemental) questionnaire at time 2 (T2), approximately six months after attending the Empowering Coaching[™] workshop. Of the 144 GCs who attended the entire workshop, 113 completed this questionnaire and were included in the quantitative part of Paper III. Additionally, a sub-sample of 12 GCs was included in the qualitative part of this paper. They were recruited according to the following

criteria: a) the GC's team (i.e., the coach and the players) had completed baseline and follow-up questionnaires, b) the GCs represented four different teams in each region and c) the GCs had attended workshops delivered by different CEs. However, due to some teams having an end-of-season break at the time planned for conducting the interviews (i.e., October), it was a challenge to accomplish the second inclusion criteria.

3.3.3 Ethics

The main (international) PAPA project was approved by the Ethical Board at the University of Birmingham, where the international coordinator of the PAPA project is located. The project has also been reviewed by the Regional Ethical Committee in Western Norway, with the conclusion that the project is not within their mandate and that the "project may therefore be conducted without approval from the ethical committee, and the committee has no objections to the publishing of the results" (Appendix 1). CEs and GCs received written information about the project, stressing the voluntary nature of their participation in the project, attention to anonymity and the option to withdraw from the project at any time (see Appendices 2 and 3).

3.4 Data collection

All the data applied in the thesis were collected before the candidate was involved in the project. In line with Creswell's [95] description of the convergent parallel mixed methods design, the quantitative and qualitative data, which were applied in the current thesis, were collected separately at approximately the same time for each of the three studies included in the thesis. Both kinds of data collection will be described in separate sections. Table 1 provides an overview of the types of data employed in each of the three studies of this thesis.

Thesis: studying programme implementation at two levels							
	Paper I	Paper II	Paper III				
CE #	7	7					
Data	Video recordings	Video recordings					
Quantitative analysis (descriptive statistics)	Fidelity scores	Delivery style scores					
Qualitative analysis	Adaptations	Facilitation of active participation among GCs					
Merging	In discussion (CE findings)	In results & discussion (CE findings)					
GC#	66	66	113 quantitative part/ 12 qualitative part				
Quantitative data	Post-workshop questionnaire	Post-workshop questionnaire	Questionnaire (T2)				
Qualitative data	-	Video recordings	Interview				
Quantitative analysis (descriptive statistics)	Satisfaction with program	Satisfaction with CEs' delivery quality	Program perception & use 6 months after workshop				
Qualitative analysis	-	Active workshop participation	Perceived implementation barriers				
Merging	In discussion (CE & GC findings)	In results & discussion (GC findings)	In discussion				

Table 1. Overview of samples	data analyses and	merging of data in	the three studies	comprising the thesis
Table 1. Overview of sumples.	autu, anaryses and	merging of uutu, m	i the three studies	comprising the thesis.

3.4.1 Quantitative data and measures

Different measures were used in the three papers included in the thesis, with the aim of expanding knowledge in relation to the research questions, and in line with the convergent parallel mixed methods design [95], to be triangulated or merged with the qualitative data in the discussion sections.

Demographic variables

To be able to compare and contrast the *CEs* ' program delivery according to their level of coaching education, experience as a coach and as a soccer player, the CEs completed a questionnaire on demographic variables prior to being trained as CEs. The demographic information is provided as a table in Paper I (page 242), as well as in Paper II. Age was not reported in the table, due to ethical considerations.

At T1 and T2, the *GCs* completed questionnaires, on which gender, age and years of coaching experience were reported, for instance. Demographic data for the

quantitative GC samples were reported in all three papers to provide information regarding the included GC sample. Demographics for the 12 interviewed GCs comprising the qualitative sample in Paper III are as follows: 10 males, two females; mean age 41.7 (SD=5.7); representing seven boys' teams and five girls' teams; four coaching 13-year-olds, eight coaching 14-year-olds; mean coaching experience 6.9 years (SD=5.3); five UEFA-level certification and seven with no certification.

Fidelity of delivery

A single measure of the overall fidelity of content delivery does not seem to provide enough details concerning an educator's program delivery [45, 78]. Therefore, a fidelity scale comprising 33 critical elements related to the core program elements was employed to measure the fidelity of content delivered (Paper I) in the current thesis.

The fidelity scale (Appendix 4) was developed within the PAPA project (www.projectpapa.org), which addressed the accuracy and relevance of the content delivered by the CEs. To capture the program delivery in detail, the 33 theoretical core elements were operationalized into 86 items, which the CEs were supposed to, at least once, deliver during each workshop. Despite applying a delivery protocol, the CEs were allowed to use their own phrasing when presenting the program content, illustrated through the 86 key points. In general, five main program dimensions are represented through the critical elements of the fidelity scale, as illustrated in Table 3 in Paper I (p. 244).

The fidelity of content delivery was rated by the candidate employing a standard protocol developed within the PAPA project. The rating was based on an assessment of whether the entire content for each of the 33 core elements was delivered. A 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*very much*), was applied for each of the critical elements. If the CE clearly and accurately delivered the content for each of a critical element's key points, a score of 5 was obtained for the respective critical element. To ensure validation of the analysis, some of the videos were

randomly selected and separately rated by the three co-authors, resulting in fairly consistent ratings. As recommended [87, 89, 100], the minor disagreements were discussed among the authors until consensus was reached.

In line with previous fidelity research [84], cut offs were identified for high and moderate fidelity through the connotations of the scoring labels for the scale. Hence, high fidelity was understood in terms of a score of at least 4 (*mostly*), whereas moderate fidelity was understood in terms of a score between 3 (*somewhat*) and 4.

Quality of the coach educators' delivery style

The quality of delivery style scale (Appendix 5) was applied to measure CEs' empowering and disempowering behavior, which was assessed through their observed behavior, and facial and verbal expressions, when conveying the workshop. A disempowering, or negative, delivery style was indicated through 13 items, comprising the following four sub dimensions: *controlling* (e.g., CE uses coercive language with coaches to control or influence behaviors during the workshop or in relation to future coaching); ego-involving (e.g., CE compares the performance/conduct of one coach or group to another); relatedness thwarting (e.g., the CE is distant, cold and uninterested in the coaches); chaos (e.g., CE provides unclear and confusing directions, instructions and/or guidance). Furthermore, an empowering, or positive, delivery style was indicated by 16 items comprising the following four sub dimensions: autonomy supportive (e.g., CE encourages coaches' input and involvement in the workshop); *task-involving* (e.g., CE provides constructive task-focused informational feedback relevant to the current task/situation); relatedness-supportive (e.g., CE attempts to build interpersonal relationships by taking an interest in the participating coaches); structure (e.g., CE provides clear and understandable/explicit directions, instructions and/or guidance).

The scale was developed within the PAPA project, based on previous research on SDT and AGT, and consisted of 29 items, which were rated on 5-point Likert scales, informed by the video recordings. The Likert scales ranged from 1 (*not at all*) to 5

(*very much*). Prior to applying the scale to the Norwegian CEs, inter-rater reliability was assessed between an English coder and the candidate through rating six clips from an English workshop. A kappa coefficient of .78 was obtained. Furthermore, to validate the ratings of the Norwegian workshops conducted by the candidate, the third author (main supervisor) of Paper II also conducted ratings of the CEs' delivery style in two of the included workshops. The CEs obtained the same scores on all items from both raters.

The same cut off values, as described for fidelity of delivery, were applied to indicate high and moderate levels of quality of delivery for an empowering delivery style. Quality of delivery related to disempowering delivery style (i.e., negative delivery) was indicated by low scores (1 to 2), while a moderate delivery quality was indicated by a score between 2 and 3.

Participant responsiveness

In the current thesis, participant responsiveness was measured in four ways: one applying qualitative data, two applying post-workshop questionnaire (Appendix 6) data and one applying T2 questionnaire data (Appendix 7). The post-workshop questionnaire was completed by the GCs at the end of the workshop. First, the GCs' satisfaction with the program, indicating what they perceived to have learned from the workshop, was measured in reference to six items (Paper I). '*As a result of this workshop, I now understand why adopting the empowering coaching approach might be considered worthwhile*', is an example of such an item. An overview of all six items is provided in Table 2 in Paper I.

Second, the GCs' satisfaction with the CE's program delivery, indicating the GCs' perception of the respective CE's delivery quality (Paper II), was measured through six other items from the same questionnaire. An example of an item was, '*In this workshop, the presenter encouraged coaches to ask questions and interact with the presenter and other coaches*'. The items of participant responsiveness were all rated on Likert scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

In the same vein as for the fidelity measure, cut offs were identified for high and moderate levels of satisfaction regarding both participant responsiveness measures: a high level of satisfaction was understood as a score of at least 4 (*mostly*), while moderate satisfaction was understood as a score between 3 (*somewhat*) and 4.

Third, at T2, the GCs completed a questionnaire indicating their perception of the program's usefulness. Nine items addressed their perceptions of the Empowering CoachingTM content, the program's influence on their current coaching practice and their use of the program principles in training sessions and matches. Table 1 in Paper III provides details on all nine items. One example is, '*The workshop has resulted in changes of my coaching practice*'. Likert scales were used in the same vein as for the other participant responsiveness measures.

3.4.2 Qualitative data

The qualitative data applied in the current thesis comprise video recordings of the CEs' workshop delivery between four and eight weeks after the baseline (T1) and indepth interviews with 12 GCs at the follow-up (T2). Table 1 provides information on the data sources applied in each of the studies included in the thesis.

Video recordings

To study the CEs' fidelity of content delivery, adaptations made and their quality of delivery (i.e., applying an empowering delivery style and facilitating active participation), video recordings were applied in Papers I and II. Video recordings, according to Heath and colleagues [101], "capture an event as it happens" (p.5) and provide the possibility for exploring different aspects of the same data. Thus, video recordings were used for capturing the CEs' verbal delivery, whether or not they applied the PowerPoint slideshow as intended (Paper I), their non-verbal behavior and their facial expressions, in addition to how they facilitated active participation among the GCs (Paper II).

The workshops were recorded on video by the CEs themselves. They were told to capture both themselves and the PowerPoint slideshow when making the recordings in order to enable analyses of the content they delivered and their delivery style. Due to technical problems, one of the 17 workshops was not recorded on video, whereas parts of five other workshops were missing. The reasons for missing video recordings seemed to be as a result of the CE forgetting to stop the camera during the lunch hour, with the result of running out of storage before completing the workshop, or forgetting to start the camera after a break. The CE who ran out of memory card storage failed to capture the last section of the workshop, which probably lasted around 10-20 minutes (i.e., CE7's third workshop). Three CEs forgot to start the camera after a break, such that approximately 25 minutes of CE4's first workshop, one hour of CE5's first workshop and half of CE6's second workshop (2.5-3 hours), were missing. Additionally, CE3 experienced some technical problems with the camera in his first workshop, resulting in approximately 1.5 hours of missing video recordings. Furthermore, part of the video recordings of CE4's second workshop was defective. It was, however, possible to recover the file, but this was not detected until after the analyses had started. Hence, CE4's first workshop was included in the analyses, as this, in the initial phase of the analyses, provided the most complete data material.

Due to missing video recordings of one entire workshop and parts of others, the video recordings constituted approximately 90 hours in total. As the initial phase of data analyses, the videos were imported into NVivo10 [102] and transcribed verbatim by the candidate, as transcriptions may help ensure the accuracy, quality and dependability (i.e., validity) of the data [87, 103]. With the aim of including comparable data (e.g., concerning the maturing of the CEs when delivering the workshop), the first workshop was intended to be included for all CEs. However, due to the missing video recordings, the most complete workshop (out of the first two workshops) was included for each CE, resulting in inclusion of the first workshop for

CE1, CE2, CE4, CE6 and CE7, and the second workshop for CE3 and CE5. The transcripts included in the current thesis constituted 292 single-spaced pages.

Interviews

Qualitative data were also collected through in-depth interviews as such data are considered an important source of information within case study research [89]. To capture the GCs' perceptions of the Empowering Coaching[™] program, their experiences with the use of the program in practice, when coaching their respective teams, and their perceived implementation barriers, 12 GCs were interviewed at the end of the soccer season (i.e., October) in 2011, as part of the T2 data collection. As recommended for qualitative research [87, 89, 104], interviews were conducted through the use of a semi-structured interview guide (Appendix 8) consisting of openended questions to stimulate the GCs into sharing their thoughts and experiences regarding the topical areas of interest, but without asking leading questions. Such an approach may facilitate interviews, which are conducted as "guided conversations rather than structured queries" (p. 106) [89]. Deviances from the interview guide were allowed, to be open to and fully explore variances in the GCs' answers and inputs. The topical areas in the interview guide concerned the coaches' motivation for coaching youth soccer athletes, how a common training session and match were carried out, what the coaches perceived to have learned from the workshop, and coaches' suggestions regarding future program implementation.

Three researchers familiar with qualitative methods and involved in the PAPA project in Norway conducted the interviews in one region each. The interviews, which took place before or after a training session with the GCs' teams, were held in a room in the club house where the interviewee and the interviewer would not be disturbed. To enable complete and accurate data, audio recordings of the interviews were made [87, 89]. Each interview lasted for 30-45 minutes, except for one shorter interview, due to the respective GC (i.e., GC12) arriving late. The interview had to end before all the topics of interest had been discussed as his training session was due to start. However, given the relevance of data revealed in this interview, it was included for data analyses. In one interview, two GCs (i.e., GC5 and GC6) showed up at the same time and a joint interview was conducted. GC5 was the most engaged and did most of the talking, whereas GC6 had a few comments, but otherwise confirmed what GC5 expressed. No contradictions were revealed among the two coaches.

To prepare the interviews for analyses, they were all transcribed, either by the researcher who had conducted the interview or by trained research assistants. In the same vein as for the transcription of the video recordings, the interviews were transcribed verbatim. The interview transcripts constituted 89 single-spaced pages.

3.5 Data analysis

The qualitative and the quantitative data were analyzed separately, in line with the procedures for convergent parallel mixed methods designs [95].

3.5.1 Analysis of quantitative data

The Statistical Package for Social Sciences software (SPSS, version 19-22) [105] was applied to carry out the statistical approaches in the current thesis.

Descriptive statistics

Analysis of the CEs' *fidelity of delivery* was conducted and reported as descriptive statistics in order to gain knowledge on: a) the number of key points covered (i.e., the counts); b) the total fidelity score (i.e., the sum of fidelity scores of the 33 critical elements calculated); c) their overall fidelity of program delivery (i.e., the computed mean fidelity score for the 33 critical elements); and d) the fidelity of delivery for the three main program topics (i.e., the computed mean fidelity scores for content on motivation, ABC-principles, and climate-strategies, respectively). This is reported in Table 4 in Paper I (p. 247).

The quantitative measure of the CEs' *quality of delivery* (Paper II), in terms of their empowering and disempowering delivery style, was analyzed by computing a mean score for empowering and disempowering delivery styles, respectively.

Descriptive statistics were also reported for *participant responsiveness*, in terms of what the GCs' reported to have learned from the workshop (Paper I), in order to gain knowledge on their satisfaction with the program. Mean scores for the GCs attending each workshop were computed, as well as standard deviations (SD).

Furthermore, descriptive statistics were conducted in order to gain an overview of the GCs' self-reported perceptions of the workshop content, the program's applicability, and the GCs' use of the program principles and changes in their coaching behavior six months after attending the workshop (Paper III). These descriptive statistics were both reported as frequencies in terms of how the GCs' reported their perceptions for each item and as a mean score for all GCs for each item, thereby gaining insight into the average scores and how the scores varied for each item.

Factor analysis

As a measure of participant responsiveness, an exploratory factor analysis was conducted in order to study the structure of the scale, which consisted of six items that measured how satisfied the GCs were with the CEs' quality of program delivery (Paper II). As the procedure that was followed to examine the factor structure is thoroughly described in Paper II, it will only be described in brief here. In order to achieve sufficient power in relation to the factor analysis [98, 106], the structure was tested with the entire GC sample (n=135) that had attended the workshop and completed the questionnaire at T2. As one item was excluded due to double loadings on two factors, while only one factor achieved an eigenvalue in line with the suggestions in the Monte Carlo PCA for parallel analysis [107], the final model relied on a one-factor solution [108], with adequate factor loadings (.46-.73). Thus, a mean score was computed for the five remaining items and applied as a measure of the GCs' satisfaction with the CEs' overall delivery quality.

3.5.2 Analysis of qualitative data

To handle the amount of data, and the coded material in a structured way, the QSR NVivo (versions 10 and 11) [102] software was applied in respect of the qualitative analyses in all three papers.

Thematic network analysis

Attride-Stirling's [109] exploratory thematic network analysis was applied to explore adaptations made by CEs when implementing the Empowering Coaching[™] workshop (Paper I). This analysis is considered to be a robust and sensitive approach to exploring qualitative material in a manner that leads to an illustration of the findings and the relationships between them in an organized manner. The analysis builds on hermeneutic approaches, as the intention is to interpret others' understanding of an issue [109].

The exploration of CEs' adaptations was based on transcripts of the video recordings. Six steps [109] were followed to reduce and explore the data and further integrate the exploration when conducting the two analyses. The first three steps constitute the reduction phase: a) the material was coded; b) themes were identified by grouping codes into themes; and c) the thematic network was constructed through grouping and organizing themes into basic, organizing and global themes. The next two steps constitute the phase of explorations: d) the network was described and explored; and e) summarized. The integration of the explored data was conducted in the last step: f) patterns within the network were interpreted.

In the reduction phase of the thematic analysis, the data were first read to gain an impression of the data, and then coded in a hybrid manner [110]. This means that the data were coded inductively (i.e., data driven), and also by actively using the theoretical framework of implementation research and the research questions in the coding of the data. Additionally, to consider the CEs' adaptations of the content delivered, the workshop delivery protocol was applied in the coding process. This

process of coding adaptations made by the CEs was also conducted by the second author (main supervisor) for two of the workshops. Then the codes and the relations between the codes and themes were discussed, as this is considered an appropriate approach to achieve an agreement among the coders (i.e., inter-coder agreement) [87, 104]. Additionally, as previously recommended when conducting qualitative research [111, 112], the discussion also aimed to illuminate nuances revealed by the two coders, aiming to add new insights into the analyses. This has been suggested to enhance the validity of data [104]. The codes derived when coding adaptations made in the two first workshops were the basis for developing a preliminary coding framework. This was applied for the rest of the coding (i.e., deductive coding), in addition to still being open to new aspects relevant to code in the data.

The phase of exploration was conducted through describing, exploring and summarizing the global, organizing and basic themes in the thematic network, as well as providing quotations to support the interpretation of the data material. The quotations were translated into English as accurately as possible to ensure that the participants' meaning was attended to. Only one thematic network was constructed in Paper I, as all the identified basic and organizing themes could be related to the same global theme (i.e., types of adaptations made by the CEs). The basic, organizing and global themes are presented as a thematic network in Figure 1 in Paper I (p. 247).

In the last phase, integration, the main findings were discussed in relation to the study's research questions and the study's theoretical foundation. This constitutes the discussion section of Paper I.

Framework analysis

Another thematic analysis was applied to analyze the video data in Paper II in order to further explore CEs' quality of delivery (i.e., their facilitation of active participation among the GCs) and participant responsiveness (i.e., the GCs' active engagement in the workshop). This thematic analysis was also applied to analyze the interview data in Paper III in order to explore the implementation barriers perceived by the GCs six months after attending the workshop. In line with procedures suggested by Lacey and Luff [113] the following five steps were undertaken by the candidate when conducting the framework analyses:

- 1) The transcripts of the video recordings and the interviews were read in order to become familiar with the data (both Papers).
- 2) Based on previous research on quality of delivery and participant responsiveness (Paper II), and through inductive coding, a preliminary coding framework was identified. In Paper III, inductive coding was conducted in order to identify the GCs' perceived implementation barriers (Paper III).
- 3) The thematic framework was applied when coding (i.e., indexing) text segments in NVivo11. Preliminary codes and themes were refined, resulting in two themes for the CEs' facilitation of active participation and four themes for GCs' types of active participation. Examples of themes that were applied are 'responding to GCs' contributions' (CE theme) and 'commenting on program content' (GC theme) (Paper II). The same approach was applied in Paper III, resulting in three main themes, and nine sub-themes. To ensure a nuanced perspective and a common understanding of the aspects uncovered [104, 111-113], the codes, themes and sub-themes were discussed with the third author (main supervisor), who was familiar with the data.
- 4) Thematic charts were created in NVivo11 for each case (workshop) in Paper II, in respect of both of the analyses, to help systematize the coded text segments. This was also done for each of the GCs in Paper III.
- 5) In the last step, mapping and interpretation, as well as patterns and relations between the themes, were explored. Finally, the data were merged with the quantitative findings and presented with quotations in the results section, then discussed in relation to the research questions and previous research (in both Papers).

4. Findings

In the following, the main findings of the three papers will be described. Detailed descriptions are presented in the respective papers.

4.1 Paper I

The fidelity of delivery was explored through the use of a fidelity observation form. Descriptive findings suggested that the CEs implemented most of the content with moderate to high fidelity, when exploring both a mean of the entire content (i.e., an overall fidelity score) and the main sub-categories of the content. These subcategories comprise the content of motivation, the ABC principles, and the climate strategies, respectively.

Qualitative in-depth analyses revealed that all of the CEs made adaptations when conveying the program. Eleven kinds of positive adaptation were found, which aligned with the program's theoretical foundation. Examples of positive adaptations include providing examples from one's own coaching practice, elaborating on program content and encouraging the use of the Empowering Coaching[™] program. However, analyses showed that two kinds of neutral adaptation and five kinds of negative adaptation were also made. The neutral adaptations comprised linguistic modifications and adding extra content, which neither aligned nor conflicted with the program. The negative adaptations, which constitute a contradiction of the underlying program theories, were expressed, for instance, as on's own skepticism to program content, in addition to skipping parts of the program content.

Two of the CEs who were found to have made the most positive adaptations, as well as deliver the program with the highest fidelity, were the most experienced CEs. Furthermore, the GCs appeared to be moderately to highly satisfied with the workshop. Based on the fidelity scores, adaptations made and the satisfactory scores by the GCs, the results indicated that the most experienced CEs delivered the program content with the highest fidelity and quality.

4.2 Paper II

In Paper II, quality of delivery was further explored, with more comprehensive analyses conducted on GCs' participant responsiveness. Quality of delivery was addressed here in respect of the CEs' delivery style and their facilitation of active engagement among the GCs. Descriptive analyses of the CEs' delivery style suggested that they employed an empowering delivery style, due to their high scores on the empowering dimension and low scores on the disempowering dimension. Hence, they seemed to reflect the program principles when conveying the workshop. Qualitative analyses showed that the CEs stimulated active engagement among the GCs, by applying interactive teaching methods in line with the program protocol. The manner in which they stimulated engagement was illustrated through their efforts in putting questions to the GCs, enabling their reflection and responding to their contributions.

Participant responsiveness was explored in terms of the GCs' satisfaction with the CEs' quality of program delivery and how the GCs actively participated in the workshop. The descriptive satisfactory scores showed that the 66 GCs appeared to be satisfied with the CEs' delivery quality, as high mean scores were obtained for all CEs. These mean scores seemed to match the scores for the CEs' empowering delivery style. Furthermore, qualitative analyses indicated that the GCs seemed interested in the program content and that they engaged in the workshop by asking questions, commenting on the program content, providing their own examples and responding to questions from the CE.

Based on the results from both the quality of delivery and the participant responsiveness analyses, the findings of this paper indicated that the CEs' quality of

delivery was high, as they employed the intended delivery style, as well as stimulated active engagement and satisfaction among the GCs.

4.3 Paper III

Since the CEs appeared to implement the Empowering Coaching[™] program with moderate to high fidelity and high quality, this paper explored the GCs' perception and use of the program six months after the workshop, as well as implementation barriers perceived by the GCs. Descriptive findings showed that the GCs appeared to be positive with regard to the program content. They also found it easy to apply and adapt the content to their own coaching practice. Despite these positive perceptions, only a few of the GCs reported that they applied the program principles often or always in their coaching practices.

Qualitative findings revealed that the perceived implementation barriers were related to implementation factors representing 1) program characteristics and the need for follow-up sessions, 2) individual factors and 3) organizational factors. The latter kinds of barriers included challenges related to both club and team levels. This relied on a lack of support from club leadership, as well as from parents and co-coaches who had a coaching philosophy or behavior conflicting with the Empowering Coaching[™] approach. Therefore, the GCs experienced difficulties in achieving a shared understanding of the program content and its importance to their team's coaches and within the club. The individual barriers reported were related to a lack of their own and their players' time. The GCs' lack of time was perceived to influence their ability in planning and carrying out the program principles, whereas the latter aspect was also influenced by the players' (lack of) time. Perceived barriers representing program characteristics and follow-up mainly reflected a perceived mismatch between the time allotted to carrying out training sessions and the time required for applying the program principles in practice. Half of the interviewed GCs also expressed a need for follow-up sessions led by CEs in order to enable more

comprehensive learning, as well as allowing for further reflections and discussions with their peer GCs about their coaching practices and use of program principles.

4.4 Merged findings

As illustrated in Table 2, the findings from the three papers provide comprehensive knowledge on program implementation at the two levels studied, i.e., CEs and GCs. The findings indicate that the program was well implemented by the CEs and that the GCs were positive about the program and its delivery, as well as actively participated in the workshop. However, they reported that they only used the program to some extent in their coaching practices, due to perceived implementation barriers, such that time constraints and the lack of follow-up.

	Paper I	Paper II	Paper III
CEs' fidelity of delivery	Moderate to high		
CEs' adaptations	Mostly positive		
CEs' quality of delivery	Indications of high quality	High quality: - Employing empowering delivery style - Facilitating active participation	
GCs' responsiveness	Satisfied with the program	Positive: - Satisfied with CEs' delivery quality - Actively participating in workshop	Positive about and motivated to use the program (at T2) Report to sometimes use the program
Perceived implementation barriers			Lack of follow-up, time, support and collaboration challenges at team level reported as reasons for not applying the program to a greater extent

Table 2. Overview of findings from the three papers on program implementation at the levels of CE and GC.

5. Discussion

5.1 Discussion of main findings

In the following, the main findings of the thesis will be highlighted and discussed, based on how possible moderators at both the CE and GC level seem to have influenced the CEs' fidelity of delivery and the GCs' use of the Empowering Coaching[™] program. Thereafter, the complexity of implementing a program at two levels will be reflected upon.

5.1.1 From theory to practice: the challenges of implementing a program in a coach educator setting

The findings in Paper I indicated that the CEs delivered the Empowering Coaching[™] program with moderate to high fidelity and that most of the program content was covered. Thus, in line with other studies [24, 25, 28, 30, 31], delivery with high fidelity by the CEs was expected to enhance program outcomes, given the assumption that the GCs would most likely apply the program principles in their coaching practices. Even though the GCs' fidelity was not specifically measured, aspects related to their faithful program use were revealed in Paper III. The findings here indicated that the program was not used to a great extent. So, why did delivery with high fidelity by the CEs not lead to GCs reporting that they used the program more often than they did? According to previous research [23, 26], the level of fidelity may be influenced by several moderators. Therefore, the influence of the moderators suggested in Figure 2 will be discussed.

Program characteristics

Program complexity is suggested to influence program fidelity [23, 26], as more complex programs may require more resources and time [25], be more challenging to learn or more difficult to manage. As the Empowering CoachingTM program was designed and implemented as a pre-packaged program, such that CEs were expected

to follow detailed descriptions (i.e., delivery protocol) and apply materials that were easy to use (i.e., PowerPoint slideshow), it might be argued that the complexity of the program is low [26, 33]. However, as the CEs should also employ interactive methods, this implies that they, as illustrated in Papers I and II, had to be flexible and adapt the program delivery in response to the many contributions from the GCs, while simultaneously trying to adhere to the program protocol. This may have increased the level of program complexity. Nevertheless, the overall assessment of the program indicates that it was quite simple to deliver, which may have led to the high levels of fidelity achieved by the CEs when implementing the program.

Moreover, as the effect at player level was expected to be mediated through the implementation of the Empowering Coaching[™] program by both CEs and GCs, this is assumed to have complicated the implementation process. At the next level, in addition to attending the workshop, the GCs were supposed to use the workbook and the e-learning modules to support their program use. The latter may be considered as easy-to-use materials, which were expected to enhance their fidelity of delivery or increase the likelihood of using the program in their practices [33]. However, as found in Paper III, the GCs reported that they did not use the program much. Thus, it may be argued that this is related to moderators others than program complexity, one of which might be the provision of facilitation strategies.

Facilitation strategies, in addition to training and guidelines, also include ongoing supervision and feedback [e.g., 23, 25]. As recommended when seeking to achieve program implementation with high fidelity [23, 25, 30-32, 77], the CEs were provided with pre-implementation training (i.e., theoretical classes, practical experience and individual tutorial feedback), in addition to receiving a prepackaged program, which included a detailed delivery protocol and a PowerPoint slideshow to enable their delivery of the workshop to the GCs. In line with previous suggestions [23, 26], these training and facilitation strategies seem to have positively impacted the program delivery, as the CEs seemed to have a good understanding of the program

and the necessary skills required for delivering the program with quality. This was supported by the fidelity scores reported in Paper I and their delivery quality reported in Paper II. Thus, due to the CEs' rather consistent program delivery, it might be argued that they were provided with adequate facilitation strategies, which may have enhanced their fidelity and quality of delivery.

The same conclusion could not be drawn at the GC level. As indicated by the findings in Paper III, the GCs' pre-implementation training (i.e., the workshop), the workbook they received and the e-learning modules were, in total, not comprehensive enough for the GCs to use the program to a great extent. Although Carrol and colleagues [23] suggest that less complex interventions may not require comprehensive facilitation strategies, the findings in Paper III revealed, in line with previous coach education research [14, 18, 114], that the lack of follow-up by program providers was one of the key barriers for not using the program more often. Thus, to more effectively implement the Empowering CoachingTM program, there seems to be a need for ongoing follow-up sessions in addition to the workshop. This has been recommended with regard to facilitating sustained motivation and commitment to implement a program, ensuring quality implementation and enhancing those abilities needed to handle different challenges, which occur throughout an implementation process [25, 32, 33, 66]. This seems particularly essential, as the Empowering Coaching[™] program aimed to change the GCs' competence and behavior mainly through a oneday workshop. As coach learning and behavior changes require time [19], a one-day workshop would appear to be too limited to enable such changes.

The GCs asked for more group-based follow-up formats led by a CE or program champion (Paper III). Research suggests that opportunities to reflect on and discuss program topics with peers [21, 115-120] enhances coach learning [18, 115, 121, 122], in particular, if discussions are facilitator-led [115, 120, 123, 124]. Thus, group-based follow-up sessions may have been useful to enhance the GCs' knowledge and skills, which were needed to create motivational climates. Such an approach may have

encouraged them to make specific plans in terms of how to apply principles, as well as subsequently evaluate how and why their plans worked or not through peer discussions [116].

Furthermore, practical experience, particularly where feedback is provided [125], has also been recommended when developing coaches [18, 19] and is considered to influence one's self-efficacy to a greater extent than vicarious learning [126-129]. Opportunities for such experiences were not included in the Empowering Coaching[™] workshop, but the e-learning modules were intended to encourage program use in practice. However, the e-learning modules did not seem to be appreciated by the GCs, maybe because the modules were released late, as the translation process (from the original English version) took time. Thus, strengthened facilitation strategies seem necessary to enhance future implementation of the Empowering Coaching[™] program, preferably as educator-led group-based sessions.

Individual moderators

In the current thesis, adaptations, quality of delivery and participant responsiveness have been explored as possible moderators related to the individual level. In line with previous implementation research, Paper I revealed that *adaptations* to the program content occurred [25, 29, 30], even though the CEs applied a delivery protocol [35], a fixed PowerPoint, and delivered the program according to a predefined structure. Most of their adaptations were considered to align with the program's goals and theoretical assumptions, many of which were made to meet the needs of the GCs. Therefore, the adaptations were considered as positive [35, 45] and indicators of CEs' attempts at adapting the program to local needs. Positive adaptations have been found to be associated with high fidelity levels [64]; this is supported by the findings in Paper I. Moreover, it has been suggested that adaptations made to meet local needs enhances the quality of program implementation [25, 28]; indeed, the findings in Papers I and II suggest that the CEs who made the most positive adaptations conducted a high-quality delivery. These CEs were (in Paper I) found to be the most

experienced ones and, therefore, the findings align with previous school-based prevention research, which suggests that the most experienced teachers make the most positive adaptations [64]. Since the GCs' program use has not been explored in detail, it is not possible to consider whether moderators, such as adaptations and quality of delivery, influenced their fidelity of delivery.

The next moderator, *quality of delivery*, has been considered difficult to explore, given that quality in general is a relative concept, which can be difficult to measure [45, 84]. In the current study, quality was understood in terms of whether the program was delivered in line with the program's theoretical foundation and within an empowering learning environment, including the facilitation of active engagement by the GCs, and not merely in terms of the content delivered. An important point of departure was the assumption that quality at the first level, the CEs, would have implications for the outcomes and acceptability at the next level, the GCs [25, 30, 77]. In line with previous research [22, 24, 25, 28, 65, 81, 82], a high-quality delivery by the CEs was suggested (cf. Paper II), due to their interactive approach, as illustrated by their efforts and skills in engaging and responding to the GCs, together with the empowering delivery style applied. The latter was to help increase the GCs' understanding of the program principles and, further, to create a safe and motivational workshop climate [51], which could contribute to enhanced engagement [80, 83] by the GCs. The CEs' efforts at modeling [126, 128] autonomy- and relatednesssupportive behaviors, as well as providing task-focused feedback, could have enhanced the GCs' beliefs in their own abilities to apply the same behaviors in their coaching practices. As the findings in Paper III show, however, the GCs did not use the program to any great extent.

Meanwhile, as suggested by Carrol and colleagues [23], the fidelity of delivery seems to have been influenced by the quality of delivery, due to the CEs' comprehensive theoretical knowledge, competence and skills in providing this knowledge, as well as their facilitation of opportunities to reflect on and discuss GCs' coaching practices.

These are all aspects that have been previously suggested as demonstrating a CE's competence [21, 49, 120]. Coaches attending coach education programs have been found to appreciate high-quality delivery by competent CEs [130]. In the current thesis, quality in delivery seems to have led to positive *responsiveness*, in terms of active engagement among the GCs, as found in Paper II, which again, might have positively influenced the CEs' quality and fidelity of delivery. This relies on the assumption that the CEs were less likely to skip or partly implement program elements, given that the GCs seemed to be engaged and interested in the program and, thus, the CEs were probably encouraged into doing their best to fully deliver the workshop [23]. This assumption is supported by the findings in Paper I, showing that the CEs covered a high number of the core elements and delivered them with moderate to high fidelity. In that sense, the GCs' overall responsiveness is, in the current thesis, perceived to have positively moderated the CEs' fidelity of delivery.

Exploring and measuring participants' responsiveness to the content and format of the coach education programs is also crucial [14, 19, 21] in order to gain knowledge on the program's usefulness and likelihood of being used [22, 24, 30, 86]. Findings suggest that the GCs considered the Empowering Coaching[™] program to be relevant and useful, due to their subjective responsiveness, which was illustrated by high-satisfaction scores in Paper I, and their behavioral responsiveness, in terms of active workshop participation revealed in Paper II. Furthermore, the GCs were also expected to have gained knowledge and skills from the workshop, as active participation has been suggested to enhance coaches' learning [19]. Due to their overall positive responsiveness to the workshop content and delivery, it is assumed that the GCs found the workshop itself to be adequate. This suggests that, rather than modifying the workshop content, there is a need to provide facilitation strategies after the workshop, as requested by several GCs (Paper III). Enhanced follow-up strategies might have encouraged the GCs to start using, and continue using, the program. However, it may also be beneficial to add practical exercises to this particular

workshop, due to previous research recommending such an inclusion to enhance coach learning [18, 19, 125].

One could argue that the participant responsiveness at the GC level, reported as the GCs' perceptions of the parents' and co-coaches' responsiveness to the program, had a negative impact on fidelity or use of the program. The qualitative findings in Paper III seem to align with previous coach education research [18], given that it is suggested that parents and co-coaches inhibit the use of programs that emphasize player development, instead of focusing on results. The lack of positive responsiveness seems to have resulted in the GCs not using the program, as it may be hard to try out new approaches, which could be met with negative feedback. Thus, the influence of negative responsiveness on the GCs' program use may suggest that addressing the GCs' relationship with parents and collaboration with co-coaches should be included in the Empowering Coaching[™] program in order to enhance the GCs' use of the program.

Organizational moderators

Although research has found that the GCs used the Empowering Coaching[™] program to some extent [131], this did not lead to significant changes in their empowering coaching behavior, while only minor differences were observed between the control and the intervention GCs in terms of their disempowering behavior [132]. This seems to relate to the barriers reported by the GCs in Paper III, which are consistent with previous coach education research [20, 62, 133], in that factors related to the team and sports club *contexts* seem crucial in terms of the low levels of the GCs' program use. Other studies [129, 134] have found verbal persuasions regarding encouragement and expectations, as well as feedback, from coaches to be of importance in enhancing players' self-efficacy. Thus, such persuasions from co-coaches might also have helped enhance GCs' beliefs in their own capabilities to use the program in practice. However, low levels of support from both co-coaches and club officials, as reported in Paper III, may have inhibited the GCs' learning opportunities, as their motivation, efforts and beliefs in their own abilities to use the program weakened.

Moreover, it is assumed that being a youth GC demands constant adjustment to one's plans and behaviors [135] within the dynamic, and sometimes challenging, coaching context [136]. This, in itself, may make it difficult to carry out a training session as intended. Considering the implementation of new principles or strategies may, therefore, be perceived a challenging task, particularly if one's co-coaches are not being supportive and encouraging with regard to program use. As previous research has emphasized, supportive climates are essential for successful implementation [25, 32, 33, 66], which implies that lack of support may, to some degree, account for the GCs' poor use of the program. At the recruitment stage of the PAPA project, all the coaches who were coaching the teams involved in the project were expected to attend the Empowering Coaching[™] workshop. Having all the coaches on a team attending coach education has also been emphasized by Langdon and colleagues [137]. However, due to practical reasons, it was impossible to make all these coaches attend the workshop. This could have accounted for some of the GCs' perceived lack of support by co-coaches, due to a possibly better understanding of and interest in the program, as well as an enhanced motivation towards subsequently using it in practice among the co-coaches.

Additionally, the GCs' perceived lack of follow-up at the club level may suggest that program adoption was not established within the soccer clubs, given that adoption implies support from the leadership [25, 32, 33], which may reflect the clubs' readiness to implement a program [25, 66, 73, 138]. As the Empowering Coaching[™] program has a health-promoting message, the lack of support from club leaders or officials may relate to soccer clubs' aims and priorities, which are usually to develop the players' sport-specific skills [139]. The emphasis on health and health-promoting actions is probably less pronounced and supported in most clubs [139-141], which may explain why such programs and activities were not being used to a great extent

[15, 142-145]. This may indicate that the Empowering Coaching[™] program did not align with the clubs' aims, needs, practices or cultures. It may also be argued that the clubs' social norms (i.e., how things are done), along with co-coaches' and club officials' competence and attitudes towards a program [69, 74, 75, 146], resulted in the GCs mainly conducting their coaching practices as usual. This is assumed to rely on the lack of a shared understanding of the benefits of the program and how to use it, which could have been established through collaborative and supportive environments [15, 25, 32, 33, 66] at the team and club levels.

Moreover, support from club leaders has also been considered to be of particular importance in enhancing the likelihood of coaches learning from a program, especially if program implementation comprises several levels of participants (e.g., CEs, GCs and club leaders) and collaboration between organizations (e.g., NFA and soccer clubs) [147]. An implementation process involving many levels of participants implies a need for strong collaboration between a club's macro (i.e., a club's policies), meso (i.e., club officials' guidance on club activities) and micro (i.e., the activities performed by coaches and players) levels in order to overcome implementation barriers [140] and gain shared understanding of the program [147]. This is particularly emphasized within the sports club setting, due to the voluntary involvement of players, coaches and club officials [140]. In terms of implementing the Empowering Coaching[™] program in the future, it might also be beneficial if club leaders seek support from the NFA to ensure a more thorough understanding of the program before deciding whether or not to adopt the program, as well as provide assistance in handling challenges during the process itself to facilitate a more effective program implementation [32].

Support from club leaders may also be reflected in their allocation of time [25, 31-33, 66] for the GCs involved in the project, which is essential for enhancing positive perceptions of a program [66]. In line with previous research [18, 120, 137, 146, 148], lack of time was reported in Paper III to be a common barrier to using

knowledge gained from coach education programs. Thus, more time for learning and using the program, in addition to enhanced collaboration with peer coaches, could have contributed to a more extensive program use. In this regard, support from leaders or other club officials seems crucial, while the lack thereof is considered as a main barrier to the GCs using the Empowering Coaching[™] program. If the club leaders had engaged one person as a program champion, who oversaw the GCs' learning, development and needs for follow-up, this might have helped overcome some of the perceived barriers, given that supportive climates are considered important for effective program implementation [25, 32, 33, 66].

5.1.2 The complexity of implementing a program at two levels in a sports club setting

The merged findings in the current thesis seem to support the need for studying program implementation through an ecological perspective [25, 73, 77, 79], due to several possible moderators [23, 26], which are related to both the organizational (i.e., context) and individual (i.e., adaptations, quality of delivery, and participant responsiveness) levels, and the program characteristics (i.e., complexity and facilitation strategies). These moderators have previously been considered to influence fidelity of delivery [23, 26]. Moreover, the outcomes of the Empowering Coaching[™] program was expected to be mediated by both the CEs' program implementation and the GCs' program use. This seems to increase the complexity of the program implementation and illustrates the need for a comprehensive evaluation of the implementation process to gain knowledge on how the program was delivered. Thus, some aspects considered to be of importance in achieving a successful implementation at the two levels within a sports club context will be highlighted and reflected upon.

The interplay between implementation levels

Although different relations have been suggested between the implementation dimensions [22, 23, 26, 82, 149], which are focused upon in the current thesis, the

discussion of each possible moderator, as suggested in Figure 2, has revealed their potential impact on the degree of fidelity achieved at the CE level, as well as on aspects relevant to the GCs' program use and fidelity to the program. It seems as if the moderators explored at the CE level have positively moderated their fidelity of program delivery. Some of these have also possibly influenced each other, as previous research [23, 26] suggests that sufficient facilitation strategies may enhance the quality of delivery, while a high-quality delivery is assumed to enhance participants' responsiveness to a program. The latter relates to an association where delivery quality and engagement by an educator is found to facilitate attentiveness and engagement among participants [82, 149]. This view is supported by Ogden and Fixen [44], who argue that effective program implementation requires competent educators and receptive participants.

Furthermore, quality implementation at one level has been suggested to influence outcomes and enhance a program's acceptability at the next level [25, 30, 77], in particular, if the implementation includes quality modeling by an educator [77]. Thus, as illustrated in Figure 2, the findings in Papers I and II could lead to an expectation that the GCs gained knowledge and skills and would apply the program principles in their coaching practices. This assumption is based on their positive responsiveness to the program and the fact that the CEs implemented the program with fidelity and quality, for instance, by modeling empowering behaviors. According to Bandura [128], modeling may have a positive impact on one's learning and such an approach has also been emphasized in previous coach education research [124, 150]. Thus, if the evaluation of the implementation had only included this first level, the implementation of the intervention would appear to be a success.

However, looking at the next level, the findings in Paper III showed that the GCs seemed to only use the program on an occasional basis, which implies that the perceived barriers reported by the GCs had a negative impact on the implementation of the intervention. Consequently, it seems that the acquired skills did not become

internalized, given that the GCs were only using the program principles to a minor degree. Taken together, one could say that the different moderators explored at the GC level are all considered to have negatively moderated their program implementation at this level more or less failed for the following reasons: poor facilitation strategies, in terms of lack of follow-up by CEs; contextual factors, given the limited extent of internal support from co-coaches and club officials, as well as the lack of program adoption at club and team levels; and negative responsiveness from co-coaches and parents. If the GCs' program use had, on the other hand, been positively moderated, such as at the first level, it is expected that they would have been able to use the principles with higher degrees of fidelity and quality. Being enthusiastic and positive when using the principles might, for example, have resulted in positive player responsiveness. Thus, the program outcomes at the player level might have been positively impacted, due to the assumption that programs implemented with quality will positively influence the participants and the outcomes [25, 77].

Facilitation and organized follow-up of youth sport coaches

The knowledge gained in the current thesis indicates that much effort was invested in training and providing follow-up to the CEs in order to facilitate a high-fidelity quality implementation, whereas too limited an effort was provided to ensure that the GCs learned from the workshop, and were capable of and motivated towards using the program in their practices. The findings in Paper III revealed a need for enhanced facilitation strategies, which is consistent with the findings of previous coach education research [14, 18, 114], where organized follow-up is emphasized as being important to both short and more comprehensive coach education programs. Thus, organized ongoing follow-up sessions seem essential for increasing volunteer GCs' use of such programs. It seems to enhance learning and may also help sustain motivation and problem-solving abilities, given that the GCs can discuss and try to solve specific situations with their peer GCs and their CEs.

Involvement by club leaders

Although more robust follow-up sessions are assumed to enhance program use [73]. this may not be enough to encourage volunteer GCs to use a coach education program. Due to the barriers reported in Paper III, it seems that too much responsibility was given to the individual GCs when trying to use the program, especially given that collaboration challenges and lack of follow-up at club level were reported as barriers. To help overcome such barriers, and because coach education programs are not always implemented as intended [20], there seems to be a need for club leaders to become more involved in the implementation process. If leaders participate in the training provided to GCs, they may gain a better understanding of how to use a program and why, while also being encouraged to follow-up on GCs when they are trying to use a program. Previous research [25, 31-33, 151] has found that involved and supportive leaders play a crucial role in implementation processes. Such leaders may help to encourage implementing staff's (e.g., GCs') motivation and engagement, in addition to help solving implementation barriers. Thus, when challenges, such as when co-coaches are skeptical about or opposed to using a program, as well as collaboration-specific ones, occur, they might be more easily solved if club leaders become more involved and contribute to the effective implementation of a program.

Moreover, support and engagement by club leaders may also help enhance positive participant responsiveness from co-coaches, players and parents, provided that the leaders clearly express the benefits of implementing and using a coach education program. This seems crucial, as the findings in the current thesis showed that negative responsiveness, in terms of resistance from co-coaches or parents, seemed to negatively moderate GCs' program use. On the other hand, positive responsiveness by the GCs seemed to positively moderate CEs' fidelity of delivery. Another option for enhancing co-coaches' responsiveness to a program is if club leaders encourage all GCs in their clubs, or the ones coaching certain age groups within the clubs, to attend the same coach education program. Within the school setting, such a wholeschool approach to implementation has been emphasized, in which programs seem to be applied more often and with higher fidelity when an effort is made to internalize a program for all teachers, in contrast to schools who let the teachers themselves decide whether to use a program or not [152]. Thus, encouraging all GCs to attend and use a coach education program is assumed, to a greater extent, to generate shared visions and aims related to the use of a program. This may help overcome some of the contextual implementation barriers, such as collaboration challenges experienced within teams and clubs. However, careful consideration should be taken with regard to how much effort the clubs can expect from volunteer GCs, as previous research has suggested that high demands may result in GCs' withdrawing from their coaching assignments [18, 142].

The suggested need for stronger involvement and support by club leaders, when implementing coach education programs, seems to be supported by findings related to the implementation of prevention interventions in the school setting [e.g., 32, 42, 66, 151]. These studies found that schools achieved a more effective program implementation when principals or administrators undertook the following: they prepared their staff concerning the need for engagement in an intervention; they actively participated in the program training themselves; they provided support in terms of practical help, necessary resources and encouragement; and they kept track of the staff's program implementation. In contrast, schools with teachers who reported a lack of administrative support and engagement were less effective in terms of program implementation. However, successful implementation requires time [25, 32], due to the possible need for change within an organization's culture, capacity and priorities [72]. As club leaders are often volunteers, program implementation within sports clubs may even be more time-consuming than more formalized organizations, such as schools, given that the leaders may not have enough time for their club assignments. This may, therefore, influence a club's capacity and readiness to implement a coach education program. Furthermore, the GCs are also usually involved on a voluntary basis [14, 17, 18], which may imply that there is a need for

unpaid volunteer GCs to be encouraged by supportive leaders and co-coaches to invest time and effort in learning and using coach education programs. These arguments all point to the important role of leaders when trying to implement coach education programs within a sports club setting.

To sum up, the comprehensive exploration of the implementation process and several moderators at both levels in the current thesis indicates the complexity related to gaining an understanding of what happens when a program is implemented at two levels. It also reveals the need for studying implementation from an ecological perspective and to explore aspects related to all levels involved in a program. The latter may help to avoid making Type III errors, as success at one level does not lead *per se* to success at the next level. Ideally, all the moderators should have been explored in relation to program implementation at both levels in the current thesis, although this was not within the scope of the thesis. Hasson [26] also suggests including recruitment as a moderator because this may reflect reasons for participation or otherwise on the program. Due to the voluntary engagement among CEs and GCs, such a measure might also have been useful, particularly in terms of the GCs' motivation and effort, which are invested in their coaching and coaching development.

5.2 Methodological considerations

Important methodological appraisals are related to how valid and reliable the data are, as well as whether the findings are generalizable to other contexts [95, 112, 153, 154]. Different terms for validity and reliability are usually applied in quantitative, qualitative and mixed methods research [95, 104, 113, 153-156]. Aspects that are considered to be of importance to the internal validity of mixed methods research will be discussed, once this study's strengths and limitations have been highlighted and reflected upon.

5.2.1 Strengths and limitations

This study has certain strengths that need to be underscored. First, based on debates about whether or not to measure implementation processes using observational or self-reported data [25, 30, 31, 35, 64], observational methods, in terms of video recordings, were employed in Papers I and II. This is considered to provide more valid data than if self-reports by CEs had been employed, due to the likelihood of reporting biased data [25, 28, 31, 35, 45, 64]. Biases often occur, as participants tend to either overreport or underreport their fidelity or the adaptations made, either because they are not aware of their adaptations or because they do not want to report them [35, 64]. Furthermore, the video recordings were conducted by the CEs themselves, suggesting that their program delivery was not influenced and biased by the presence of any observers [82, 87, 95].

Video recordings are assumed to provide accurate and comprehensive data, as the recordings capture what really happens. It is, therefore, considered sufficient for program evaluations [157]. Thus, video recordings are assumed to enhance the data's internal validity and quality [87, 101, 158]. By applying observational data to the current thesis, detailed appraisals of the CEs' program implementation, in terms of both fidelity and quality of delivery, were possible. In particular, an appraisal of the delivery quality would have been difficult without observational data [45], as these analyses relied on assessments about whether the CEs: seemed to have comprehensive knowledge of the Empowering Coaching[™] program's theoretical foundation; were able to convey this knowledge to the GCs, both verbally and through modeling an empowering delivery style, thereby creating safe learning climates for the GCs; and managed to facilitate active engagement and provide adequate feedback to the GCs' contributions. Exploring the delivery quality was of great importance in the current thesis, due to the complexity related to the implementation of the Empowering Coaching[™] program at two levels. This implies that high-quality delivery at the CE level is a premise for achieving a good

understanding of the program among the GCs, which in turn is necessary in enabling them to use the program in their coaching practices. Thus, an understanding of what was delivered by the CEs, and how, was a crucial point of departure for understanding the GCs' use of the program.

The second main strength of the current study is the use of several or mixed methods. Such an approach has been emphasized as helpful in gaining a comprehensive understanding of an implementation process [35, 39, 40, 76, 90-92, 159, 160]. Although a successful integration of qualitative and quantitative findings is challenging [161], triangulation – referring to the integration of findings in mixed methods research [95, 162] – is considered to enhance the validity, reliability [87, 95, 153, 163, 164] and, thus, the quality of the findings [89]. As suggested in previous research [87, 95, 153, 164], the current study therefore tried to a) reveal convergences between the findings in each of the strands and b) elaborate findings from one approach with knowledge gained from the other approach. Furthermore, c) the CEs' use of an empowering delivery style was validated by the GCs' responsiveness scores, which reflected their satisfaction with the CEs' delivery quality. This validation, along with a correlation previously found between measures of delivery quality and participant responsiveness [82, 149], may yield the possibility of only conducting analyses based on participant responsiveness measures to gain an impression of the quality of program delivery, on the basis that there is a lack of resources (i.e., time and money) to conduct in-depth observational analyses of quality of delivery.

Another aspect related to the use of mixed methods, which is considered to enhance the validity of the findings, is the use of the same sample when conducting both qualitative and quantitative analyses [95]. This was the case for the CE sample in Papers I and II, as well as for the GC sample in Paper II. Although not possible in Paper III, the qualitative sample was a sub-sample of the quantitative sample, a common approach when conducting mixed methods research [95, 96, 156, 162, 165]. Some limitations also need to be considered in the current thesis. A first limitation relates to the samples included. They were both small and purposefully sampled, resulting in the CE sample comprising *only* men and the GC sample comprising *mostly* men. Thus, the acquired knowledge may not be representative for larger populations and both genders [95, 96, 98]. With regard to the GC sample, the large number of males probably reflects the actual situation in terms of the proportion of female versus male youth GCs. Furthermore, the qualitative GC sample was recruited on the basis of the inclusion criteria of having provided data at both baseline and T2, as well as ensuring the inclusion of GCs, as follows: representing both males and females; coaching both girls' and boys' teams; representing all three regions; being trained by the same CEs in each of the regions; and having diverse coaching and player experiences, while also representing a range in terms of age. Thus, the sampling of GCs and CEs with diverse backgrounds may enhance the internal validity of the data, although the transferability seems limited.

As qualitative research aims to produce new knowledge on the topics being studied – not to gain all knowledge on a topic – and to allow for in-depth explorations [87, 104, 166], the samples applied during the qualitative analyses were considered sufficient. The samples also seemed to meet established criteria for data saturation [87, 104, 112, 113], as no new aspects were revealed when data had been collected from all the CEs or GCs. Except for one criterion (i.e., conducting cross-case analyses), the other four criteria suggested by Malterud and colleagues [166] concerning 'information power' also seemed to support the assumption about having included sufficient samples, given that the thesis a) had specific aims (e.g., fidelity and adaptations), b) relied on a theoretical rational (i.e., implementation) and c) had high specificity samples (i.e., representing diversities of target groups). Furthermore, d) in respect of the video recordings, data were perceived to have high levels of quality and accuracy, while the interview data relied on quality dialogues between experienced interviewers

and GCs, who shared their own experiences regarding barriers perceived during the implementation process.

Another aspect of concern is the CEs' and GCs' voluntary participation on the project. Thus, the sample in this thesis may be considered to be convenience samples, despite the cluster-randomization of clubs before the GCs were invited to participate in the study. This implies that the CEs and GCs were interested in the program and their own development in their respective roles. Therefore, the GCs' responsiveness to the program might have been more positive than GCs who had not voluntary attended the workshop. The GCs are therefore most likely unrepresentative of all youth soccer GCs with teams in the 11-14 years age group. Thus, as pointed out in previous research [95, 104, 112, 167], the transferability of findings should be appraised in relation to the included samples, the contextual factors, and the content and format of the program being studied. However, as it is important to recruit samples that can provide knowledge to illuminate a study's research question [95, 96], while the purpose of the current thesis was not to conduct inferential statistical analyses or to generalize findings, the samples recruited are considered to have provided valid data for an in-depth study of the program implementation.

A second limitation of the current study relates to the use of the instruments developed within the PAPA project, which had not been tested for validity and reliability. However, they are considered to have provided relevant and valid data. As recommended [45, 78], the fidelity scale comprises measurements of the CEs' fidelity of content delivered for each of the program's 33 theoretical core elements, instead of only providing a total fidelity score. Furthermore, as suggested for enhancing the validity of the findings [89, 100], inter-rater agreement discussions were held between the candidate and the three co-authors (Paper I). Minor disagreements were discussed until consensus was reached in terms of how to appraise the different scoring labels applied, with a view to ensuring a consistent use of the instrument for the remaining ratings.

The delivery style instrument that was applied when assessing CEs' quality of delivery (Paper II) was developed by the researchers, who had developed a similar instrument (i.e., the 'Multidimensional Motivational Climate Observation System' (MMCOS)) for measuring GCs' empowering and disempowering behaviors. The MMCOS has been validated [52] and applied in recent research [168-170]. The delivery-style instrument relies on the same theoretical aspects and research as the MMCOS, while the items have been modified to assess CEs instead of GCs. This instrument was also applied in a study by van Hoye and colleagues [171], who achieved alpha values for empowering and disempowering delivery styles of .76 and .75, respectively. Due to little variance in the CEs' scores for the sub-categories of both empowering and disempowering delivery styles, it was impossible to calculate alpha values during the analysis of the current thesis. The same happened when rating CEs' fidelity. This may be due to the lack of rater training before applying the scales, resulting in higher scores than expected, or because the 5-point Likert scales, which were applied, may not be sensitive enough to differentiate the CEs' fidelity or quality of delivery. However, as recommended for the coding of observational data [87, 111], an inter-rater reliability test was conducted, resulting in a Kappa coefficient of .78. This, in addition to discussing the ratings with the main supervisor, who rated two of the workshops, is assumed to have generated valid data.

As previous coach education research [14, 19, 21] has emphasized the importance of exploring whether participants find a coach education program to be adequate in terms of content and format, the GCs' post-workshop questionnaire was found to provide useful data. Thus, six items were applied in Paper I, while six other items were initially applied in Paper II (this was reduced to five when conducting a factor analysis).

Third, the GCs' use of the Empowering Coaching[™] program relied on self-reported data from the follow-up questionnaire and interview data. Observational methods

could have enhanced the data's validity by ensuring that the GCs neither over reported nor underreported their program use.

Fourth, although observational methods conducted by an independent observer are assumed to provide more objective data, due to reduced biases related to analyses and interpretations of the findings [25, 28, 31, 35, 45, 64], this objectivity may be questioned. The candidate had not been involved in the planning, implementation or data collection phases of the PAPA project. Thus, no relations to the CEs or GCs were established before analyzing the data, which contributed to the candidate being open to the data, looking for several nuances in the qualitative data and conducting the ratings of the CEs' fidelity and quality of delivery as objectively as possible (i.e., not valuing one over the other). However, the ratings of the CEs' fidelity of content delivery comprised an interpretation by the candidate of whether the CEs' phrasings aligned with the content, which was expected to be delivered (i.e., the items in the fidelity scale), whereas the rating of their quality of delivery implied an interpretation of both behavioral and verbal expressions. Such objective assessments might be influenced by the observer's prejudgments [172]. Nevertheless, when applying the fidelity and quality of delivery scales, prejudgments and interpretations did not seem to influence the ratings to a great extent, due to the results of the inter-rater reliability test and discussions

5.2.2 Reflections on the study's internal validity

As suggested by Creswell [95], the current thesis applied multiple approaches (presented in italics) for considering the validity and the reliability of the mixed methods approaches conducted. In line with a parallel convergent mixed methods design [95], the quantitative and qualitative *analyses* were conducted separately. To ensure reliable data and findings when conducting qualitative research, the following procedures, suggested by Gibbs [173], were conducted: a) the video recordings were transcribed by the candidate, while the interviews were transcribed by co-authors and trained research assistants, to enhance the quality, accuracy and dependability of data;

b) the transcripts were checked against the recordings to avoid mistakes; c) the procedures applied for data collection and analyses are described in the methods section of this thesis; and d) the meaning of codes has been ensured, with analyses shared to enhance the reliability of the procedures applied. The meaning of the codes and their definitions were discussed with the main supervisor before initial coding frameworks were developed, based on deductive theoretical coding and inductive coding of new aspects emerging from the data. Furthermore, the coding frameworks were refined before being applied in a consistent way in the remaining analyses, as well as for re-coding of the initial analyses. The themes that were generated were discussed with the supervisor(s) to ensure a nuanced appraisal of the findings and achieve consensus on the themes and the relations among them. Such discussions on analyses and checking of coding consistency may be regarded as *peer debriefing*, which is suggested enhancing the validity of a qualitative study [95].

To ensure a realistic and valid presentation of the findings, both positive and *negative aspects* should be sought and presented [95, 153, 174]. With the aim of producing valid data, negative aspects were revealed and reported, such as some of the adaptations made by the CEs (Paper I) and implementation barriers perceived by the GCs (Paper III). This further represents a part of the *thick, thorough and nuanced descriptions* of the findings, which are also considered to be a validation strategy [87, 95, 104, 174]. In this regard, contextual aspects concerning how the workshop was organized and delivered, as well as how many GCs attended each of the included workshops, have also been provided in the papers or the thesis. Furthermore, as quotations may both enhance the reader's understanding and the validity of the presented findings [95], all three papers have reproduced quotations by several participants (i.e., CEs and GCs).

The merging of two types of findings is challenging [161], given that different conceptualizations of terms applied in quantitative and qualitative analyses may influence the *interpretation of the findings* [95]. Due to the diversity of terms applied within the field of implementation research, along with the several aspects relevant to

the process of gaining comprehensive knowledge on the dimensions, the conceptualization of each term has been clarified in the theoretical section of this thesis. Furthermore, when presenting and interpreting the findings in mixed methods research, the weighting of the quantitative and qualitative findings has to be considered [90, 91, 95, 161]. In line with a convergent parallel mixed methods design [95], and because all aspects being explored for each dimension were considered to be important, equal weighting was conducted in Papers I and II. In Paper III, however, more emphasis was put on the qualitative findings, as these were interpreted to be of particular importance in terms of enhancing future implementation (i.e., use) of the program at the GC level.

The papers of the current thesis were submitted to peer-reviewed journals, while changes were made based on reviewer feedback. Such appraisals by *external auditors* are suggested for enhancing the validity of the data and the findings, as well as the reliability of the procedures conducted [95].

Reflexivity concerns reflections on the biases related to the researcher, which inform how the study's conclusions have been drawn [112]. Although the interpretations of the findings in the current thesis were guided, to a great extent, by the theoretical framework, the candidate's influence on the research process and, thus, the validity of the data and the findings ought to be reflected upon. Assessments of social phenomenon will always be influenced by an observer and her preconceptions [87, 95, 104, 112, 172, 175, 176]. Therefore, the candidate's motivation for conducting this study and her preconceptions will be described.

The current thesis was motivated by conducting research on healthy youth and sports, as well as desire to learn more about how to conduct a process evaluation. The candidate was familiar with some qualitative methods (i.e., focus groups), and had, as an occupational therapist, experience of observational methods in clinical practice. Furthermore, soccer and youth coaches were also areas of interest, due to previously having been a youth soccer player and experienced both 'good' and 'poor' GCs, as

well as how this fact influenced her own motivation for sustained sports participation. The candidate was unfamiliar with the field of implementation research from the outset. Therefore, the qualitative analyses were most likely theory-driven in the beginning, especially concerning the adaptations made by the CEs. However, the candidate tried to be open to the many nuances, which were actually revealed when conducting the analyses.

Before analyzing the data, the candidate expected the most experienced CEs to implement the program with the highest quality, as they were assumed to provide more adequate responses, examples and elaborations to the GCs, based on their extensive experience as players and coaches. Furthermore, the preconceptions related to the GCs' implementation barriers comprised expectations regarding a desire for follow-up sessions by the CEs, as the candidate assumed that a one-day workshop was not enough to contribute to changes in the GCs' coaching behavior. Additionally, the Empowering Coaching[™] program aligns with regulations related to children and youth soccer (e.g., including every player, not focusing on results, and having fun when playing) in Norway [177]. Thus, the GCs were expected to already coach in line with the program principles or report that they perceived the program to be of little interest, as it aligns with the aforementioned regulations. However, the aim was to conduct the analyses without being led by these preconceptions. This seems to have been achieved, as several aspects were revealed through analyses at both the CE and GC level, which were not part of the candidate's preconception.

6. Implications and conclusions

In the following, some of the findings' implications for practice and future research are reflected upon.

6.1 Implications for practice

The findings may have implications for the future implementation of the Empowering Coaching[™] program. First, the format of the workshop may benefit from some changes in order to meet the need for organized follow-up sessions, either by program providers or by a program champion within the clubs. Follow-up sessions could have been provided instead of, or as an addition to, the e-learning modules. Either such sessions could be an extension of the program or the six-hour workshop could be split into several shorter sessions, delivered a few weeks apart, in order to encourage the GCs to use program principles between the sessions. The GCs could then have time to reflect on their own program use and challenges before meeting again and, thus, have the opportunity to discuss their experiences with the peer GCs at the follow-up sessions. Second, including practical exercises in real-world coaching sessions, both on the course and between follow-up sessions, might have been beneficial in terms of enhancing GCs' knowledge, skills and self-efficacy in using the program.

Furthermore, the findings may also have implications for the implementation of coach education programs in general, of both the short non-formal and the more comprehensive varieties. First, there seems to be a need for a more thorough program adoption at the club level before GCs are encouraged to attend coach education programs. This requires a club's leadership to be more involved and interested in the program implementation, which is the second implication. Leaders may then be able to encourage GCs to invest time and effort to participate in and use coach education programs, as well as collaborate with peer GCs within the club to achieve a shared understanding of the aims and benefits of using a program. Third, the clubs should try

to engage most of the GCs coaching teams within certain age groups to attend a coach education program and its follow-up sessions to strengthen collaboration among the club's GCs. The GCs' interest in a program and the motivation to use it, as well as the possibilities in solving challenges, which occur when trying to use the program, may be enhanced through such shared visions and collaboration. Fourth, most coach education programs seem to benefit from having organized follow-up sessions, which may help sustain the GCs' interest in and motivation to use a program. Fifth, it may also be beneficial if a sports association, such as a soccer federation, is involved in the provision of coach education programs, so that they can provide implementation support and guidance for club leaders and CEs throughout the implementation process.

6.2 Implications for future research

This thesis has several implications for future research. These are as follows:

- If changing the format through which the Empowering Coaching[™] program is delivered is to be considered, it may be beneficial to gain knowledge on the CEs' perceptions of the format and their suggestions for possible changes that can work in practice in the future.

- Moreover, there is a need for an exploration of the GCs' actual program use through observational methods in order to gain a fuller picture of their program implementation. The MMCOS measure seems adequate for obtaining knowledge on their empowering and disempowering coaching behavior. Furthermore, the GCs' program use may be compared and contrasted, based on whom, among the CEs, taught the program.

- When implementing coach education programs in general, it may be sufficient to include responsiveness measures by players, co-coaches, parents and club officials in

order to gain an in-depth knowledge about how a program is perceived by the parties involved.

- Studying contextual aspects at the club level, such as a club's aims and priorities, its interest in and adoption of a program, its plans for facilitating program implementation, and its needs regarding external support from program providers or other collaborators, may inform the potential for successfully implementing coach education programs in general.

- When exploring the implementation of coach education programs, outcomes at the player level should also be investigated, with a view to combining the findings in term of implementation and outcomes. This may inform whether a program is working as intended or not, as well as whether this relates to the manner in which a program is implemented.

- In general, comprehensive knowledge of program implementation may be achieved by combining measures of several levels of participants (e.g., educators and coaches or teachers), as well as by employing mixed methods, such as observational and selfreported data. This may render possibilities of validating different kinds of findings against each other.

6.3 Conclusion

The main aim of this study was to explore the CEs' fidelity and quality of delivery when implementing the Empowering CoachingTM program in Norway, as this was assumed to influence the GCs' use of the program. The in-depth study of the CEs' program delivery comprised an appraisal of their fidelity, quality of delivery and the kinds of adaptations that were made. Findings indicate that the program was well implemented, given that they: a) implemented the program with moderate to high fidelity, in relation to different parts of the program and the program as a whole; b) delivered the program with high quality, in terms of modeling program principles, by

employing an empowering delivery style and applying interactive delivery, which facilitated active participation among the GCs; and c) made mostly positive adaptations, such as exemplifying, elaborating and responding to the GCs contributions. These adaptations may have contributed to a more thorough understanding of the program content among the GCs. Some negative adaptations were also conducted by a few CEs, which consisted, for the most part, of skipping parts of program content or by showing their own skepticism to some of the program aspects, such as autonomy-supportive principles or having a task-focused coaching approach.

The GCs seemed to appreciate the program and the CEs' program delivery, as they actively participated in the workshop and reported high satisfactory scores at the end of the workshop and six months thereafter. However, the translation of the program from the theoretical workshop into the GCs' practical coaching contexts seemed to meet some challenges. An exploration of possible barriers in using the program showed that the GCs perceived the following barriers to their use of the program: the lack of their own and players' time; the lack of internal support by co-coaches or follow-up by club officials; and the lack of external support or follow-up by program providers. These barriers indicate that the setting, in which the program users act, seems to be more important than how a program is implemented, particularly in terms of the influence of organizational factors and program characteristics. Thus, the findings suggest that there is a need for more involvement and encouragement by club leaders when trying to implement coach education programs in general in a sports club setting. This seems necessary in order to strengthen program adoption, encourage GCs to attend and use coach education programs, and to create more supportive learning climates within the clubs. Such climates may further help solve implementation challenges without leaving this responsibility entirely to the individual GCs alone.

To conclude, a one-day workshop is not enough to enable volunteer GCs to use a coach education program, even if it is implemented with quality and fidelity by CEs. Enhancing the implementation of coach education programs in sports clubs requires an ecological approach, in terms of collaboration between the organizational (e.g., leaders) and individual (e.g., GCs) levels of the clubs. Furthermore, monitoring and evaluating the implementation process are also crucial in order to obtaining knowledge about what works or not, as well as how to enhance future program implementations within sports clubs.

7. References

- 1. European Commission. White paper on sport. Brussels: Commission of European Communities; 2007.
- 2. Crane J, Temple V. A systematic review of dropout from organized sport among children and youth. Eur Phys Educ Rev. 2015;21(1): 114-131.
- 3. Kjønniksen L, Anderssen N, Wold B. Organized youth sport as a predictor of physical activity in adulthood. Scand J Med Sci Sports. 2009;19(5):646-54.
- 4. Molinero O, Salguero A, Alvarez E, et al. Reasons for dropout in youth soccer: a comparison with other team sports. Eur J Hum Mov. 2009;22:21-30.
- 5. Skille EÅ, Solbakken T. The relationship between adolescent sport participation and lifelong participation in physical activity in Norway: a critical analysis. Scand Sport Stud Forum. 2014;5:25-45.
- 6. Gould D. Understanding attrition in children's sport. In: Smith D, Bar-Eli M, editors. Essential readings in sport and exercise psychology. Champaign (IL): Human Kinetics; 2007. p. 401-411.
- 7. Mageau GA, Vallerand RJ. The coach–athlete relationship: a motivational model. J Sports Sci. 2003;21:883-904.
- 8. Occhino JL, Mallet CJ, Rynne SB, et al. Autonomy-supportive pedagogical approach to sports coaching: research, challenges and opportunities. Int J Sports Sci Coach. 2014;9:401-415.
- 9. Smith RE, Smoll FL, Cumming SP. Effects of a motivational climate intervention for coaches on young athletes' sport performance anxiety. J Sport Exercise Psy. 2007; 29:39-59.
- Vallerand R, Rousseau F. Intrinsic and extrinsic motivation in sport and exercise: a review using the hierarchical model of intrinsic and extrinsic motivation. In: Singer RN, Hausenblas HA, Janelle CM, editors. Handbook of sport psychology, 2nd ed. New York (NY): Wiley; 2001. p. 389-416.
- 11. Armour K. What is 'sport pedagogy' and why study it? In: Armour K, editor. Sport pedagogy: an introduction for teaching and coaching. London (UK): Routledge; 2013. p. 11-23.
- 12. Amorose AJ. Coaching effectiveness: exploring the relationship between coaching behavior and self-determined motivation. In: Hagger MS, Chatzisarantis NLD, editors. Intrinsic motivation and self-determination in exercise and sport. Champaign (IL): Human Kinetics. 2007. p. 209-227.
- Capstick AL. The development of youth soccer coaches: an examination within the unique coaching context of recreational youth sport. [dissertation]. University of Ottawa (CA); 2013.
- 14. Langan E, Blake C, Lonsdale C. Systematic review of the effectiveness of interpersonal coach education interventions on athlete outcomes. Psychol Sport Exerc. 2013;14(1):37-49.
- 15. Kokko S, Green LW, Kannas, L. A review of settings-based health promotion with applications to sports clubs. Health Promot Int, 2014;29(3):494-509.

- 16. Kokko S. Sports clubs as settings for health promotion: fundamentals and an overview to research. Scand J Public Health. 2014;42(15 Suppl):60-5.
- 17. Ommundsen Y, Lemyre PN, Abrahamsen F, et al. Motivational climate, need satisfaction, regulation of motivation and subjective vitality: a study of young soccer players. Int J Sport Psychol. 2010;41(3):216-242.
- Wiersma LD, Sherman CP. Volunteer youth sport coaches' perspectives of coaching education/certification and parental codes of conduct. Res Q Exercise Sport. 2005;76(3):324-38.
- 19. Cushion C, Nelson L, Armour K, et al. Coach learning and development: a review of literature. Leeds (UK): Sports Coach UK; 2010.
- 20. Gilbert W, Trudel P. An evaluation strategy for coach education programs. J Sport Behav. 1999;22(2):234-250.
- Nelson L, Cushion C, Potrac P. Enhancing the provision of coach education: the recommendations of UK coaching practitioners. Phys Educ Sport Pedagog. 2013;18(2):204-218.
- 22. Berkel C, Mauricio AM, Schoenfelder E, et al. Putting the pieces together: an integrated model of program implementation. Prev Sci. 2011;12:23-33.
- 23. Carroll C, Patterson M, Wood S, et al. A conceptual framework for implementation fidelity. Implement Sci. 2007;2(1):40-49.
- 24. Dane A, Schneider B. Program integrity in primary and early secondary prevention: are implementation effects out of control. Clin Psychol Rev. 1998;18(1):23-45.
- 25. Durlak JA, DuPre EP. Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. Am J Commun Psychol. 2008:41(3-4):327-50.
- 26. Hasson H. Systematic evaluation of implementation fidelity of complex interventions in health and social care. Implement Sci. 2010;5:67-75.
- 27. Meyers DC, Durlak JA, Wandersman A. The quality implementation framework: a synthesis of critical steps in the implementation process. Am J Commun Psychol. 2012;50(3-4):462-480.
- Dusenbury L, Brannigan R, Falco M, et al. A review of research on fidelity of implementation: implications for drug abuse prevention in school settings. Health Educ Res. 2003;18(2):237-256.
- 29. Rogers EM. Diffusion of innovation. New York (NY): Free Press; 2003.
- 30. Domitrovich CE, Greenberg MT. The study of implementation: current findings from effective programs that prevent mental disorders in school-aged children. J Educ Psychol Cons. 2000;11(2):193-221.
- 31. Durlak JA. Why program implementation is important. J Prev Interv Community. 1998;17(2):5-18.
- 32. Mihalic S, Irwin K, Fagan A, et al. Successful program implementation: lessons from blueprints. Juvenile Justice Bulletin. 2004;2004(July):1-12.
- 33. Rohrbach LA, Grana R, Sussman S, et al. TYPE II translation transporting prevention interventions from research to real-world settings. Eval Health Prof. 2006;29(3):302-333.

- 34. Antikainen I, Ellis R. A RE-AIM evaluation of theory-based physical activity interventions. J Sport Exercise Psy. 2011;33(2):198-214.
- 35. Moore JE, Bumbarger BK, Cooper BR. Examining adaptations of evidencebased programs in natural contexts. J Prim Prev. 2013;34(3):147-161.
- 36. Saunders RP, Ward D, Felton GM, et al. Examining the link between program implementation and behavior outcomes in the lifestyle education for activity program (LEAP). Eval Program Plann. 2006;29(4):352-364.
- Linnan L, Steckler A. Process evaluation for public health interventions and research: an overview. In: Steckler A, Linnan L, editors. Process evaluation for public health interventions and research. San Fransisco (CA): Wiley; 2002. p. 1-23.
- Bopp M, Saunders RP, Lattimore D. The tug-of-war: fidelity versus adaptation throughout the health promotion program life cycle. J Prim Prev. 2013;34(3):193-207.
- 39. Parry-Langdon N, Bloor M, Audrey S, et al. Process evaluation of health promotion interventions. Policy Polit. 2003;31(2):207-216.
- 40. Saunders RP, Evans MH, Joshi P. Developing a process-evaluation plan for assessing health promotion program implementation: a how-to guide. Health Promot Pract. 2005;6(2):134-47.
- 41. Durlak J. Studying program implementation is not easy but it is essential. Prev Sci, 2015;16(8):1123-1127.
- 42. Elliot D, Mihalic S. Issues in disseminating and replicating effective prevention programs. Prev Sci. 2004;5(1):47-53.
- 43. Mihalic S. The importance of implementation fidelity. Emotional Behav Disorders Youth. 2004;Fall 2004:83-105.
- 44. Ogden T, Fixsen DL. Implementation science: a brief overview and a look ahead. Z Psychol. 2014;222(1):4-11.
- 45. Domitrovich CE, Gest SD, Jones D, et al. Implementation quality: lessons learned in the context of the Head Start REDI trial. Early Child Res Q. 2010;25(3):284-298.
- 46. Côté J. The development of coaching knowledge. Int J Sports Sci Coach. 2006;1(3):217-222.
- 47. Nash C, Sproule J. Insights into experiences: reflections of an expert and novice coach. Int J Sports Sci Coach. 2011;6(1):149-161.
- Swennen A, Lunenberg M, Korthagen F. Preach what you teach! Teacher educators and congruent teaching. Teachers and Teaching. 2008;14(5-6):531-542.
- 49. Hammond J, Perry J. A multi-dimensional assessment of soccer coaching course effectiveness. Ergonomics. 2005;48(11-14):1698-1710.
- 50. Duda JL, Quested E, Haug E, et al. Promoting Adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity (PAPA): Background to the project and main trial protocol. Int J Sport Exercise Psy. 2013;11(4):319-327.

- Duda JL. The conceptual and empirical foundations of Empowering Coaching[™]: setting the stage for the PAPA project. Int J Sport Exercise Psy. 2013;11(4):311-318.
- 52. Smith N, Tessier D, Tzioumakis Y, et al. Development and validation of the Multidimensional Motivational Climate Observation System. J Sport Exercise Psy. 2015;37(1):4-22.
- 53. Appleton PR, Ntoumanis N, Quested E, et al. Initial validation of the coachcreated Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C). Psychol Sport Exerc. 2016;22:53-65.
- Amorose AJ, Anderson-Butcher D. Autonomy-supportive coaching and selfdetermined motivation in high school and college athletes: a test of selfdetermination theory. Psychol Sport Exerc. 2007;8(5):654-670.
- 55. Ommundsen Y, Roberts GC, Lemyre PN, et al. Parental and coach support or pressure on psychosocial outcomes of pediatric athletes in soccer. Clin J Sport Med. 2006;16(6):522-6.
- Reinboth M, Duda JL, Ntoumanis N. Dimensions of coaching behavior, need satisfaction, and the psychological and physical welfare of young athletes. Motiv Emotion. 2004;28(3):297-313.
- 57. Duda JL, Balaguer I. Coach-created motivational climate. In: Jowett S, Lavallee D, editors. Social psychology in sport. Champaign (US): Human Kinetics Publishers; 2007. p. 117-130.
- 58. Nicholls JG. The competitive ethos and democratic education. Cambridge (MA): Harvard University Press; 1989.
- Elliot AJ. A conceptual history of the achievement goal construct. In: Elliot AJ, Dweck CS|, editors. Handbook of competence and motivation. New York (NY): Guilford Press; 2005. p. 52–72.
- Duda JL. Motivation in sport. In: Elliot AJ, Dweck CS, editors. Handbook of competence and motivation. New York (NY): Guilford Press; 2005. p. 318-335.
- 61. Deci EL, Ryan RM. The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. Psychol Inq. 2000;11(4):227-268.
- 62. Mallett C. Quality Coaching, Learning and Coach Development. Jpn J Sport Educ Stud. 2011;30(2):51-62.
- 63. Knoche LL, Sheridan SM, Edwards CP, et al. Implementation of a relationship-based school readiness intervention: a multidimensional approach to fidelity measurement for early childhood. Early Child Res Q. 2010;25(3):299-313.
- 64. Dusenbury L, Brannigan R, Hansen WB, et al. Quality of implementation: developing measures crucial to understanding the diffusion of preventive interventions. Health Educ Res. 2005;20(3):308-313.
- 65. Breitenstein SM, Gross D, Garvey CA, et al. Implementation fidelity in community-based interventions. Res Nurs Health. 2010;33(2):164-173.

- 66. Kam CM, Greenberg MT, Walls CT. Examining the role of implementation quality in school-based prevention using the PATHS curriculum. Promoting Alternative THinking Skills Curriculum. Prev Sci. 2003;4(1):55-63.
- 67. Hawe P, Shiell A, Riley T, et al. Methods for exploring implementation variation and local context within a cluster randomised community intervention trial. Journal of Epidemiol Commun H. 2004;58(9):788-793.
- 68. Lipsey MW, Cordray DS. Evaluation methods for social intervention. Annu Rev Psychol. 2000;51:345-75.
- 69. Pawson R, Tilley N. Realistic evaluation. London (UK): Sage; 1997.
- 70. Pfadenhauer LM, Mozygemba K, Gerhardus A, et al. Context and implementation: a concept analysis towards conceptual maturity. Z Evid Fortbild Qual Gesundhwes. 2015;109(2):103-114.
- 71. Casey MM, Payne WR, Eime RM. Organisational readiness and capacity building strategies of sporting organisations to promote health. Sport Manage Rev. 2012;15(1):109-124.
- 72. Fixen DL, Naoom SF, Blase KA, et al. Implementation research: a synthesis of the literature. Tampa, FL: University of South Florida, Louis de la Parte FLorida Mental Health institute, The National Implementation Research Network (FMHI Publication #231); 2005.
- 73. Wandersman A, Duffy J, Flaspohler P, et al. Bridging the gap between prevention research and practice: the interactive systems framework for dissemination and implementation. Am J Commun Psychol. 2008;41(3-4):171-181.
- 74. Estabrooks CA, Squires JE, Cummings GG, et al. Development and assessment of the Alberta context tool. BMC Health Serv Res. 2009;9(1):1-12.
- 75. Pettigrew AM. What is a processual analysis? Scand J Manag. 1997;13(4):337-348.
- Oakley A, Strange V, Bonell C, et al. Process evaluation in randomised controlled trials of complex interventions. BMJ. 2006;332(7538):413-6.
- 77. Domitrovich CE, Bradshaw CP, Poduska JM, et al. Maximizing the implementation quality of evidence-based preventive interventions in schools: a conceptual framework. Adv Sch Ment Health Promot. 2008;1(3):6-28.
- 78. Molloy LE, Moore JE, Trail J, et al. Understanding real-world implementation quality and "active ingredients" of PBIS. Prev Sci. 2013;14(6):593-605.
- Wandersman A. Community science: bridging the gap between science and practice with community-centered models. Am J Commun Psychol. 2003;31(3-4):227-242.
- 80. Forgatch M, Patterson G, DeGarmo D. Evaluating fidelity: predictive validity for a measure of competent adherence to the Oregon model of parent management training. Behav Ther. 2005;36(1):3-13.
- 81. Tobler NS, Roona MR, Ochshorn P, et al. School-based adolescent drug prevention programs: 1998 Meta-Analysis. J Prim Prev. 2000;20(4):275-336.

- 82. Pettigrew J, Graham JW, Miller-Day M, et al. Adherence and delivery: implementation quality and program outcomes for the seventh-grade keepin' it REAL program. Prev Sci. 2014;16(1):90-99.
- 83. Schoenfelder EN. Behavioral and subjective participant responsiveness to a manualized preventive intervention. [dissertation]. Arizona (US): Arizona State University; 2012.
- 84. Feagans Gould L, Mendelson T, Dariotis JK, et al. Assessing fidelity of core components in a mindfulness and yoga intervention for urban youth: applying the CORE process. New Dir Youth Dev. 2014;2014(142):59-81.
- 85. Century J, Rudnick M, Freeman C. A framework for measuring fidelity of implementation: a foundation for shared language and accumulation of knowledge. Am J Eval. 2010;31(2):199-218.
- 86. Schoenfelder EN, Sandler IN, Millsap RE, et al. Caregiver responsiveness to the family bereavement program: what predicts responsiveness? What does responsiveness predict? Prev Sci. 2013;14(6):545-556.
- 87. Creswell JW. Qualitative inquiry & research design: choosing among five approaches. 3rd ed. Thousand Oaks (CA): Sage; 2013.
- Noor KBM. Case study: a strategic research methodology. Am J Appl Sci. 2008;5(11):1602-1604.
- 89. Yin RK. Case study research: design and methods. 4th ed. Thousand Oaks (CA): Sage; 2009.
- 90. Collins KM, Onwuegbuzie AJ, Sutton IL. A model incorporating the rationale and purpose for conducting mixed methods research in special education and beyond. Learn Disabilities: a Contemp J. 2006;4(1):67-100.
- 91. Johnson RB, Onwuegbuzie AJ, Turner LA. Toward a definition of mixed methods research. JMMR. 2007;1(2):112-133.
- 92. O'Cathain A. Editorial: mixed methods research in the health sciences: a quiet revolution. JMMR. 2009;3(1):3-6.
- 93. Nelson L. Understanding coach learning. [dissertation]. Loughborough University (UK); 2010.
- 94. Bazeley P. Computerized data analysis for mixed methods research. In: Tashakkori A, Teddlie C, editors. Handbook of mixed methods in social & behavioral research. Thousand Oaks (CA): Sage; 2003. p. 385-422.
- 95. Creswell JW. Research design: qualitative, quantitative, and mixed methods approaches. 4th ed. Los Angeles (CA): Sage; 2014.
- 96. Teddlie C, Yu F. Mixed methods sampling: a typology with examples. JMMR. 2007;1(1):77-100.
- 97. UEFA. Coaching convention. Switzerland: UEFA; 2015. [cited 2016 July 2]. Available online: http://www.uefa.org/football-development/technical/coacheducation/
- Field A. Discovering statistics using IBM SPSS statistics. 4th ed. London (UK): Sage; 2013.
- 99. PAPA. Promoting Adolescent Physical Activity. [cited 2016 May 15]. Available from: http://www.projectpapa.org

- 100. Miles MB, Huberman AM. Qualitative data analysis: a sourcebook of new methods. Thousand Oaks (CA): Sage; 1994.
- 101. Heath C, Hindmarsh J, Luff P. Video in qualitative research: analysing social interaction in everyday life. London (UK): Sage; 2010.
- 102. QSR International. QSR NVivo10 [software]. Available from: www.qsrinternational.com
- Silverman D. Doing qualitative research: a practical handbook. London (UK): Sage; 2005.
- 104. Malterud K. Kvalitative metoder i medisinsk forskning. En innføring [Qualitative methods]. Oslo: Universitetsforlaget; 2011.
- 105. IBM. IBM SPSS Software. Available from: http://www.ibm.com/analytics/us/en/technology/spss/spss.html
- 106. Pallant J. SPSS survival manual. 5th ed. UK:McGraw-Hill Education. 2013.
- 107. Watkins MW. Monte Carlo PCA for parallel analysis [software]. 2000. Available online: http://www.softpedia.com/dynpostdownload.php/80a0951765cd07dc61761990a234eb6b/554202f8/dbf8/4/2
- 108. Ledesma RD, Valero-Mora P. Determining the number of factors to retain in EFA: an easy-to-use computer program for carrying out parallel analysis. Pract Assess Res Eval. 2007;12(2).
- 109. Attride-Stirling J. Thematic networks: an analytic tool for qualitative research. Qual Res. 2001;1(3):385-405.
- 110. Fereday J, Muir-Cochrane E. Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. Int J Qual Methods. 2006;5(1):80-92.
- Richards L. Handling qualitative data: a practical guide. 2nd ed. London (UK): Sage; 2009.
- 112. Malterud K. Qualitative research: standards, challenges, and guidelines. Lancet. 2001;358:483-488.
- 113. Lacey A, Luff D. Qualitative research analysis. Sheffield (UK): Trent TDSU; 2007.
- Nelson LJ, Cushion CJ, Potrac P. Formal, nonformal and informal coach learning: a holistic conceptualisation. Int J Sports Sci Coach. 2006;1(3):247-259.
- 115. Culver DM, Trudel P. Cultivating coaches' communities of practice: developing the potential for learning through interactions. In: Jones RL, editor. The sports coach as educator: re-conceptualising sports coaching. Oxon (UK): Routledge; 2006. p. 97-112.
- 116. Cassidy T, Potrac P, McKenzie A. Evaluating and reflecting upon a coach education initiative: the CoDe of rugby. Sport Psychol. 2006;20:145-161.
- 117. Wright T, Trudel P, Culver D. Learning how to coach: the different learning situations reported by youth ice hockey coaches. Phys Educ Sport Pedagog. 2007;12(2):127-144.
- 118. Gilbert WD, Trudel P. Learning to coach through experience: conditions that influence reflection. Phys Educ. 2005;62(1 Winter):32-43.

- 119. Nash C, Sproule J. Coaches perceptions of their coach education experiences. Int J Sport Psychol. 2012;43:33-52.
- Vella SA, Crowe TP, Oades LG. Increasing the effectiveness of formal coach education: evidence of a parallel process. Int J Sports Sci Coach. 2013;8(2):417-430.
- 121. Griffiths MA, Armour KM. Volunteer sport coaches and their learning dispositions in coach education. Int J Sports Sci Coach. 2013;8(4):677-688.
- 122. Armour K. Effective career-long professional development for teachers and coaches. In: Armour K, editor. Sport pedagogy: an introduction for teaching and coaching. London (UK): Routledge; 2013. p. 229-243.
- 123. Culver D, Trudel P. Clarifying the concept of communities of practice in sport. Int J Sports Sci Coach. 2008;3(1):1-10.
- 124. Lemyre F, Trudel P, Durand-Bush N. How youth-sport coaches learn to coach. Sport Psychol. 2007;21(2):191-209.
- Cushion CJ, Armour KM, Jones RL. Coach education and continuing professional development: experience and learning to coach. Quest. 2003;55(3):215-230.
- 126. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. Psychol Rev. 1977;84(2):191-215.
- 127. Bandura A. Self-efficacy. In: Ramachaudran VS, editor. Encyclopedia in human behavior. New York (NY): Academic Press; 1994. p. 71-81.
- 128. Bandura A. Self-efficacy: the exercise of control. New York (NY): WH Freeman and Company; 1997.
- 129. Feltz DL, Lirgg CD. Self-efficacy beliefs of athletes, teams, and coaches. In: Singer RN, Hausenblas HA, Janelle C, editors. Handbook of sport psychology, 2nd ed. New York (NY): Wiley; 2001. p. 340-361.
- 130. Werthner P, Trudel P. A new theoretical perspective for understanding how coaches learn to coach. Sport psychol. 2006;20(2):198-212.
- 131. Larsen T, Van Hoye A, Tjomsland HE, et al. Creating a supportive environment among youth football players: a qualitative study of French and Norwegian youth grassroots football coaches. Health Educ. 2015;115(6):570-586.
- 132. PAPA. Final Report Summary PAPA (Promoting Adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity). European Commission: CORDIS (COmmunity Research and Development Information Service); 2014. Available online: http://cordis.europa.eu/result/rcn/147637_en.html
- Cushion C. Coach behaviour. In: Lyle J, Cushion C, editors. Sports coaching: professionalisation and practice. Edinburgh: Elsevier Health Sciences; 2010. p. 103-139.
- 134. Feltz DL, Chase MA, Moritz SE, et al. A conceptual model of coaching efficacy: preliminary investigation and instrument development. J Educ Psychol. 1999;91(4):765-776.

- 135. Jones RL, Wallace M. Another bad day at the training ground: coping with ambiguity in the coaching context. Sport Educ Soc. 2005;10(1):119-134.
- Cushion CJ, Armour KM, Jones RL. Locating the coaching process in practice: models 'for'and 'of'coaching. Phys Educ Sport Pedagog, 2006;11(01):83-99.
- 137 Langdon, J., et al., Development and implementation of an autonomy supportive training program among youth sport coaches. Int Sport Coach J, 2015;2:169-177.
- Geidne S, Quennerstedt M, Eriksson C. The implementation process of alcohol policies in eight Swedish football clubs. Health Educ. 2013;113(3):196-215.
- Skille, EÅ. Competitiveness and health: the work of sport clubs as seen by sport clubs representatives - a Norwegian case study. Int Rev Sociol Sport. 2010;45(1):73-85.
- 140. Kokko S, Donaldson A, Geidne S, et al. Piecing the puzzle together: case studies of international research in health-promoting sports clubs. Glob Health promot. 2016;23(1 suppl):75-84.
- Meganck J, Scheerder J, Thibaut E, et al. Youth sports clubs' potential as health-promoting setting: profiles, motives and barriers. Health Educ J. 2015;74(5):531-543.
- 142. Kokko S, Villberg J, Kannas L. Health promotion in sport coaching: coaches and young male athletes evaluations on the health promotion activity of coaches. Int J Sports Sci Coach. 2015;10(2-3):339-352.
- Kokko S, Kannas L, Villberg J. Health promotion profile of youth sports clubs in Finland: club officials' and coaches' perceptions. Health Promot Int. 2009;24(1):26-35.
- 144. Van Hoye A, Sarrazin P, Heuzé JP, et al. Coaches' perceptions of French sports clubs: health-promotion activities, aims and coach motivation. Health Educ J. 2015;74(2):231-243.
- 145. Geidne S, Quennerstedt M, Eriksson C. The youth sports club as a healthpromoting setting: an integrative review of research. Scand J Public Health. 2013;41(3):269-83.
- 146. Cassidy T, Jones R, Potrac P. Understanding sports coaching: the social, cultural and pedagogical foundations of coaching practice. 2nd ed. Oxon (UK): Routledge; 2004.
- 147. Griffiths MA, Armour KM, Cushion CJ. 'Trying to get our message across': successes and challenges in an evidence-based professional development programme for sport coaches. Sport Educ Soc, 2016 [cited 2016 June 20]. 10.1080/13573322.2016.1182014
- Saunders N, Otago L, Romiti M, et al. Coaches' perspectives on implementing an evidence-informed injury prevention programme in junior community netball. Br J Sports Med, 2010;44(15):1128-32.

- Rohrbach LA, Gunning M, Sun P, et al., The project Towards No Drug abuse (TND) dissemination trial: implementation fidelity and immediate outcomes. Prev Sci. 2010;11:77-88.
- 150. Gilbert W, Trudel P. Learning to coach through experience: reflection in model youth sports coaches. J Teach Phys Educ. 2001;21(1, October):16-34.
- 151. Ertesvåg SK, Roland P, Vaaland, GS, et al. The challenge of continuation: schools' continuation of the Respect program. J Educ Change. 2010;11:323-344.
- 152. Larsen T, Samdal O. Implementing second step: balancing fidelity and program adaptation. J Educ Psychol Cons. 2007;17(1):1-29.
- 153. O'Cathain A. Assessing the quality of mixed methods research: toward a comprehensive framework. In: Handbook of mixed methods in social and behavioral research, Tashakkori A, Teddlie C, editors. Thousand Oaks (CA): Sage; 2010. p. 531-555.
- 154. Onwuegbuzie AJ, Johnson RB. The validity issue in mixed research. Res Sch. 2006;13(1):48-63.
- 155. Dellinger AB, Leech NL. Toward a unified validation framework in mixed methods research. JMMR. 2007;1(4):309-332.
- 156. Tashakkori A, Teddlie C, Johnson B. Mixed methods. International Encyclopedia of the Social & Behavioral Sciences, 2nd ed. Elsevier: 2015, vol.15. p: 618-623. Available online: http://www.sciencedirect.com/science/article/pii/B9780080970868105501
- 157. Rosenstein B. Video use in social science research and program evaluation. Int J Qual Methods. 2002;1(3):22-43.
- 158. Ratcliff D. Video methods in qualitative research. In: Camic PM, Rhodes JE, Yardley L, editors. Qualitative research in psychology: expanding perspectives in methodology and design. Washington (DC): American Psychological Association; 2003. p. 113-129.
- 159. Padgett DK. Qualitative and mixed methods in public health. Thousand Oaks (CA): Sage; 2012.
- 160. Aarons GA, Fettes DL, Sommerfeld DH, et al. Mixed methods for implementation research: application to evidence-based practice implementation and staff turnover in community-based organizations providing child welfare services. Child Maltreatment. 2012;17(1):67-79.
- 161. Tariq S, Woodman J. Using mixed methods in health research. J R Soc Med Short Reports. 2010;0:1-8.
- 162. O'Cathain A, Murphy E, Nicholl J. Three techniques for integrating data in mixed methods studies. BMJ. 2010;341:c4587.
- 163. Merriam S. Case study research in education: a qualitative approach. San Fransisco (CA): Jossey-Bass; 1988.
- 164. Palinkas LA, Aarons GA, Horwitz S, et al. Mixed method designs in implementation research. Adm Policy Ment Hlth. 2011;38(1):44-53.

- Plano Clark VL, Anderson N, Wertz JA, et al. Conceptualizing longitudinal mixed methods designs: a methodological review of health sciences research. JMMR. 2015;9(4):297-319.
- Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2016:26(13):1753-1760.
- 167. Lincoln YS, Guba EG. Naturalistic inquiry. Beverly Hills (CA): Sage; 1985.
- 168. Smith N, Quested E, Appleton PR, et al. Observing the coach-created motivational environment across training and competition in youth sport. J Sports Sci. 2016 [cited 2016 May 1]. doi:10.1080/02640414.2016.1159714
- Tessier D, Smith N, Tzioumakis Y, et al. Comparing the objective motivational climate created by grassroots soccer coaches in England, Greece and France. Int J Sport Exercise Psy. 2013;11:365-383.
- 170. Smith N, Tessier D, Tzioumakis Y, et al. The relationship between observed and perceived assessments of the coach-created motivational environment and links to athlete motivation. Psychol Sport Exerc. 2016;23:51-63.
- 171. Van Hoye A, Larsen T, Sovik M, et al. Evaluation of the coaches educators training implementation of the PAPA project: a comparison between Norway and France. Scand J Med Sci Sports. 2015;25(5):e539-e546.
- 172. Finlay L. Through the looking glass: intersubjectivity and hermeneutic reflection. In: Finlay L, Gough B, editors. Reflexivity: a practical guide for researchers in health and social sciences. Oxford (UK): Blackwell Science Ltd; 2003. p. 105-119.
- 173. Gibbs GR. Analyzing qualitative data. In: Flick U, editor. The Sage qualitative research kit. Thousand Oaks (CA): Sage; 2007.
- Curry LA, Nembhard IM, Bradley EH. Qualitative and mixed methods provide unique contributions to outcomes research. Circulation. 2009;119(10):1442-52.
- 175. Ziman J. Real science: what it is, and what it means. Cambridge (UK): Cambridge University Press; 2000.
- 176. Finlay L. "Outing" the researcher: the provenance, process, and practice of reflexivity. Qual Health Res. 2002;12(4):531-545.
- 177. NFF. Barnefotball. Verdier og virkemidler. Et hefte for deg som jobber med barn mellom 6-12 år. [cited 2016 July 25]. Available from: <u>www.fotball.no</u>

IV



Bente Wold bente.wold@psyhp.uib.no HEMIL-senteret Universitetet i Bergen

Vår ref	Dato
2010/671	26.03.10

Ad. prosjekt: Trivsel i barne- og ungdomsfotball (2010/ 671)

Det vises til din søknad datert 25.02.10.

Komiteen behandlet søknaden i møtet den 18.03.10.

Hensikten med prosjektet er å tilby opplæring om motivasjon til fotballtrenere, og se om det skjer en forandring i spillernes motivasjon og engasjement i forhold til fotball i løpet av fotballsesongen. Målet med opplæringsprogrammet er å fremme kvaliteten i barn og unges deltakelse i idrett. Prosjektets formål ligger utenfor helseforskningslovens virkeområde (§§ 2,4b), og man anser derfor ikke prosjektet som fremleggingspliktig for REK.

En gjør oppmerksom på at prosjekter som ikke omfattes av helseforskningsloven, men som innebærer behandling av personopplysninger (herunder avidentifiserbare opplysninger) skal fremlegges for et personvernombud/Norsk samfunnsvitenskaplig datatjeneste.

Vedtak:

Søknaden avvises da prosjektet ligger utenfor komiteens mandat. Prosjektet kan således i prinsippet gjennomføres uten godkjenning fra REK, som ikke har innvendinger mot at resultatene eventuelt blir publisert.

Vennlig hilsen

Jon Lekven leder

> Camilla Gjerstad rådgiver

(Brevet er godkjent for elektronisk utsending uten signatur

Postadresse:	E-post: rek-vest@uib.no	Regional komité for medisinsk	Besøksadresse:
REK Vest		og helsefaglig forskningsetikk,	2. etasje, sentralblokken,
Postboks 7804	Hjemmeside:	Vest-Norge	Haukeland universitetssykehus
5020 Bergen	http://helseforskning.etikkom.no/xnet/public	Telefon 55 97 84 97 / 98 / 99	

Org no. 874 789 542

Ny ordning fra 01.07.09:

En gjør oppmerksom på at denne søknaden er vurdert i henhold til helseforskningsloven, som ble satt i kraft 01.07.09. Dette innebærer at REK fra og med denne dato har kompetanse til å godkjenne opprettelse og endring av forskningsbiobank, å innvilge dispensasjon fra taushetsplikt og å gi tillatelse til bruk av personopplysninger til forskning.

De regionale komiteene for medisinsk og helsefaglig forskningsetikk foretar sin forskningsetiske vurdering med hjemmel i helseforskningsloven § 10, jfr. forskningsetikkloven § 4.

Saksbehandlingen følger forvaltningsloven. Komiteenes vedtak etter forskningsetikklovens § 4 kan påklages (jfr. forvaltningsloven § 28) til Den nasjonale forskningsetiske komité for medisin og helsefag. Klagen skal sendes REK Vest (jfr. forvaltningsloven § 32). Klagefristen er tre uker fra den dagen du mottar dette brevet (jfr. forvaltningsloven § 29).



Invitasjon til å delta i prosjektet "Trivsel i barne- og ungdomsfotball"

Kjære trenerutvikler,

Vi er en gruppe forskere fra Universitetet i Bergen og Norges Idrettshøgskole som i samarbeid med forskere fra fire andre europeiske nasjoner, gjennomfører et prosjekt om barne- og ungdomsfotball. Deltakerne i undersøkelsen er fotballspillere, både gutter og jenter, i alderen 10-14 år fra Norge, Storbritannia, Frankrike, Hellas og Spania. Prosjektet er støttet av fotballforbundene i alle landene, inkludert Norges Fotballforbund. Dette betyr ikke at du er forpliktet til å delta i prosjektet.

Målet for prosjektet er å tilby fotballtrenere opplæring innen motivasjonsteknikker, for så å undersøke om det skjer en forandring i spillernes motivasjon, samt kvaliteten på spillernes engasjement til fotball i løpet av fotballsesongen. Denne studien kan hjelpe oss med å utvikle en praktisk veiledning for trenere i Norge og i andre land. Målet er å sikre at unge fotballspillere mottar den nødvendige støtten som skal til for å opprettholde trivsel og motivasjon gjennom hele sesongen.

Vi vil gjerne invitere deg til å delta i pilot fasen av denne studien. I denne delen av prosjektet er vi opptatt av å prøve ut opplegget og dine erfaringer som deltager er derfor viktig for oss. Det innebærer at vi ønsker å gjennomføre et fokusgruppeintervju i etterkant av opplæringen, der tema er trenernes opplevelse av opplæringsprogrammet, deres synspunkter på egen rolle som trener og refleksjoner knyttet til innholdet i programmet. Disse intervjuene vil vare ca en time, og det vil bli tatt lyd- eller video-opptak av intervjuene. For å samle inn mer informasjon om ulike formidlingsstiler, i forhold tilopplæringsprogrammet, ønsker vi også filme disse opplæringshelgene.

Det er helt frivillig å delta i dette prosjektet, noe som betyr at du kan bestemme deg for å ikke delta på hvilket som helst tidspunkt uten negative følger. Dersom du ikke ønsker å delta, eller velger å trekke deg senere, vil det ikke få noen konsekvenser for ditt forhold til Norges Fotballforbund.

Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS. Lyd-/videoopptak vil bli slettet og alt datamateriale anonymisert ved prosjektslutt, senest innen 31.03.2018.

Ved å delta i dette prosjektet gir du også ditt samtykke til at vi kan bruke datamaterialet til vitenskapelige formål, og til å eventuelt å publisere resultatet i vitenskapelige tidsskrift.

Ta gjerne kontakt med oss dersom du har spørsmål angående prosjektet. Vår kontaktinformasjon står under. Vi håper at du vil støtte dette verdifulle prosjektet.

Vennlig hilsen,

Professor Bente Wold

Professor Oddrun Samdal Professor Yngvar Ommundsen

Kontaktopplysninger for prosjektleder og behandlingsansvarlig institusjon : Bente Wold, HEMIL-senteret, Det psykologiske fakultet, Universitetet i Bergen. <u>bente.wold@psyhp.uib.no</u>, tlf. 5558 3223



TILBUD OM Å DELTA PÅ KURSET *MOTIVERENDE LEDERSKAP* FOR FOTBALLTRENERE

xxx skal arrangere kurs i **Motiverende Lederskap** for trenere i aldersbestemt gutte- og jentefotball

Norges idrettshøgskole og HEMIL senteret ved Universitetet i Bergen gjennomfører et større prosjekt i fotballsesongen 2011 i samarbeid med Norges fotballforbund og xxx fotballkrets. I hver krets er noen klubber valgt ut som arrangørklubber, og xxx er en av arrangørklubbene i xxx (fylke). **Du** og **ditt lag**, får nå tilbud om å delta på kurset!

xxx arrangerer kurs: dag dato.måned

Om forskningsprosjektet: Et større Europeisk prosjekt som gjennomføres i Norge, England, Frankrike, Hellas og Spania. Målet med prosjektet er å evaluere et nytt og unikt trenerkurs i aldersbestemt fotball. I Norge involverer prosjektet 650 spillere og 55 lag i hver av de tre fotballkretene.

Om kurset: Trenerkurset har som mål å fremme trivsel, motivasjon og spillerutvikling i aldersbestemt fotball. Kurset er på 6 timer, er gratis, og holdes i klubblokale/ klasserom. Det gir en teoretisk og praktisk innføring i hvordan trenere kan skape et godt motivasjonsklima blant unge spillere. Innholdet baserer seg på nyere forskning innen motivasjon og fotball. Kurset har fått gode tilbakemeldinger i en utprøvingsfase.

Kursinstruktører: Instruktørene på kurset i xxx (fylke) er håndplukket av NFF sentralt i samarbeid med xxx fotballkrets.

Hva innebærer det å bli med? Dersom du takker ja til å delta på kurset innebærer det at du og laget ditt er prosjektdeltagere. Du forplikter deg da på å delta på trenerkurset i *Motiverende Lederskap*, dag dato måned. Du vil i tillegg få personlig tilgang til en nettside i prosjektet der det månedlig legges ut ressursmateriell gjennom hele fotballsesongen 2011 som en oppfølger til kurset. Du og dine spillere vil også bli bedt om å fylle ut et spørreskjema før sesongen, ved slutten av sesongen, og i begynnelsen av følgende sesong. Som ledd i en ytterligere evaluering

UNIVERSITETET I BERGEN (



NORGES IDRETTSHØGSKOLE







På vei mot bedre idrettsopplevelse blant barn og unge

av trenerkurset, vil vi også på et senere tidspunkt forespørre noen trenere om å delta i intervjuer, og om å filme noen av treningsøktene og kampene.

Påmelding: Vi håper at dette er noe for deg og at du melder deg på snarest! Dersom laget du har ansvar for har to trenere, må begge to takke ja for at dere kan være med på kurset.

Spørreskjemaundersøkelsen: Forskere fra Universitet i Bergen vil senere ta kontakt med deg i forhold til å avtale tid og sted for å svare på spørreskjemaene. Vi vil sørge for innhenting av nødvendig samtykke fra spillere/foreldre til å fylle ut spørreskjemaene.

Frivillig: Det er helt frivillig å delta i dette prosjektet. Det innebærer at du på hvilket som helst tidspunkt kan bestemme deg for å trekke deg/ikke delta uten negative følger.

Vennlig hilsen

Stipendiat Vidar Ertesvåg og professor Yngvar Ommundsen	Professor Bente Wold
Norges Idrettshøgskole	Universitetet i Bergen
Eventuelle spørsmål kan rettes til:	
Vidar Ertesvåg ved Norges Idrettshøgskole	

vidar.ertesvag@nih.no













Informasjon om prosjektet "Trivsel i barne- og ungdomsfotball"

Bergen/Oslo 28/3-11

Kjære trener,

Tusen takk for at du/dere har sagt dere villige til å delta i forskningsprosjektet **"Trivsel i barne- og ungdomsfotball"** ved å være med på en spørreskjema-undersøkelse blant 11-14 årige spillere og deres trenere. Gjennom dette er du/dere med på å gi dere selv og oss (Universitetet i Bergen, Norges idrettshøgskole og vår alliansepartner Norges Fotballforbund) ny kunnskap om trivsel, motivasjon og læring i fotballen for barn og unge, ikke minst i forhold til hvordan trenere kan fungere godt som motiverende ledere. Som en takk for innsatsen vil ditt lag motta en sekk med fotballer. Undersøkelsen vil bli gjennomført i begynnelsen og i slutten av denne sesongen, så vel som i begynnelsen av neste sesong.

Hvordan møter vi dere for å svare på spørreskjemaene?

Her er det to muligheter:

- <u>En samling for spillerne på et klubbhus utenom trening</u>. Dersom dere allikevel skal ha eller har mulighet for å arrangere en sosial samling med laget kan våre ansvarlige for datainnsamlingen besøke dere og dele ut og samle inn utfylte skjemaer.
- 2. I forbindelse med en trening
 - Våre ansvarlige for datainnsamlingen kan besøke dere på en trening. Et godt opplegg da vil være at treningen avsluttes 20 minutter tidligere enn vanlig og at dere bruker disse 20 minuttene samt litt tid i etterkant av treningen til å besvare spørreskjemaene

Hvor lang tid tar det å fylle ut skjemaene?

Det varierer litt, men de fleste vil klare dette på under 30 minutter. Men det alltid noe variasjon i hvor hurtig denne aldersgruppen leser og krysser av på skjemaet. Vi vil derfor oppfordre til at det settes av 40 minutter fra vi kommer og introduserer oss til dere har fylt ut skjemaene og vi drar igjen.

Praktisk gjennomføring

Vi ber om at du bidrar med å tilrettelegge for et egnet sted for utfylling av skjema, og motivere spillerne til å være med. Det vil være vanskelig å få til en god datainnsamling utendørs, særlig dersom været er dårlig, så vi håper dere har tilgang til et klubbhus, klasserom eller lignende der det er tilgang til bord og stoler, og der spillerne ikke må sitte for tett. Vi tar med materiell for utfylling (blyanter og lignende).

NB! Viktig!:

- Foreldre informeres i forkant om at treningen denne dagen vil ta noe lenger tid enn vanlig.
- At alle spillerne på laget møter opp for denne treningen eller samlingen for spillerne (også spillere som måtte være skadet og ikke kan delta på selve treningen)

Informasjon til foreldre: Prosjektet er meldt til Etikk-komiteen ved Universitetet i Birmingham, som er behandlingsansvarlig institusjon for prosjektet. Når det gjelder undersøkelsen blant spillerne, innebærer tillatelsen passivt samtykke fra foreldrene. Det er derfor viktig at vi får informert foreldre om at de har mulighet til å trekke barna sine fra deltagelse i denne studien dersom de skulle ønske det.

Dette kan vi praktisk løse på følgende måter:

- 1. Du kan videresende vedlegget som kom med denne e-posten (*informasjon_om_studien_til_foreldre_2.doc*) til spillere og foreldre
- 2. Du kan skrive ut vedlegget og dele ut på neste trening.
- 3. Vi kan sende deg informasjonsskrivet i posten, som du kan dele ut på trening.

Vennligst gi beskjed tilbake på epost dersom du vil ha tilsendt disse info-skrivene i posten, ellers antar vi at du sender denne informasjonen videre selv.

Personvern: Det er helt frivillig for spillerne å delta i spørreskjemaundersøkelsene, og all informasjon som han/hun gir fra seg vil bli behandlet helt konfidensielt. Informasjonen som samles inn vil være avidentifisert, hvilket betyr at ingen skal skrive sitt navn på skjemaene, og data vil bli lagret i avidentifisert form, slik at det ikke vil være mulig å identifisere den enkelte trener eller spiller direkte. Selv om det hjelper vår studie om alle spørsmålene er besvart, er dere ikke forpliktet til å svare på alle spørsmålene. Det er mulig til å trekke seg fra studien på ethvert tidspunkt ved å informere oss. Dersom du senere velger å trekke deg, vil det ikke få innvirkning på forholdet til fotballkretsen eller Norges Fotballforbund.

Vi vil bruke datamaterialet til vitenskapelig arbeid, og publisere resultatene i vitenskapelige tidsskrifter. Det vil ikke være mulig å gjenkjenne enkeltpersoner eller –lag i publikasjoner. Når studien er fullført vil din klubb motta en rapport der hovedresultatene fra studien blir presentert sammen med våre konklusjoner og anbefalinger. Denne rapporten vil foreligge i anonym form.

Vi trenger følgende informasjon fra deg snarest og innen ... :

- 1. Tid og sted (besøksadresse til banen/stedet dere trener) for gjennomføring av spørreskjema-undersøkelsen.
- 2. Tilgang på lokaliteter for utfylling av skjemaene: Klubbhus m/ bord & stoler? Garderobe? Kun ute?
- **3.** Hvor mange trenere og hvor mange spillere som vil være til stede. Vi ønsker at spillere som er skadet blir bedt om å komme denne dagen, og at alle trenere på laget også fyller ut trenerskjemaet.

4. Kun dersom du vil ha informasjonsskriv til foreldre sendt i posten: Din postadresse.

Vi håper på din velvilje og samarbeid for å få dette til på en god måte. Vi vil ringe deg dersom vi ikke hører fra deg.

Vi er svært takknemlige for at du/dere er villige til å stille opp for denne svært viktige studien. Kunnskapen vi får fra dette prosjektet vil gi oss verdifull kunnskap som i løpet av kort tid vil kunne bli brukt til å tilrettelegge for at flere barn og unge skal få en positiv opplevelse av å spille fotball og ha en fysisk aktiv livsstil.

Vennlig hilsen

Bente Wold, professor HEMIL-senteret, Universitetet i Bergen Yngvar Ommundsen, professor, Norges idrettshøgskole

Kontaktopplysninger for prosjektleder: Bente Wold, HEMIL-senteret, Det psykologiske fakultet, Universitetet i Bergen. <u>bente.wold@uib.no</u>, tlf. 5558 3223, mobil 90 53 26 67.



CRITICAL ELEMENTS: FIDELITY OF CONTENT GRID

1) Scoring only the content related to the bullets and what is told to the whole group.

3) Beside this scale, a memo with the sequence (how the content is structured) and the researcher's impression about the workshop will be 2) One time is defined as the moment CE starts with the bullet and finish at the moment they are moving to another bullet (purpose).

4) For the examples, refer the number of time a CE provide an example for the bullet point and indicate for each example under bracket if this oring the buillet content (VEC). created (in English).

example was good in term of covering the bullet content (YES) or poor (NO).	et content (YES	s) or po	or (NO).							
	<u>SEC</u>	SECTION 1		SECTION	SECTION 3			SECTION 4		
	N time	N times referred	red	2	Quotes		Del	Delivered with fidelity	delity	
				Interactio						
				su						
				between						
				CE and						
				Gcoach						
	Directly Related		Examples	Code as		Not	Very	Somewhat	Mostly Very	Very
				N(Yes/So		at all	little			
	Code as Code as		Code as	mewhat/						
	2	2	N(Yes/Som	No)						
			ewhat/No)							
DEFINITION OF EMPOWERING COACHING (ALL EXCEPT NO)						1	2	3	4	5
An Empowering Coaching climate is one that will										
maximize development of each child.										
As a player and a person.										
Via the nurturing of the psychological ABCs.										
ABOUT THE NATURE OF THE CONTENT						1	2	3	4	5
 Information presented isn't opinion-based. 										
 Information presented is grounded in theory and 										



evidenced-based.Not a receipt list of coaching behaviours, but rather an approach to coaching.					
 AIMS OF THE WORKSHOP Our key purpose is to help you to maximize what you are trying to achieve/be as a coach, and to compliment your current goals as a coach. 			3	4	ъ
 PERILS OF PARTICIPATION IN GRASSROOTS SPORT Not all young football players have a positive experience in grassroots football. Many find playing football more stressful than fun, fear making a mistake and dread losing. Some kids believe winning is all that matters. In some cases playing football can damage children's self-worth. 		1	2 3	4	ы
 THE MOTIVATIONAL CLIMATE (ALL EXCEPT NO) The motivational climate is the coach-created environment (social context, or atmosphere) as perceived by the players. Everything the coach says and does, how they say it, how they do it The motivational climate determines whether kids have a positive or negative experience in football. 		1	3	4	ъ
 PHILOSOPHY An important determinant of the coaching climate is the coaches' philosophy. Your personal coaching philosophy is the foundation of your approach to coaching. Nourishing the players' ABCs via the creation of an empowering climate is aligned with most coaches' 		1	3	4	ъ



bhilosophies.								
KEY POINTS WHEN REFERRING TO THE MODEL OF MOTIVATION			1	2	ю	4		ъ
We will build this model to understand how/why coach								
well-being, enjoyment and continued participation.	 							
To ensure players' have high intrinsic motivation and a								
healthier engagement in sport, it is important to								
promote the psychological ABC's.								
We can do this via creating an empowering coaching								
climate.								
DEFINITION OF MOTIVATION			1	2	3	4	_	5
Motivation is the why of behaviour; reflected in								
how players behave, think, and feel about football.								
QUANTITY OF MOTIVATION			1	2	3	7	4	5
 Just because a player has high motivation (i.e., 								
seems to be "into" the sport at the moment),								
doesn't mean they have quality of motivation (i.e.,								
makes reference to the reasons why the child is								
participating in football).								
• Focusing on the quantity (amount) of motivation is								
only the tip of the iceberg.								
QUALITY OF MOTIVATION			7	2	ŝ	4	_	5
 Dependent on WHY the players play football. 								
 It is more difficult to see the reasons why players 								
train/compete (below the surface).								
Quality of motivation is reflected in how players								
feel about themselves when participating in								
football?? and feel about football in the long-term.								
 There are the emotional and behavioural 								

m



consequences of quality motivation that can optimise each child's development. • Motives (reasons) to play football are not all the same quality. Motives can be described as more or less intrinsic or extrinsic. Only more intrinsic reasons for playing result in high quality motivation.						
 BENEFITS ASSOCIATED WITH QUALITY OF/INTRINSIC MOTIVATION Regardless of ability, children will flourish as people and as players, when they are intrinsically motivated. Players enjoy themselves, apply effort both when winning and losing, and return to the team each season. 		1	2	ε	4	ъ
 PROBLEMS WITH EXTRINSIC MOTIVATION Sometimes we mistakenly assume that levels of motivation will be higher when players are controlled by extrinsic motivation (pressure, for trophies, etc). 		1	2	£	4	ъ
 THE ROLE OF THE ABCS A coach will be empowering when his/her behaviour impacts upon the players' psychological ABCs. Players, at all competitive levels, are more likely to exhibit quantity and quality of motivation when they have a sense of autonomy, belongingness, competence The ABCs are the building blocks for maximising intrinsic motivation and an Empowering 		7	2	π	4	ы



CoachingTM climate contributes to players' development of the ABCs!								
 AUTONOMY Children have a voice and choice, and sense of ownership in relation to their participation. Children that feel autonomous in football will continue to participate for intrinsic reasons reflecting quality motivation. Sometimes kids feel controlled in football by something (chance for rewards) or someone else (pushy coach or parent). This often results in a bad experience and kids1 dropping-out. Feeling autonomous allows children to enjoy sport, concentrate, be creative, and participate when rewards are not present. 					N	m	4	۰ ۱
 BELONGING Players need to feel respected and connected to their coach and others on their team. This means they feel cared for, safe, valued, respected with their coaches and with their team. If children are to continue playing football for intrinsic reasons and experience high quality and quantity of motivation, it is important that they feel a sense of belonging. If you want to share your wisdom about the tactical side of the game and help develop the players' football skill level, you first need to show that you care about them. 					7	m	4	м
COMPETENCE				1	2	3	4	5
		5						



 A sense of competence refers to the children feeling they have the ability to meet demands in training/matches. Children that feel competent/good/effective at football will have high (quantity) motivation. 							
 TWO TYPES OF COMPETENCE Sustaining quantity and quality of motivation is dependent on how children judge whether they are able and effective (i.e., competent) players. 			1	2	m	4	ъ
 TASK-FOCUSED COMPETENCE When" task focused", the goal is to master the task or challenge and to improve, and so it makes sense that task focused players will always do the best they can. Task focused players experience a range of positive outcomes that you may want for your players. 			1	5	ĸ	4	ъ
 SUPERIORITY FOCUSED COMPETENCE "Superiority focused" players are focusing on how they compare to others, whether or not they are outdoing others. Whether confident or not, quality of motivation is fragile when superiority goals predominate. Can't always be the best. Superiority focused players experience a range of negative outcomes that you may not want for your players. 			1	2	m	4	ъ
 COMPETENCE & EFFORT Regardless of whether the task focused players feel confident or not we still should see effort, intensity, continued participation, intrinsic 			1	2	б	4	5



 motivation. Task focused players will always give effort, even if they are losing. It makes sense to always try if you have task focus as you can always do your best and be your best via the exertion of effort. Superiority focused players will hold back on effort when losing/not performing well to avoid looking incompetent. When doing well superiority focused players may hold back from doing their best. If they can succeed without trying very hard, this is a way of showing superiority. 								
 COMPETENCE & WINNING Task focused players still care about winning, but this isn't the only way they judge success/failure. For the superiority focused players, winning is (more likely to be) everything. 			1	2	3	4	ß	
 COMPETENCE & LOSING Task-focused players are disappointed but not devastated by failure. They don't like to lose but don't fear losing! They consider what did go well within the loss, and this helps maintain their motivation and sense of confidence. Superiority focused players dread losing. They are more likely to fear failurewhich is not the same as not liking to lose! 			۲	2	m	4	ц	
THE NATURE OF EMPOWERING CLIMATESTo create an environment that is really empowering, there are many strategies or			1	2	ε	4	ъ	

 \sim



 approaches that one can use across all aspects of your coaching. They are often inter-relatedand the aim is to be as empowering as possible across all the dimensions! We may think about what we say, how we say it, what we plan to do and how we do it Consider how this might support the players' ABCs. All of these aspects will create the climate which surrounds our players 						
 CO-OPERATIVE CONTRIBUTION Players are encouraged to work together, learn together and to cooperate. Players on empowering teams feel (whether they are one of the best players or not) that they have an important role to play on the team. 		1	2	£	4	ъ
 LEARNING EMPHASISED In empowering climates the aim is to learn and improveregardless of the outcome. Mistakes are looked at as opportunities for learning and improvement. What was learned and ways to improve next time are pointed out after successful and unsuccessful performance attempts. 		1	2	æ	4	2
 INTRINSIC FOCUS Intrinsic reasons (e.g., enjoyment, fun, personal development) for playing are promoted. Extrinsic rewards used sparingly, and not used to control players. Players are supported to feel they are involved in football because of their own personal choice. 		1	7	ε	4	ъ



• The coach emphasises what is in the players' personal control, including reasons to play football.								
MASTERING THE TASK All players have the chance to feel successful if we support players' task-focused perceptions of their competence via emphasising personal mastery, effort, improvement, rather than having to be superior. 			1	2	£	4	ъ	
 AUTHORITY WITH AUTONOMY Players are given a voice into what happens on the pitch, and (relevant) choices in training/matches Specific directions /instructions/decisions from the coach are accompanied with a rationale/explanation. The coach provides the structure in which the players can experience autonomy. When authority is coupled with autonomy, players are more likely to respect the coach. 			1	2	ε	4	υ	
 TAKING PERSPECTIVE Players' views and feelings matter. The coach doesn't assumebut rather asks questions, tries to ensure that he/she understands how the players see things. Coach keeps in mind that he/she is working with children and does not equate player's worth with performance. 			1	2	κ	4	ъ	
 EVALUATION Evaluation of players is provided in reference to task-focused competence, focusing on improvement. 			1	2	ε	4	Ω	



 Players are encouraged to keep track of what they have done well/what they could do better following performances. 							
 WHAT THE COACHES ALREADY DO (ALL EXCEPT NO) CE acknowledges what the coaches already do to be empowering. Coaches are encouraged to discuss what they already do. Coaches are encouraged to write down what they they already do. 							
 COACHES GENERATE NEW IDEAS TO BE MORE EMPOWERING (ALL EXCEPT NO) Coaches are encouraged to discuss their new ideas. Coaches are encouraged to write down their new ideas. 							
 BARRIERS Coaches are encouraged to identify personal barriers to being an empowering coach The coaches are encouraged to resolve these Barriers 			1	2	£	4	ъ
 SPECIFIC PLANS TO BE MORE EMPOWERING ARE MADE FOR THE NEXT TRAINING SESSION Coaches are encouraged to discuss their specific plans for their next training session. Coaches are encouraged to write down their specific plans for their next training session. 			1	2	£	4	ъ
SPECIFIC PLANS TO BE MORE EMPOWERING ARE MADE FOR THE NEXT MATCH • Coaches are encouraged to discuss their specific			1	2	æ	4	ى ا



plans for their next match.							
 Coaches are encouraged to write down their 							
specific plans for their next match.							
REVIEW OF THE WORKSHOP			1	2	~	4	5
 CE asks has the workshop met intended aims. 							
• CE asks have the coaches met their personal goals.							
 CE asks can the coaches summarise the workshop 							
take home message.							
FUTURE PLANNING			1	2 3	~	4	5
 Increasing your awareness of what you do as a 							
coach when interacting with your players.							
 Monitoring and reflecting on your coaching 							
behaviours and strategies.							
 Become part of our community of empowering 							
coaches via the website							



шпсµ ДыД	Ŋ	ы	5	5	5	5	5	5
	4	4	4	4	4	4	4	4
əmo2 tedw	3	m	3	3	3	m	ĸ	e
	2	2	2	2	2	2	2	2
lle te toN	1	1	1	1	1	1	1	1
Quotes								
From your viewing of the whole workshop, to what extent did you observe the coach educator to exhibit the following in his/her dialogue, actions and inactions during the workshop?	 Intimidation (to frighten by threats) - CE uses power-assertive strategies that may promote fear or frighten the coaches as a means to coerce behaviour change. This could include verbal ill-treatment, yelling or threats of penalties/reprimand. 	 Negative Conditional Regard - CE withholds his approval and/or attention. Can be seen through verbal or non-verbal rejection of coaches when a task is not performed as is expected, and/or a coach rejects the principles of the workshop 	 Controlling use of Rewards - CE offers rewards or incentives for desirable behavior(s) during the workshop, or in relation to future coaching 	 Controlling use of Language - CE uses coercive language with coaches to control or influence behaviours during the workshop, or in relation to future coaching 	Devalues Player Perspective - CE is dismissive of / ignores coaches' thoughts and feelings	6. No Rationale - CE provides no explanation for requests during the workshop, or in relation to future coaching	7. Encourages Inter/Intra-group rivalry - CE compares the performance/conduct of one coach or group (or club) to another	 Recognition for Superior/inferior Ability -CE notices or acknowledges coaches when they meet or miss normative standards, outperform or under-perform another coach/groups of coaches



9. Punishment for Mistakes - CE imposes a negative or unpleasant consequence onto a coach for performing a task/behaviour incorrectly: Could be a positive punishment i.e. Application of an aversive stimuli or a negative punishment i.e. Application of an aversive stimuli or a negative punishment i.e. Application of an aversive stimulus 10. Task focused Competence Feedback – CE provides constructive factors of a pleasant stimulus focused informational feedback relevant to the current task/situation 11. Role Importance - CE ensures coaches feel like an integral part of the workshop group and/or coaching community 12. Emphasises or recognises effort and/or improvement – CE emphasises/recognises the importance of putting in effort/working hard and improving 13. Cooperative Learning - Coaches are encouraged to work together to learn/improve together 14. Unconditional regard -The CE allows coaches to be themselves and accepts them for who take to recognise the involve together		7 7 7 7 <u>7</u>	m m m m m	4 4 4 4 4	ന ന ന ന	
15. Takes interest - The CE tries to build interpersonal relationships by taking an interest in their coaches	1	2	ε	4	5	
16. Warm delivery style - CE has a welcoming, friendly communication style	1	2	e S	4	5	-
17. No Interest - The CE is distant, cold, uninterested in the coaches	Ļ	2	3	4	5	
 Belittlement - The CE belittles the coaches; the CE actively inflicts physical or psychological harm on the coaches in what he/she says or does 	1	2	£	4	ъ	1



1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
19. Acknowledges Feelings and Perspective - CE is aware of and acknowledges the coaches' thoughts and feelings towards tasks and rules and topics discussed in the workshop	20. Provides Meaningful Choice - CE provides the coaches with a selection of meaningful options encouraging ownership over decisions	21. Intrinsic Task Interest – The CE emphasises the importance of and/or promotes having a fun and an enjoyable experience in coaching	22. Provides Rationale – CE explains the relevance and/or importance of why coaches' efforts towards being empowering are worthwhile/important	23. Provides opportunities for coach input – CE encourages coaches' input and involvement in the workshop	24. Initiative Taking – Coaches are encouraged to take the initiative and to the try new/different things	25. Non-controlling communication style – CE uses language which is nonthreatening, inclusive, not demanding	26. Clear explanations on organisation – CE provides optimal challenging, progressive, and appropriate tasks	27. Clear expectations on learning - CE provides clear and understandable/explicit directions, instructions and/or guidance	 Ambiguous leadership and support - CE provides unclear and confusing directions, instructions and/or guidance 	29. Chaos during the learning process – CE does not effectively organize

MOTIVERENDE LEDERSKAP – KURSEVALUERING

Hva er din fødselsdato (dag/måned/år) ?

Hva heter laget du er trener for ?

Hvor mange timer av kurset deltok du på? timer

Vennligst sett ring rundt det tallet som gir best uttrykk for din mening om kurset

		Svært Uenig	Uenig	Litt enig	Enig	Svært enig
	Læringsopplevelsen					
1.	Jeg likte kurset	1	2	3	4	5
2.	Kurset utfordret mine ideer om trenergjerningen	1	2	3	4	5
3.	Målet med kurset var tydelig for meg	1	2	3	4	5
4.	Innholdet i kurset (f. eks. målsetninger og strategier) var ukjent for meg	1	2	3	4	5
5.	Jeg synes at teoriene som kurset bygger på er relevante for breddefotballtrenere	1	2	3	4	5
6.	Jeg synes at kursaktivitetene egnet seg for breddefotballtrenere	1	2	3	4	5
7.	Kurset ble gjennomført i passe tempo	1	2	3	4	5
8.	Det var en god balanse mellom teori og praksis	1	2	3	4	5
9.	Kursinstruktøren var entusiastisk	1	2	3	4	5
10.	Det var rom for å uttrykke egne meninger og følelser	1	2	3	4	5
11.	Vi ble oppfordret til å være i dialog med de andre på kurset	1	2	3	4	5
12.	Jeg synes at kursinstruktøren hadde en inkluderende tilnærming	1	2	3	4	5
13.	Kursinstruktøren gjorde en glimrende jobb	1	2	3	4	5
14.	Det var ikke nok tid til diskusjon	1	2	3	4	5

	Motiverende ledelse	Svært Uenig	Uenig	Litt enig	Enig	Svært enig
15.	Kurset fikk fram hvorfor motiverende ledelse kan være nyttig	1	2	3	4	5
16.	Kurset ga en god innføring i hvordan trenere kan integrere prinsippene i motiverende lederskap i egen trenerpraksis	1	2	3	4	5
17.	Jeg tror at kurset vil føre til at jeg vil prøve å bli en mer motiverende trener	1	2	3	4	5
18.	Jeg forstår hvordan jeg kan bli en mer motiverende trener	1	2	3	4	5
19.	Kurset bidrar til at jeg føler meg trygg på at jeg kan bli en mer motiverende trener <u>under trening</u>	1	2	3	4	5
20.	Kurset bidrar til at jeg føler meg trygg på at jeg kan bli en mer motiverende trener i <u>kamper</u>	1	2	3	4	5
21.	Jeg tror at arbeidsboken er et nyttig verktøy for å kunne anvende motiverende ledelse	1	2	3	4	5
22.	Det virket som om kursinstruktøren kjente godt til teoriene bak motiverende ledelse	1	2	3	4	5
23.	Kursinstruktøren inspirerte meg til å ville bruke motiverende ledelse	1	2	3	4	5
24.	Jeg lærte mye av ABC-spillet	1	2	3	4	5
25. H	lva likte du ved kurset?					
 26. F	Iva likte du ikke ved kurset?					
27. ⊦	lva kan forbedres ved kurset?					

TRIVSEL I BARNE- OG UNGDOMSFOTBALL. TILLEGGSSKJEMA TIL TRENERE

HØST 2011

Skriv inn fødselsdagen din her: ____/___/___/

1. Hva heter laget du er trener for _____

(Klubb, Gutter/Jenter, Aldersgruppe)?

2. Nedenfor står det endel utsagn i forhold til kurset i «Motiverende lederskap». Sett en ring for hvert utsagn rundt det svaret som passer best.

		Aldri	Sjelden	Av og til	Ofte	Alltid
1.	Jeg har brukt prinsippene fra kurset under trening	1	2	3	4	5
2.	Jeg har brukt prinsippene fra kurset under kamp	1	2	3	4	5

3. Nedenfor står det endel utsagn i forhold til kurset i «Motiverende lederskap». Sett en ring for hvert utsagn rundt det svaret som passer best.

	Jeg synes innholdet i kurset var:	Svært Uenig	Uenig	Verken/ eller	Enig	Svært enig
1.	lett å bruke i praksis	1	2	3	4	5
2.	sammenfallende med min trenerfilosofi	1	2	3	. <u>4</u>	5
3.	vanskelig å tilpasse til min praksis som trener	1	2	3	4	5
4.	har gitt meg større trygghet som trener	1	2	3	Δ	5
5.	Jeg brukte prinsippene fra kurset i begynnelsen, men etterhvert ble de mindre brukt	1	2	2		
1.1	etterhvert ble de mindre brukt	「常慶」では近		and the second		A CALL AND A
6	and studied and every summarized and the foreign and the Construction of the second studied and the			3	4	5
6.	Jeg synes kurset var lite nyttig for meg	1	2	3	4 4	5 5
6. 7.	and studied and every summarized and the foreign and the Construction of the second studied and the	1	2	3	4 4 4	5 5 5

4. Nedenfor står det endel utsagn i forhold til nytteverdien av arbeidsboken. Sett en ring for hvert utsagn rundt det svaret som passer best.

124.81.21	Jeg synes arbeidsboken	Svært Uenig	Uenig	Verken/ eller	Enig	Svært enig
1.	har vært viktig i planlegging av treningene	1	2	3	4	5
2.	har økt min bevissthet på hva jeg gjør som trener	1	2	3	4	5
3.	har gitt meg ideer til hvordan kommunisere med spillerne	1	2	- 3	4	5
4.	var nyttig i trenerhverdagen	1	2	2	A 1	F
5.	har gitt meg innsikt i hvordan motivere spillerne	-	2	2	4	5
6.	har fungert som et godt refleksjonsverktøy	1	2	3	4 4 4	5

5. I hvor stor grad har du gjennomført modulene i e-læringen (internett-baserte moduler i Motiverende Lederskap)?

		Helt	Delvis	Ingen	Ikke tilgjengelig
2.	Introduksjonsmodulen	1	2	3	4
3.	K- Modulen	1	2	3	4
4.	L- Modulen	1	2	3	4
5.	l -Modulen	1	2	3	4
6.	M- Modulen	1	2	3	4
7.	A- Modulen	1	2	3	4
8.	E- Modulen	1	2	3	4
9.	T- Modulen	1	2	3	4

6. Nedenfor står det endel utsagn i forhold til nytteverdien av e-læringen. Sett en ring for hvert utsagn rundt det svaret som passer best.

	Svært Uenig	Uenig	Verken/ eller	Enig	Svært enig
1. Jeg synes e-læring var en effektiv repetisjon av kursinnholdet	1	2	3	4	5
2. Jeg synes e-læring bidro til å forsterke utbyttet av kurset	1	2	3	4	5

7. I hvor stor grad har det vært vanskelig å gjennomføre prinsippene i kurset knyttet til forhold ved:

		Svært vanskelig	Ganske vanskelig	Litt vanskelig	lkke vanskelig
1.	Klubben	1	2	3	4
3.	Andre trenere	1	2	3	4
4.	Foreldre	1	2	3	4
5.	Spillere	1	2	3	4
6.	Deg selv	1	2	3	4
7.	Tid til planlegging	1	2	3	4
8.	Tid til gjennomføring	1	2	3	4

8. Hvordan vurderer du ditt utbytte av kurset Motiverende Lederskap?

INTERVJUGUIDE breddefotballtrenere September – November 2011

Vi har invitert deg til dette intervjuet fordi vi ønsker å få dine tilbakemeldinger på kurset motiverende ledelse som du var med på i vår. Vi ønsker å få høre litt om hva du lærte på kurset og hvilke erfaringer du har i forhold til å bruke kunnskapen og strategiene du lærte på kurset. Din tilbakemelding, både vedrørende dine tanker og refleksjoner knyttet til programmets verdi, styrker og svakheter, og også knyttet til hvordan vi organiserte kursingen, kan bringe oss et viktig skritt framover i evalueringen av motiverende ledelse i norske klubber.

Det er ikke noe rett eller galt svar på spørsmålene. Dine synspunkt og kommentarer er viktige, uansett om de er positive eller negative. Og så er det selvfølgelig slik at det er opp til deg hva du vil fortelle, hvordan du vil fortelle det, og hvor mye du vil si. Du trenger ikke å bekymre deg for at vi forventer at du skal si noe spesielt, din erfaring er uansett viktig for oss.

Be om tillatelse til å ta opptak av samtalen....

Først av alt, ønsker jeg å få vite litt om din fotballerfaring som trener og spiller...

- Hvor lenge du har vært trener?
- Alder på spillere?
- Antall treninger pr uke?
- Egen spillererfaring?

Klubbens visjoner / sportslig plan og støtte...

- Hvordan er klubben din organisert?
- Hvilken oppfølging får du som trener fra klubbens ledelse?
- Har din klubb en felles målsetning / visjon for klubbens arbeid med barne- og ungdomsfotball?
 - På hvilken måte formidles / diskuterer klubbledelsen denne med dere?
- Hvordan / hvem rekrutterte deg til å delta på Motiverende lederskap kurset?

Da har jeg lyst til å gå videre med og snakke om hvordan du opplever trenerrollen / treneroppgaven.

- Kan du si noe om hvorfor du begynte som trener?
- Hvordan vil du beskrive din trenerfilosofi?
- Hva synes du er din viktigste oppgave som trener?

- Kan du beskrive så detaljert som mulig en typisk treningsøkt fra dere kommer på banen og til dere er ferdige / går hjem?
 - Hva gjør du? (hvordan organiserer du treningen?)
 - Hvordan møter du og snakker du til spillerne?
- Kan du på samme måte beskrive en kamp fra dere møtes til dere forlater garderoben etter kampen?
 - Hva snakker du med spillerne om?
 - Involverer du spillerne i valg av taktikk o.l?

Da du var på kurs i vår, antar jeg at dere brukte en del tid på å diskutere barn og ungdoms motivasjon for å spille fotball.

- Hva betyr motivasjon for deg?
- Hvordan kan du vite om en spiller er motivert?
- Hvordan kan en fotballtrener fremme spillernes motivasjon?
 - Kan du gi noen praktiske eksempler på hvordan (du kan) spillernes motivasjon kan fremmes?

Hva betyr autonomi for deg?

- Hvordan kan du legge til rette for at spillerne dine blir hørt, får være med å påvirke og ta egne valg? (medbestemmelse og autonomi)
 - Kan du gi noen eksempler på hvordan dette kan gjøres?
- Er det noe forskjell i spillernes medbestemmelse på trening og i kamp?
 - Evt. På hvilken måte / Hvordan?
- Hvor viktig synes du det er at spillerne dine opplever en viss grad av medbestemmelse? (bli hørt, får være med å påvirke?)
 - Hvorfor synes du dette er viktig / ikke viktig?
- Hvor viktig synes du det er at en spiller føler seg som en del av laget?
 O Hvorfor er det viktig / ikke viktig?
- Hvordan kan du som trener bidra til at spillerne dine føler seg som en del av laget?
 - Kan du gi noen eksempler på hvordan du kan gjøre dette?
 - Er det en forskjell i spillernes følelse av å være en del av laget på trening og i kamp? (Dersom, hvorfor er det slik tror du?)
 - Hvordan kan du få dem som sitter på benken / står på sidelinjen til å føle at de hører til / er inkludert?
- Hvor viktig synes du det er at en spiller føler de får ting til på trening og i kamp?
 Hvorfor synes du dette er viktig / ikke viktig?
- Hvordan kan du som trener bidra til at en spiller føler at de får det til?

- Er det en forskjell i spillernes følelse av å få til ting på trening og i kamp?
- I hvilken grad har du benyttet deg av e-læringen som har vært tilgjengelig på PAPA prosjektets hjemmeside?
 - Hvor mange av testene har du gjennomført?
 - På hvilken måte har dette vært nyttig / ikke nyttig?

I hvilken grad har du benyttet deg av arbeidsboken som et planleggingsredskap denne sesongen? Kan du si noe om hvorfor eller hvorfor ikke?

- Hvis du nå tenker tilbake på denne fotballsesongen, hva synes du er det viktigste du har lært gjennom deltakelse på kurset Motiverende ledelse samt e-læringen i løpet av sesongen?
 - Hvorfor trekker du fram nettopp dette / hva er grunnen til at dette er det viktigste?
 - Har dette påvirket til trenerfilosofi?
- Kan du si noe om hvor lett eller vanskelig det har vært å bruke det du lærte på kurset, i din praktiske trener hverdag?
- Hvorfor var det vanskelig eller lett (barriere)?
- Hva skulle eventuelt til for at du skulle kunne bruke det?
- Har innholdet i kurset vært positivt mottatt av spilleren og foreldre, eventuelt medtrenere?
- Dersom du har gjort noen endringer,
 - Hvilke fordeler har du erfart som et resultat av å gjøre disse endringene, enten for deg selv eller spillerne dine?
 - Kan du gi et eksempel?
- Har du forslag til andre måter vi kunne ha organisert motiverende ledelseskurset på for å fremme din kompetanse som fotballtrener?
 - Andre kommentarer ifh til din erfaringer med motiverende ledelse?

Takk!

Doctoral Theses at The Faculty of Psychology. University of Bergen

1980	Allen, H.M., Dr. philos.	Parent-offspring interactions in willow grouse (Lagopus L. Lagopus).
1981	Myhrer, T., Dr. philos.	Behavioral Studies after selective disruption of hippocampal inputs in albino rats.
1982	Svebak, S., Dr. philos.	The significance of motivation for task-induced tonic physiological changes.
1983	Myhre, G., Dr. philos.	The Biopsychology of behavior in captive Willow ptarmigan.
	Eide, R., Dr. philos.	PSYCHOSOCIAL FACTORS AND INDICES OF HEALTH RISKS. The relationship of psychosocial conditions to subjective complaints, arterial blood pressure, serum cholesterol, serum triglycerides and urinary catecholamines in middle aged populations in Western Norway.
	Værnes, R.J., Dr. philos.	Neuropsychological effects of diving.
1984	Kolstad, A., Dr. philos.	Til diskusjonen om sammenhengen mellom sosiale forhold og psykiske strukturer. En epidemiologisk undersøkelse blant barn og unge.
	Løberg, T., Dr. philos.	Neuropsychological assessment in alcohol dependence.
1985	Hellesnes, T., Dr. philos.	Læring og problemløsning. En studie av den perseptuelle analysens betydning for verbal læring.
	Håland, W., Dr. philos.	Psykoterapi: relasjon, utviklingsprosess og effekt.
1986	Hagtvet, K.A., Dr. philos.	The construct of test anxiety: Conceptual and methodological issues.
	Jellestad, F.K., Dr. philos.	Effects of neuron specific amygdala lesions on fear- motivated behavior in rats.
1987	Aarø, L.E., Dr. philos.	Health behaviour and sosioeconomic Status. A survey among the adult population in Norway.
	Underlid, K., Dr. philos.	Arbeidsløyse i psykososialt perspektiv.
	Laberg, J.C., Dr. philos.	Expectancy and classical conditioning in alcoholics' craving.
	Vollmer, F.C., Dr. philos.	Essays on explanation in psychology.
	Ellertsen, B., Dr. philos.	Migraine and tension headache: Psychophysiology, personality and therapy.
1988	Kaufmann, A., Dr. philos.	Antisosial atferd hos ungdom. En studie av psykologiske determinanter.

	Mykletun, R.J., Dr. philos.	Teacher stress: personality, work-load and health.
	Havik, O.E., Dr. philos.	After the myocardial infarction: A medical and psychological study with special emphasis on perceived illness.
1989	Bråten, S., Dr. philos.	Menneskedyaden. En teoretisk tese om sinnets dialogiske natur med informasjons- og utviklingspsykologiske implikasjoner sammenholdt med utvalgte spedbarnsstudier.
	Wold, B., Dr. psychol.	Lifestyles and physical activity. A theoretical and empirical analysis of socialization among children and adolescents.
1990	Flaten, M.A., Dr. psychol.	The role of habituation and learning in reflex modification.
1991	Alsaker, F.D., Dr. philos.	Global negative self-evaluations in early adolescence.
	Kraft, P., Dr. philos.	AIDS prevention in Norway. Empirical studies on diffusion of knowledge, public opinion, and sexual behaviour.
	Endresen, I.M., Dr. philos.	Psychoimmuniological stress markers in working life.
	Faleide, A.O., Dr. philos.	Asthma and allergy in childhood. Psychosocial and psychotherapeutic problems.
1992	Dalen, K., Dr. philos.	Hemispheric asymmetry and the Dual-Task Paradigm: An experimental approach.
	Bø, I.B., Dr. philos.	Ungdoms sosiale økologi. En undersøkelse av 14-16 åringers sosiale nettverk.
	Nivison, M.E., Dr. philos.	The relationship between noise as an experimental and environmental stressor, physiological changes and psychological factors.
	Torgersen, A.M., Dr. philos.	Genetic and environmental influence on temperamental behaviour. A longitudinal study of twins from infancy to adolescence.
1993	Larsen, S., Dr. philos.	Cultural background and problem drinking.
	Nordhus, I.H., Dr. philos.	Family caregiving. A community psychological study with special emphasis on clinical interventions.
	Thuen, F., Dr. psychol.	Accident-related behaviour among children and young adolescents: Prediction and prevention.
	Solheim, R., Dr. philos.	Spesifikke lærevansker. Diskrepanskriteriet anvendt i seleksjonsmetodikk.
	Johnsen, B.H., Dr. psychol.	Brain assymetry and facial emotional expressions: Conditioning experiments.
1994	Tønnessen, F.E., Dr. philos.	The etiology of Dyslexia.
	Kvale, G., Dr. psychol.	Psychological factors in anticipatory nausea and vomiting in cancer chemotherapy.

	Asbjørnsen, A.E., Dr. psychol.	Structural and dynamic factors in dichotic listening: An interactional model.
	Bru, E., Dr. philos.	The role of psychological factors in neck, shoulder and low back pain among female hospitale staff.
	Braathen, E.T., Dr. psychol.	Prediction of exellence and discontinuation in different types of sport: The significance of motivation and EMG.
	Johannessen, B.F., Dr. philos.	Det flytende kjønnet. Om lederskap, politikk og identitet.
1995	Sam, D.L., Dr. psychol.	Acculturation of young immigrants in Norway: A psychological and socio-cultural adaptation.
	Bjaalid, IK., Dr. philos	Component processes in word recognition.
	Martinsen, Ø., Dr. philos.	Cognitive style and insight.
	Nordby, H., Dr. philos.	Processing of auditory deviant events: Mismatch negativity of event-related brain potentials.
	Raaheim, A., Dr. philos.	Health perception and health behaviour, theoretical considerations, empirical studies, and practical implications.
	Seltzer, W.J., Dr.philos.	Studies of Psychocultural Approach to Families in Therapy.
	Brun, W., Dr.philos.	Subjective conceptions of uncertainty and risk.
	Aas, H.N., Dr. psychol.	Alcohol expectancies and socialization: Adolescents learning to drink.
	Bjørkly, S., Dr. psychol.	Diagnosis and prediction of intra-institutional aggressive behaviour in psychotic patients
1996	Anderssen, N., Dr. psychol.	Physical activity of young people in a health perspective: Stability, change and social influences.
	Sandal, Gro Mjeldheim, Dr. psychol.	Coping in extreme environments: The role of personality.
	Strumse, Einar, Dr. philos.	The psychology of aesthetics: explaining visual preferences for agrarian landscapes in Western Norway.
	Hestad, Knut, Dr. philos.	Neuropsychological deficits in HIV-1 infection.
	Lugoe, L.Wycliffe, Dr. philos.	Prediction of Tanzanian students' HIV risk and preventive behaviours
	Sandvik, B. Gunnhild, Dr. philos.	Fra distriktsjordmor til institusjonsjordmor. Fremveksten av en profesjon og en profesjonsutdanning
	Lie, Gro Therese, Dr. psychol.	The disease that dares not speak its name: Studies on factors of importance for coping with HIV/AIDS in Northern Tanzania
	Øygard, Lisbet, Dr. philos.	Health behaviors among young adults. A psychological and sociological approach
	Stormark, Kjell Morten, Dr. psychol.	Emotional modulation of selective attention: Experimental and clinical evidence.

	Einarsen, Ståle, Dr. psychol.	Bullying and harassment at work: epidemiological and psychosocial aspects.
1997	Knivsberg, Ann-Mari, Dr. philos.	Behavioural abnormalities and childhood psychopathology: Urinary peptide patterns as a potential tool in diagnosis and remediation.
	Eide, Arne H., Dr. philos.	Adolescent drug use in Zimbabwe. Cultural orientation in a global-local perspective and use of psychoactive substances among secondary school students.
	Sørensen, Marit, Dr. philos.	The psychology of initiating and maintaining exercise and diet behaviour.
	Skjæveland, Oddvar, Dr. psychol.	Relationships between spatial-physical neighborhood attributes and social relations among neighbors.
	Zewdie, Teka, Dr. philos.	Mother-child relational patterns in Ethiopia. Issues of developmental theories and intervention programs.
	Wilhelmsen, Britt Unni, Dr. philos.	Development and evaluation of two educational programmes designed to prevent alcohol use among adolescents.
	Manger, Terje, Dr. philos.	Gender differences in mathematical achievement among Norwegian elementary school students.
1998 V	Lindstrøm, Torill Christine, Dr. philos.	«Good Grief»: Adapting to Bereavement.
	Skogstad, Anders, Dr. philos.	Effects of leadership behaviour on job satisfaction, health and efficiency.
	Haldorsen, Ellen M. Håland, Dr. psychol.	Return to work in low back pain patients.
	Besemer, Susan P., Dr. philos.	Creative Product Analysis: The Search for a Valid Model for Understanding Creativity in Products.
н	Winje, Dagfinn, Dr. psychol.	Psychological adjustment after severe trauma. A longitudinal study of adults' and children's posttraumatic reactions and coping after the bus accident in Måbødalen, Norway 1988.
	Vosburg, Suzanne K., Dr. philos.	The effects of mood on creative problem solving.
	Eriksen, Hege R., Dr. philos.	Stress and coping: Does it really matter for subjective health complaints?
	Jakobsen, Reidar, Dr. psychol.	Empiriske studier av kunnskap og holdninger om hiv/aids og den normative seksuelle utvikling i ungdomsårene.
1999 V	Mikkelsen, Aslaug, Dr. philos.	Effects of learning opportunities and learning climate on occupational health.
	Samdal, Oddrun, Dr. philos.	The school environment as a risk or resource for students' health-related behaviours and subjective well- being.
	Friestad, Christine, Dr. philos.	Social psychological approaches to smoking.
	Ekeland, Tor-Johan, Dr. philos.	Meining som medisin. Ein analyse av placebofenomenet og implikasjoner for terapi og terapeutiske teoriar.

н	Saban, Sara, Dr. psychol.	Brain Asymmetry and Attention: Classical Conditioning Experiments.
	Carlsten, Carl Thomas, Dr. philos.	God lesing – God læring. En aksjonsrettet studie av undervisning i fagtekstlesing.
	Dundas, Ingrid, Dr. psychol.	Functional and dysfunctional closeness. Family interaction and children's adjustment.
	Engen, Liv, Dr. philos.	Kartlegging av leseferdighet på småskoletrinnet og vurdering av faktorer som kan være av betydning for optimal leseutvikling.
2000 V	Hovland, Ole Johan, Dr. philos.	Transforming a self-preserving "alarm" reaction into a self-defeating emotional response: Toward an integrative approach to anxiety as a human phenomenon.
	Lillejord, Sølvi, Dr. philos.	Handlingsrasjonalitet og spesialundervisning. En analyse av aktørperspektiver.
	Sandell, Ove, Dr. philos.	Den varme kunnskapen.
	Oftedal, Marit Petersen, Dr. philos.	Diagnostisering av ordavkodingsvansker: En prosessanalytisk tilnærmingsmåte.
н	Sandbak, Tone, Dr. psychol.	Alcohol consumption and preference in the rat: The significance of individual differences and relationships to stress pathology
	Eid, Jarle, Dr. psychol.	Early predictors of PTSD symptom reporting; The significance of contextual and individual factors.
2001 V	Skinstad, Anne Helene, Dr. philos.	Substance dependence and borderline personality disorders.
	Binder, Per-Einar, Dr. psychol.	Individet og den meningsbærende andre. En teoretisk undersøkelse av de mellommenneskelige forutsetningene for psykisk liv og utvikling med utgangspunkt i Donald Winnicotts teori.
	Roald, Ingvild K., Dr. philos.	Building of concepts. A study of Physics concepts of Norwegian deaf students.
н	Fekadu, Zelalem W., Dr. philos.	Predicting contraceptive use and intention among a sample of adolescent girls. An application of the theory of planned behaviour in Ethiopian context.
	Melesse, Fantu, Dr. philos.	The more intelligent and sensitive child (MISC) mediational intervention in an Ethiopian context: An evaluation study.
	Råheim, Målfrid, Dr. philos.	Kvinners kroppserfaring og livssammenheng. En fenomenologisk – hermeneutisk studie av friske kvinner og kvinner med kroniske muskelsmerter.
	Engelsen, Birthe Kari, Dr. psychol.	Measurement of the eating problem construct.
	Lau, Bjørn, Dr. philos.	Weight and eating concerns in adolescence.
2002 V	Ihlebæk, Camilla, Dr. philos.	Epidemiological studies of subjective health complaints.

		-
	Rosén, Gunnar O. R., Dr. philos.	The phantom limb experience. Models for understanding and treatment of pain with hypnosis.
	Høines, Marit Johnsen, Dr. philos.	Fleksible språkrom. Matematikklæring som tekstutvikling.
	Anthun, Roald Andor, Dr. philos.	School psychology service quality. Consumer appraisal, quality dimensions, and collaborative improvement potential
	Pallesen, Ståle, Dr. psychol.	Insomnia in the elderly. Epidemiology, psychological characteristics and treatment.
	Midthassel, Unni Vere, Dr. philos.	Teacher involvement in school development activity. A study of teachers in Norwegian compulsory schools
	Kallestad, Jan Helge, Dr. philos.	Teachers, schools and implementation of the Olweus Bullying Prevention Program.
н	Ofte, Sonja Helgesen, Dr. psychol.	Right-left discrimination in adults and children.
	Netland, Marit, Dr. psychol.	Exposure to political violence. The need to estimate our estimations.
	Diseth, Åge, Dr. psychol.	Approaches to learning: Validity and prediction of academic performance.
	Bjuland, Raymond, Dr. philos.	Problem solving in geometry. Reasoning processes of student teachers working in small groups: A dialogical approach.
2003 V	Arefjord, Kjersti, Dr. psychol.	After the myocardial infarction – the wives' view. Short- and long-term adjustment in wives of myocardial infarction patients.
	Ingjaldsson, Jón Þorvaldur, Dr. psychol.	Unconscious Processes and Vagal Activity in Alcohol Dependency.
	Holden, Børge, Dr. philos.	Følger av atferdsanalytiske forklaringer for atferdsanalysens tilnærming til utforming av behandling.
	Holsen, Ingrid, Dr. philos.	Depressed mood from adolescence to 'emerging adulthood'. Course and longitudinal influences of body image and parent-adolescent relationship.
	Hammar, Åsa Karin, Dr. psychol.	Major depression and cognitive dysfunction- An experimental study of the cognitive effort hypothesis.
	Sprugevica, leva, Dr. philos.	The impact of enabling skills on early reading acquisition.
	Gabrielsen, Egil, Dr. philos.	LESE FOR LIVET. Lesekompetansen i den norske voksenbefolkningen sett i lys av visjonen om en enhetsskole.
н	Hansen, Anita Lill, Dr. psychol.	The influence of heart rate variability in the regulation of attentional and memory processes.
	Dyregrov, Kari, Dr. philos.	The loss of child by suicide, SIDS, and accidents: Consequences, needs and provisions of help.
2004 V	Torsheim, Torbjørn, Dr. psychol.	Student role strain and subjective health complaints: Individual, contextual, and longitudinal perspectives.

	Haugland, Bente Storm Mowatt Dr. psychol.	Parental alcohol abuse. Family functioning and child adjustment.
	Milde, Anne Marita, Dr. psychol.	Ulcerative colitis and the role of stress. Animal studies of psychobiological factors in relationship to experimentally induced colitis.
	Stornes, Tor, Dr. philos.	Socio-moral behaviour in sport. An investigation of perceptions of sportspersonship in handball related to important factors of socio-moral influence.
	Mæhle, Magne, Dr. philos.	Re-inventing the child in family therapy: An investigation of the relevance and applicability of theory and research in child development for family therapy involving children.
	Kobbeltvedt, Therese, Dr. psychol.	Risk and feelings: A field approach.
2004 H	Thomsen, Tormod, Dr. psychol.	Localization of attention in the brain.
	Løberg, Else-Marie, Dr. psychol.	Functional laterality and attention modulation in schizophrenia: Effects of clinical variables.
	Kyrkjebø, Jane Mikkelsen, Dr. philos.	Learning to improve: Integrating continuous quality improvement learning into nursing education.
	Laumann, Karin, Dr. psychol.	Restorative and stress-reducing effects of natural environments: Experiencal, behavioural and cardiovascular indices.
	Holgersen, Helge, PhD	Mellom oss - Essay i relasjonell psykoanalyse.
2005 V	Hetland, Hilde, Dr. psychol.	Leading to the extraordinary? Antecedents and outcomes of transformational leadership.
	Hetland, Hilde, Dr. psychol. Iversen, Anette Christine, Dr. philos.	Antecedents and outcomes of transformational
	Iversen, Anette Christine, Dr.	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational
V 2005	Iversen, Anette Christine, Dr. philos.	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational role of perceived control and coping. Climates for creativity and innovation: Definitions,
V 2005	Iversen, Anette Christine, Dr. philos. Mathisen, Gro Ellen, PhD	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational role of perceived control and coping. Climates for creativity and innovation: Definitions, measurement, predictors and consequences. Seeing disability pedagogically – The lived experience of
V 2005	Iversen, Anette Christine, Dr. philos. Mathisen, Gro Ellen, PhD Sævi, Tone, Dr. philos.	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational role of perceived control and coping. Climates for creativity and innovation: Definitions, measurement, predictors and consequences. Seeing disability pedagogically – The lived experience of disability in the pedagogical encounter. Intrapersonal factors, family and school norms: combined and interactive influence on adolescent smoking
V 2005	Iversen, Anette Christine, Dr. philos. Mathisen, Gro Ellen, PhD Sævi, Tone, Dr. philos. Wiium, Nora, PhD	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational role of perceived control and coping. Climates for creativity and innovation: Definitions, measurement, predictors and consequences. Seeing disability pedagogically – The lived experience of disability in the pedagogical encounter. Intrapersonal factors, family and school norms: combined and interactive influence on adolescent smoking behaviour. Subjective and objective correlates of Posttraumatic Stress in immigrants/refugees exposed to political
V 2005	Iversen, Anette Christine, Dr. philos. Mathisen, Gro Ellen, PhD Sævi, Tone, Dr. philos. Wiium, Nora, PhD Kanagaratnam, Pushpa, PhD	Antecedents and outcomes of transformational leadership. Social differences in health behaviour: the motivational role of perceived control and coping. Climates for creativity and innovation: Definitions, measurement, predictors and consequences. Seeing disability pedagogically – The lived experience of disability in the pedagogical encounter. Intrapersonal factors, family and school norms: combined and interactive influence on adolescent smoking behaviour. Subjective and objective correlates of Posttraumatic Stress in immigrants/refugees exposed to political violence. Evaluating principals` and teachers` implementation of Second Step. A case study of four Norwegian primary

	Nordanger, Dag Øystein, Dr. psychol.	Psychosocial discourses and responses to political violence in post-war Tigray, Ethiopia.
	Rimol, Lars Morten, PhD	Behavioral and fMRI studies of auditory laterality and speech sound processing.
	Krumsvik, Rune Johan, Dr. philos.	ICT in the school. ICT-initiated school development in lower secondary school.
	Norman, Elisabeth, Dr. psychol.	Gut feelings and unconscious thought: An exploration of fringe consiousness in implicit cognition.
	Israel, K Pravin, Dr. psychol.	Parent involvement in the mental health care of children and adolescents. Emperical studies from clinical care setting.
	Glasø, Lars, PhD	Affects and emotional regulation in leader-subordinate relationships.
	Knutsen, Ketil, Dr. philos.	HISTORIER UNGDOM LEVER – En studie av hvordan ungdommer bruker historie for å gjøre livet meningsfullt.
	Matthiesen, Stig Berge, PhD	Bullying at work. Antecedents and outcomes.
2006 H	Gramstad, Arne, PhD	Neuropsychological assessment of cognitive and emotional functioning in patients with epilepsy.
	Bendixen, Mons, PhD	Antisocial behaviour in early adolescence: Methodological and substantive issues.
	Mrumbi, Khalifa Maulid, PhD	Parental illness and loss to HIV/AIDS as experienced by AIDS orphans aged between 12-17 years from Temeke District, Dar es Salaam, Tanzania: A study of the children's psychosocial health and coping responses.
	Hetland, Jørn, Dr. psychol.	The nature of subjective health complaints in adolescence: Dimensionality, stability, and psychosocial predictors
	Kakoko, Deodatus Conatus Vitalis, PhD	Voluntary HIV counselling and testing service uptake among primary school teachers in Mwanza, Tanzania: assessment of socio-demographic, psychosocial and socio-cognitive aspects
	Mykletun, Arnstein, Dr. psychol.	Mortality and work-related disability as long-term consequences of anxiety and depression: Historical cohort designs based on the HUNT-2 study
	Sivertsen, Børge, PhD	Insomnia in older adults. Consequences, assessment and treatment.
2007 V	Singhammer, John, Dr. philos.	Social conditions from before birth to early adulthood – the influence on health and health behaviour
	Janvin, Carmen Ani Cristea, PhD	Cognitive impairment in patients with Parkinson's disease: profiles and implications for prognosis
	Braarud, Hanne Cecilie, Dr.psychol.	Infant regulation of distress: A longitudinal study of transactions between mothers and infants
	Tveito, Torill Helene, PhD	Sick Leave and Subjective Health Complaints

	Magnussen, Liv Heide, PhD	Returning disability pensioners with back pain to work
	Thuen, Elin Marie, Dr.philos.	Learning environment, students' coping styles and emotional and behavioural problems. A study of Norwegian secondary school students.
	Solberg, Ole Asbjørn, PhD	Peacekeeping warriors – A longitudinal study of Norwegian peacekeepers in Kosovo
2007 H	Søreide, Gunn Elisabeth, Dr.philos.	Narrative construction of teacher identity
	Svensen, Erling, PhD	WORK & HEALTH. Cognitive Activation Theory of Stress applied in an organisational setting.
	Øverland, Simon Nygaard, PhD	Mental health and impairment in disability benefits. Studies applying linkages between health surveys and administrative registries.
	Eichele, Tom, PhD	Electrophysiological and Hemodynamic Correlates of Expectancy in Target Processing
	Børhaug, Kjetil, Dr.philos.	Oppseding til demokrati. Ein studie av politisk oppseding i norsk skule.
	Eikeland, Thorleif, Dr.philos.	Om å vokse opp på barnehjem og på sykehus. En undersøkelse av barnehjemsbarns opplevelser på barnehjem sammenholdt med sanatoriebarns beskrivelse av langvarige sykehusopphold – og et forsøk på forklaring.
	Wadel, Carl Cato, Dr.philos.	Medarbeidersamhandling og medarbeiderledelse i en lagbasert organisasjon
	Vinje, Hege Forbech, PhD	Thriving despite adversity: Job engagement and self-care among community nurses
	Noort, Maurits van den, PhD	Working memory capacity and foreign language acquisition
2008 V	Breivik, Kyrre, Dr.psychol.	The Adjustment of Children and Adolescents in Different Post-Divorce Family Structures. A Norwegian Study of Risks and Mechanisms.
	Johnsen, Grethe E., PhD	Memory impairment in patients with posttraumatic stress disorder
	Sætrevik, Bjørn, PhD	Cognitive Control in Auditory Processing
	Carvalhosa, Susana Fonseca, PhD	Prevention of bullying in schools: an ecological model
2008 H	Brønnick, Kolbjørn Selvåg	Attentional dysfunction in dementia associated with Parkinson's disease.
	Posserud, Maj-Britt Rocio	Epidemiology of autism spectrum disorders
	Haug, Ellen	Multilevel correlates of physical activity in the school setting
	Skjerve, Arvid	Assessing mild dementia – a study of brief cognitive tests.

	Kjønniksen, Lise	The association between adolescent experiences in physical activity and leisure time physical activity in adulthood: a ten year longitudinal study
	Gundersen, Hilde	The effects of alcohol and expectancy on brain function
	Omvik, Siri	Insomnia – a night and day problem
2009 V	Molde, Helge	Pathological gambling: prevalence, mechanisms and treatment outcome.
	Foss, Else	Den omsorgsfulle væremåte. En studie av voksnes væremåte i forhold til barn i barnehagen.
	Westrheim, Kariane	Education in a Political Context: A study of Konwledge Processes and Learning Sites in the PKK.
	Wehling, Eike	Cognitive and olfactory changes in aging
	Wangberg, Silje C.	Internet based interventions to support health behaviours: The role of self-efficacy.
	Nielsen, Morten B.	Methodological issues in research on workplace bullying. Operationalisations, measurements and samples.
	Sandu, Anca Larisa	MRI measures of brain volume and cortical complexity in clinical groups and during development.
	Guribye, Eugene	Refugees and mental health interventions
	Sørensen, Lin	Emotional problems in inattentive children – effects on cognitive control functions.
	Tjomsland, Hege E.	Health promotion with teachers. Evaluation of the Norwegian Network of Health Promoting Schools: Quantitative and qualitative analyses of predisposing, reinforcing and enabling conditions related to teacher participation and program sustainability.
	Helleve, Ingrid	Productive interactions in ICT supported communities of learners
2009 H	Skorpen, Aina Øye, Christine	Dagliglivet i en psykiatrisk institusjon: En analyse av miljøterapeutiske praksiser
	Andreassen, Cecilie Schou	WORKAHOLISM – Antecedents and Outcomes
	Stang, Ingun	Being in the same boat: An empowerment intervention in breast cancer self-help groups
	Sequeira, Sarah Dorothee Dos Santos	The effects of background noise on asymmetrical speech perception
	Kleiven, Jo, dr.philos.	The Lillehammer scales: Measuring common motives for vacation and leisure behavior
	Jónsdóttir, Guðrún	Dubito ergo sum? Ni jenter møter naturfaglig kunnskap.
	Hove, Oddbjørn	Mental health disorders in adults with intellectual disabilities - Methods of assessment and prevalence of mental health disorders and problem behaviour
	Wageningen, Heidi Karin van	The role of glutamate on brain function

	Bjørkvik, Jofrid	God nok? Selvaktelse og interpersonlig fungering hos pasienter innen psykisk helsevern: Forholdet til diagnoser, symptomer og behandlingsutbytte
	Andersson, Martin	A study of attention control in children and elderly using a forced-attention dichotic listening paradigm
	Almås, Aslaug Grov	Teachers in the Digital Network Society: Visions and Realities. A study of teachers' experiences with the use of ICT in teaching and learning.
	Ulvik, Marit	Lærerutdanning som danning? Tre stemmer i diskusjonen
2010 V	Skår, Randi	Læringsprosesser i sykepleieres profesjonsutøvelse. En studie av sykepleieres læringserfaringer.
	Roald, Knut	Kvalitetsvurdering som organisasjonslæring mellom skole og skoleeigar
	Lunde, Linn-Heidi	Chronic pain in older adults. Consequences, assessment and treatment.
	Danielsen, Anne Grete	Perceived psychosocial support, students' self-reported academic initiative and perceived life satisfaction
	Hysing, Mari	Mental health in children with chronic illness
	Olsen, Olav Kjellevold	Are good leaders moral leaders? The relationship between effective military operational leadership and morals
	Riese, Hanne	Friendship and learning. Entrepreneurship education through mini-enterprises.
	Holthe, Asle	Evaluating the implementation of the Norwegian guidelines for healthy school meals: A case study involving three secondary schools
н	Hauge, Lars Johan	Environmental antecedents of workplace bullying: A multi-design approach
	Bjørkelo, Brita	Whistleblowing at work: Antecedents and consequences
	Reme, Silje Endresen	Common Complaints – Common Cure? Psychiatric comorbidity and predictors of treatment outcome in low back pain and irritable bowel syndrome
	Helland, Wenche Andersen	Communication difficulties in children identified with psychiatric problems
	Beneventi, Harald	Neuronal correlates of working memory in dyslexia
	Thygesen, Elin	Subjective health and coping in care-dependent old persons living at home
	Aanes, Mette Marthinussen	Poor social relationships as a threat to belongingness needs. Interpersonal stress and subjective health complaints: Mediating and moderating factors.
	Anker, Morten Gustav	Client directed outcome informed couple therapy

	Bull, Torill	Combining employment and child care: The subjective well-being of single women in Scandinavia and in Southern Europe
	Viig, Nina Grieg	Tilrettelegging for læreres deltakelse i helsefremmende arbeid. En kvalitativ og kvantitativ analyse av sammenhengen mellom organisatoriske forhold og læreres deltakelse i utvikling og implementering av Europeisk Nettverk av Helsefremmende Skoler i Norge
	Wolff, Katharina	To know or not to know? Attitudes towards receiving genetic information among patients and the general public.
	Ogden, Terje, dr.philos.	Familiebasert behandling av alvorlige atferdsproblemer blant barn og ungdom. Evaluering og implementering av evidensbaserte behandlingsprogrammer i Norge.
	Solberg, Mona Elin	Self-reported bullying and victimisation at school: Prevalence, overlap and psychosocial adjustment.
2011 V	Bye, Hege Høivik	Self-presentation in job interviews. Individual and cultural differences in applicant self-presentation during job interviews and hiring managers' evaluation
	Notelaers, Guy	Workplace bullying. A risk control perspective.
	Moltu, Christian	Being a therapist in difficult therapeutic impasses. A hermeneutic phenomenological analysis of skilled psychotherapists' experiences, needs, and strategies in difficult therapies ending well.
	Myrseth, Helga	Pathological Gambling - Treatment and Personality Factors
	Schanche, Elisabeth	From self-criticism to self-compassion. An empirical investigation of hypothesized change prosesses in the Affect Phobia Treatment Model of short-term dynamic psychotherapy for patients with Cluster C personality disorders.
	Våpenstad, Eystein Victor, dr.philos.	Det tempererte nærvær. En teoretisk undersøkelse av psykoterapautens subjektivitet i psykoanalyse og psykoanalytisk psykoterapi.
	Haukebø, Kristin	Cognitive, behavioral and neural correlates of dental and intra-oral injection phobia. Results from one treatment and one fMRI study of randomized, controlled design.
	Harris, Anette	Adaptation and health in extreme and isolated environments. From 78°N to 75°S.
	Bjørknes, Ragnhild	Parent Management Training-Oregon Model: intervention effects on maternal practice and child behavior in ethnic minority families
	Mamen, Asgeir	Aspects of using physical training in patients with substance dependence and additional mental distress
	Espevik, Roar	Expert teams: Do shared mental models of team members make a difference
	Haara, Frode Olav	Unveiling teachers' reasons for choosing practical activities in mathematics teaching

XII

2011 H	Hauge, Hans Abraham	How can employee empowerment be made conducive to both employee health and organisation performance? An empirical investigation of a tailor-made approach to organisation learning in a municipal public service organisation.
	Melkevik, Ole Rogstad	Screen-based sedentary behaviours: pastimes for the poor, inactive and overweight? A cross-national survey of children and adolescents in 39 countries.
	Vøllestad, Jon	Mindfulness-based treatment for anxiety disorders. A quantitative review of the evidence, results from a randomized controlled trial, and a qualitative exploration of patient experiences.
	Tolo, Astrid	Hvordan blir lærerkompetanse konstruert? En kvalitativ studie av PPU-studenters kunnskapsutvikling.
	Saus, Evelyn-Rose	Training effectiveness: Situation awareness training in simulators
	Nordgreen, Tine	Internet-based self-help for social anxiety disorder and panic disorder. Factors associated with effect and use of self-help.
	Munkvold, Linda Helen	Oppositional Defiant Disorder: Informant discrepancies, gender differences, co-occuring mental health problems and neurocognitive function.
	Christiansen, Øivin	Når barn plasseres utenfor hjemmet: beslutninger, forløp og relasjoner. Under barnevernets (ved)tak.
	Brunborg, Geir Scott	Conditionability and Reinforcement Sensitivity in Gambling Behaviour
	Hystad, Sigurd William	Measuring Psychological Resiliency: Validation of an Adapted Norwegian Hardiness Scale
2012 V	Roness, Dag	Hvorfor bli lærer? Motivasjon for utdanning og utøving.
	Fjermestad, Krister Westlye	The therapeutic alliance in cognitive behavioural therapy for youth anxiety disorders
	Jenssen, Eirik Sørnes	Tilpasset opplæring i norsk skole: politikeres, skolelederes og læreres handlingsvalg
	Saksvik-Lehouillier, Ingvild	Shift work tolerance and adaptation to shift work among offshore workers and nurses
	Johansen, Venke Frederike	Når det intime blir offentlig. Om kvinners åpenhet om brystkreft og om markedsføring av brystkreftsaken.
	Herheim, Rune	Pupils collaborating in pairs at a computer in mathematics learning: investigating verbal communication patterns and qualities
	Vie, Tina Løkke	Cognitive appraisal, emotions and subjective health complaints among victims of workplace bullying: A stress-theoretical approach
	Jones, Lise Øen	Effects of reading skills, spelling skills and accompanying efficacy beliefs on participation in education. A study in Norwegian prisons.

2012 H	Danielsen, Yngvild Sørebø	Childhood obesity – characteristics and treatment. Psychological perspectives.
	Horverak, Jøri Gytre	Sense or sensibility in hiring processes. Interviewee and interviewer characteristics as antecedents of immigrant applicants' employment probabilities. An experimental approach.
	Jøsendal, Ola	Development and evaluation of BE smokeFREE, a school-based smoking prevention program
	Osnes, Berge	Temporal and Posterior Frontal Involvement in Auditory Speech Perception
	Drageset, Sigrunn	Psychological distress, coping and social support in the diagnostic and preoperative phase of breast cancer
	Aasland, Merethe Schanke	Destructive leadership: Conceptualization, measurement, prevalence and outcomes
	Bakibinga, Pauline	The experience of job engagement and self-care among Ugandan nurses and midwives
	Skogen, Jens Christoffer	Foetal and early origins of old age health. Linkage between birth records and the old age cohort of the Hordaland Health Study (HUSK)
	Leversen, Ingrid	Adolescents' leisure activity participation and their life satisfaction: The role of demographic characteristics and psychological processes
	Hanss, Daniel	Explaining sustainable consumption: Findings from cross-sectional and intervention approaches
	Rød, Per Arne	Barn i klem mellom foreldrekonflikter og samfunnsmessig beskyttelse
2013 V	Mentzoni, Rune Aune	Structural Characteristics in Gambling
	Knudsen, Ann Kristin	Long-term sickness absence and disability pension award as consequences of common mental disorders. Epidemiological studies using a population-based health survey and official ill health benefit registries.
	Strand, Mari	Emotional information processing in recurrent MDD
	Veseth, Marius	Recovery in bipolar disorder. A reflexive-collaborative exploration of the lived experiences of healing and growth when battling a severe mental illness
	Mæland, Silje	Sick leave for patients with severe subjective health complaints. Challenges in general practice.
	Mjaaland, Thera	At the frontiers of change? Women and girls' pursuit of education in north-western Tigray, Ethiopia
	Odéen, Magnus	Coping at work. The role of knowledge and coping expectancies in health and sick leave.
	Hynninen, Kia Minna Johanna	Anxiety, depression and sleep disturbance in chronic obstructive pulmonary disease (COPD). Associations, prevalence and effect of psychological treatment.

	Flo, Elisabeth	Sleep and health in shift working nurses
	Aasen, Elin Margrethe	From paternalism to patient participation? The older patients undergoing hemodialysis, their next of kin and the nurses: a discursive perspective on perception of patient participation in dialysis units
	Ekornås, Belinda	Emotional and Behavioural Problems in Children: Self-perception, peer relationships, and motor abilities
	Corbin, J. Hope	North-South Partnerships for Health: Key Factors for Partnership Success from the Perspective of the KIWAKKUKI
	Birkeland, Marianne Skogbrott	Development of global self-esteem: The transition from adolescence to adulthood
2013 H	Gianella-Malca, Camila	Challenges in Implementing the Colombian Constitutional Court's Health-Care System Ruling of 2008
	Hovland, Anders	Panic disorder – Treatment outcomes and psychophysiological concomitants
	Mortensen, Øystein	The transition to parenthood – Couple relationships put to the test
	Årdal, Guro	Major Depressive Disorder – a Ten Year Follow-up Study. Inhibition, Information Processing and Health Related Quality of Life
	Johansen, Rino Bandlitz	The impact of military identity on performance in the Norwegian armed forces
	Bøe, Tormod	Socioeconomic Status and Mental Health in Children and Adolescents
2014 V	Nordmo, Ivar	Gjennom nåløyet – studenters læringserfaringer i psykologutdanningen
	Dovran, Anders	Childhood Trauma and Mental Health Problems in Adult Life
	Hegelstad, Wenche ten Velden	Early Detection and Intervention in Psychosis: A Long-Term Perspective
	Urheim, Ragnar	Forståelse av pasientaggresjon og forklaringer på nedgang i voldsrate ved Regional sikkerhetsavdeling, Sandviken sykehus
	Kinn, Liv Grethe	Round-Trips to Work. Qualitative studies of how persons with severe mental illness experience work integration.
	Rød, Anne Marie Kinn	Consequences of social defeat stress for behaviour and sleep. Short-term and long-term assessments in rats.
	Nygård, Merethe	Schizophrenia – Cognitive Function, Brain Abnormalities, and Cannabis Use
	Tjora, Tore	Smoking from adolescence through adulthood: the role of family, friends, depression and socioeconomic status. Predictors of smoking from age 13 to 30 in the "The Norwegian Longitudinal Health Behaviour Study" (NLHB)
	Vangsnes, Vigdis	The Dramaturgy and Didactics of Computer Gaming. A Study of a Medium in the Educational Context of Kindergartens.

	Nordahl, Kristin Berg	Early Father-Child Interaction in a Father-Friendly Context: Gender Differences, Child Outcomes, and Protective Factors related to Fathers' Parenting Behaviors with One-year-olds
2014 H	Sandvik, Asle Makoto	Psychopathy – the heterogenety of the construct
	Skotheim, Siv	Maternal emotional distress and early mother-infant interaction: Psychological, social and nutritional contributions
	Halleland, Helene Barone	Executive Functioning in adult Attention Deficit Hyperactivity Disorder (ADHD). From basic mechanisms to functional outcome.
	Halvorsen, Kirsti Vindal	Partnerskap i lærerutdanning, sett fra et økologisk perspektiv
	Solbue, Vibeke	Dialogen som visker ut kategorier. En studie av hvilke erfaringer innvandrerungdommer og norskfødte med innvandrerforeldre har med videregående skole. Hva forteller ungdommenes erfaringer om videregående skoles håndtering av etniske ulikheter?
	Kvalevaag, Anne Lise	Fathers' mental health and child development. The predictive value of fathers' psychological distress during pregnancy for the social, emotional and behavioural development of their children
	Sandal, Ann Karin	Ungdom og utdanningsval. Om elevar sine opplevingar av val og overgangsprosessar.
	Haug, Thomas	Predictors and moderators of treatment outcome from high- and low-intensity cognitive behavioral therapy for anxiety disorders. Association between patient and process factors, and the outcome from guided self-help, stepped care, and face-to-face cognitive behavioral therapy.
	Sjølie, Hege	Experiences of Members of a Crisis Resolution Home Treatment Team. Personal history, professional role and emotional support in a CRHT team.
	Falkenberg, Liv Eggset	Neuronal underpinnings of healthy and dysfunctional cognitive control
	Mrdalj, Jelena	The early life condition. Importance for sleep, circadian rhythmicity, behaviour and response to later life challenges
	Hesjedal, Elisabeth	Tverrprofesjonelt samarbeid mellom skule og barnevern: Kva kan støtte utsette barn og unge?
2015 V	Hauken, May Aasebø	«The cancer treatment was only half the work!» A Mixed- Method Study of Rehabilitation among Young Adult Cancer Survivors
	Ryland, Hilde Katrin	Social functioning and mental health in children: the influence of chronic illness and intellectual function
	Rønsen, Anne Kristin	Vurdering som profesjonskompetanse. Refleksjonsbasert utvikling av læreres kompetanse i formativ vurdering

	Hoff, Helge Andreas	Thinking about Symptoms of Psychopathy in Norway: Content Validation of the Comprehensive Assessment of Psychopathic Personality (CAPP) Model in a Norwegian Setting
	Schmid, Marit Therese	Executive Functioning in recurrent- and first episode Major Depressive Disorder. Longitudinal studies
	Sand, Liv	Body Image Distortion and Eating Disturbances in Children and Adolescents
	Matanda, Dennis Juma	Child physical growth and care practices in Kenya: Evidence from Demographic and Health Surveys
	Amugsi, Dickson Abanimi	Child care practices, resources for care, and nutritional outcomes in Ghana: Findings from Demographic and Health Surveys
	Jakobsen, Hilde	The good beating: Social norms supporting men's partner violence in Tanzania
	Sagoe, Dominic	Nonmedical anabolic-androgenic steroid use: Prevalence, attitudes, and social perception
	Eide, Helene Marie Kjærgård	Narrating the relationship between leadership and learning outcomes. A study of public narratives in the Norwegian educational sector.
2015 H	Wubs, Annegreet Gera	Intimate partner violence among adolescents in South Africa and Tanzania
	Hjelmervik, Helene Susanne	Sex and sex-hormonal effects on brain organization of fronto-parietal networks
	Dahl, Berit Misund	The meaning of professional identity in public health nursing
	Røykenes, Kari	Testangst hos sykepleierstudenter: «Alternativ behandling»
	Bless, Josef Johann	The smartphone as a research tool in psychology. Assessment of language lateralization and training of auditory attention.
	Løvvik, Camilla Margrethe Sigvaldsen	Common mental disorders and work participation – the role of return-to-work expectations
	Lehmann, Stine	Mental Disorders in Foster Children: A Study of Prevalence, Comorbidity, and Risk Factors
	Knapstad, Marit	Psychological factors in long-term sickness absence: the role of shame and social support. Epidemiological studies based on the Health Assets Project.
2016 V	Kvestad, Ingrid	Biological risks and neurodevelopment in young North Indian children
	Sælør, Knut Tore	Hinderløyper, halmstrå og hengende snører. En kvalitativ studie av håp innenfor psykisk helse- og rusfeltet.
	Mellingen, Sonja	Alkoholbruk, partilfredshet og samlivsstatus. Før, inn i, og etter svangerskapet – korrelater eller konsekvenser?
	Thun, Eirunn	Shift work: negative consequences and protective factors

	Hilt, Line Torbjørnsen	The borderlands of educational inclusion. Analyses of inclusion and exclusion processes for minority language students
	Havnen, Audun	Treatment of obsessive-compulsive disorder and the importance of assessing clinical effectiveness
	Slåtten, Hilde	Gay-related name-calling among young adolescents. Exploring the importance of the context.
	Ree, Eline	Staying at work. The role of expectancies and beliefs in health and workplace interventions.
	Morken, Frøydis	Reading and writing processing in dyslexia
2016 H	Løvoll, Helga Synnevåg	Inside the outdoor experience. On the distinction between pleasant and interesting feelings and their implication in the motivational process.
	Hjeltnes, Aslak	Facing social fears: An investigation of mindfulness- based stress reduction for young adults with social anxiety disorder
	Øyeflaten, Irene Larsen	Long-term sick leave and work rehabilitation. Prognostic factors for return to work.
	Henriksen, Roger Ekeberg	Social relationships, stress and infection risk in mother and child
	Johnsen, Iren	«Only a friend» - The bereavement process of young adults who have lost a friend to a traumatic death. A mixed methods study.
	Helle, Siri	Cannabis use in non-affective psychoses: Relationship to age at onset, cognitive functioning and social cognition
	Glambek, Mats	Workplace bullying and expulsion in working life. A representative study addressing prospective associations and explanatory conditions.
	Oanes, Camilla Jensen	Tilbakemelding i terapi. På hvilke måter opplever terapeuter at tilbakemeldingsprosedyrer kan virke inn på terapeutiske praksiser?
	Reknes, Iselin	Exposure to workplace bullying among nurses: Health outcomes and individual coping
	Chimhutu, Victor	Results-Based Financing (RBF) in the health sector of a low-income country. From agenda setting to implementation: The case of Tanzania
	Ness, Ingunn Johanne	The Room of Opportunity. Understanding how knowledge and ideas are constructed in multidisciplinary groups working with developing innovative ideas.
	Hollekim, Ragnhild	Contemporary discourses on children and parenting in Norway. An empirical study based on two cases.
	Doran, Rouven	Eco-friendly travelling: The relevance of perceived norms and social comparison
2017 V	Katisi, Masego	The power of context in health partnerships: Exploring synergy and antagony between external and internal ideologies in implementing Safe Male Circumcision (SMC) for HIV prevention in Botswana

Jamaludin, Nor Lelawati Binti	The "why" and "how" of International Students' Ambassadorship Roles in International Education
Berthelsen, Mona	Effects of shift work and psychological and social work factors on mental distress. Studies of onshore/offshore workers and nurses in Norway.

Errata paper 3

Abstract "One hundred and thirty-one GCs" - Rettet til "One hundred and thirteen GCs".

- Page 5 "10-14 years old" Rettet til "11-14 years old".
- Page 10 "Geidne, Quennerstedt & Eriksson, 2013" Rettet til "Geidne, Quennerstedt & Eriksson, 2013a".
- Page 17 "Geidne et al., 2013" Rettet til "Geidne et al., 2013a".
- Page 18 "Geidne et al., 2013" Rettet til "Geidne et al., 2013a".
- Page 20 "Geidne, Quennerstedt & Eriksson, 2013" Rettet til "Geidne, Quennerstedt & Eriksson, 2013b".
- Page 23 "Geidne and colleagues (2013)" Rettet til "Geidne and colleagues (2013a)".

Table 1 Layout endret

Table 2 Layout endret