

**The effects of skill training on social workers' professional competences in Norway:
results of a cluster-randomized study**

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Abstract

Using a cluster-randomized design, this study analyses the effects of a government administered skill training programme for social workers in Norway. The training programme aims to improve social workers' professional competences by enhancing and systematizing follow-up work directed towards longer-term unemployed clients in the following areas: encountering the user, system-oriented efforts and administrative work. The main tools and techniques of the programme are based on motivational interviewing and appreciative inquiry. The data comprise responses to baseline and 18-month follow-up questionnaires administered to all social workers ($n = 99$) in 18 participating Labour and Welfare offices randomized into experimental and control groups. The findings indicate that the skill training programme positively affected the social workers' evaluations of their professional competences and quality of work supervision received. The acquisition and mastering of combinations of specific tools

and techniques, a comprehensive supervision structure and the opportunity to adapt the learned skills to local conditions were important in explaining the results.

Keywords: Evidence-based, Skill training, Social work, Randomized, Experimental, Cluster-randomized, Professional competences

Introduction

Facilitating for professional social work satisfying both requirements of effectiveness and empowerment on behalf of the clients, calls for a need to investigate and understand the of development professional competences. In Norway, social workers within a nationwide welfare-to-work programme, the Qualification Programme, addressed the need for increased competences regarding the close follow-up to which clients were entitled. Accordingly, the Norwegian Directorate of Labour and Welfare developed and implemented a skill training programme: the Comprehensive, Methodological and Principle-based Approach (CMPA). They also commissioned an independent evaluation of the programme. The aim of the implementation and evaluation was to improve social workers' skills, develop evidence-based methods for social work and increase the knowledge of what 'works' within social work practices (Labour and Welfare Administration, 2011).

The CMPA programme can be understood as a marker of the development of evidence-based practice in social work, and consequently, within the context of the general academic turn of social work into an academic discipline. This development is characterized by a need to understand knowledge production, including evidence-based research and practice. Sackett et al. (1996, p. 71) define evidence-based practice as the

'conscientious, explicit, and judicious use of current evidence in making decisions about the care of individual patients'. It rests on a paradigm, which maximizes opportunities to help clients and avoid harm, but it also derives from public resource limitations, which impose pressure to document efficiency. The latter perspective can be criticised for building on the notion of practitioners and clients as rational actors, which may reduce social work to an instrumental activity (Webb, 2001). Neoliberal ideologies and perspectives of managerialism may also result in a market view of welfare services and the individualization of social problems (Wiggan, 2012).

On the other hand, it is fundamental to evidence-based practice that expertise from the field should be acknowledged. While some scholars have demonstrated the importance of guidelines, standardized work methods and specific interventions, others argue that the reflexive and relational competences of the professional is essential (Messer and Wampold, 2002). Critics emphasize that evidence-based practice takes insufficient account of practitioner competences, client's values and wishes (Johnson and Austin, 2006). Thus, the complexity of the discipline calls for a broad understanding of what evidence-based practice is, how it relates to professional competences and how it influences social workers' skills and everyday practice.

The government-administered CMPA skill training programme seeks to improve social workers' professional competences by systematizing and improving follow-up work in the welfare-to-work Qualification Programme. Using a cluster-randomized research design with an 18-month follow-up, this study evaluates the effects of the CMPA on social workers' assessments of their professional competences, working alliance, the quality of work supervision received, and the three main areas of the programme (i.e. encountering the user, system-oriented efforts and administration). As the CMPA

programme focuses on increasing professional competences as well as specific skills for follow-up work, we expect it to have a positive effect on measured outcomes.

The CMPA skill training programme in a Norwegian social work context

In 2006, the Norwegian government introduced an extensive reform initiative, the aim of which was to streamline and improve Norway's welfare services based on a 'one-stop shop' principle. The reform integrated social welfare, social security and employment services into one joint unit, the Norwegian Labour and Welfare Administration. To prevent poverty and social exclusion among the long-term unemployed, the Labour and Welfare Administration also implemented the Qualification Programme. The programme is regarded the new context for Norwegian social work; social workers are expected to conduct a close and comprehensive follow-up that should be tailored to the needs, preferences and limitations of the individual client. It is a full-time programme lasting up to two years, which focuses on increasing qualifications, motivation and self-efficacy (Andersen and Skinnarland, 2011; Helgøy et al., 2010).

In order to meet social workers' need for increased competences regarding the follow-up work within the Qualification Programme, The Norwegian Directorate of Labour and Welfare developed and implemented the Comprehensive, Methodological and Principle-based Approach (CMPA). The CMPA programme consists of four joint seminars (for a total of nine days) and a comprehensive supervision structure carried out at the local work place. It is described as 'innovative' because it introduces a model consisting of a new structure and a common, systematic approach for social workers' follow-up work. It also attempts to improve their abilities for more accurate and tailor made social work. Therefore, the model recognizes the complex, locally situated nature of social work and that clients' needs vary, allowing for pragmatic adjustments.

According to the CMPA programme (Figure 1), the follow-up work should cover three essential areas: *encounters with users*, focusing on the relationship between the social worker and the client; *system-oriented efforts*, focusing on work with collaborating partners (e.g. the client's social network, collaborators in welfare services and the labour market); and *administrative work*, which includes charting, planning, coordination and evaluation of services (Labour and Welfare Administration, 2011).

CMPA's methodological tools are based on motivational interviewing (MI) and appreciative inquiry (AI). MI offers an important way of working with resistance, as it involves the use of active listening skills (Markland et al., 2005; Prochaska and Di Clemente, 1983). Due to its anti-oppressive nature, MI is important in the context of social work (Watson, 2011). AI encourages individuals to adopt a positive, constructive approach in order to support organizational changes. Its relevance to social work is that it challenges the problem-focused approach often dominant in the field (Dematteo and Reeves, 2011). In the skill training programme, MI relates especially to the first area, encounters with users, while AI relates to the second area, system-oriented efforts.

Insert Figure 1 here

To ensure local implementation of the CMPA programme, a three-level work supervision structure was implemented. Previous research has demonstrated that in order to translate learned knowledge into practice, long-term work supervision with individual feedback and coaching after workshops or courses are essential (Miller et al., 2004; Heaven et al., 2006; Madson et al., 2009). Within CMPA, the *first* level of work

supervision consists of the CMPA team leaders at the local Labour and Welfare offices who supervise social workers in the Qualification Programme. The *second* level is the county CMPA representatives who supervise the CMPA team leaders. The *third* level is the resource group at the Directorate of Labour and Welfare, which supervises the county-level CMPA representatives and, if needed, representatives at other levels. Social workers were to attend supervisory sessions with the CMPA team leaders every 14 days. Local CMPA implementation was further supported by two booster seminars in which social workers discussed their experiences, and by a two-day seminar for office leaders.

Professional competences in social work

Professional competences are acquired through both formal education and workplace experience. The concept of competence has been criticized (O'Hagan, 1996), as it may result in a technical and bureaucratic approach to social work practice that is contrary to a holistic perspective emphasizing critical reflection and autonomy; suitable for an organizational framework in which strategies and structures are valued more than individualized and person-focused development. These criticisms are similar to those related to evidence-based practice within social work, as pointed out in the introduction section. However, the criticism depends on how 'competence' is defined; the concept does not have one unique definition, but different meanings depending on perspective and epistemological traditions. It has for instance been argued that a rationalist, positivistic perspective, measuring competences defined as certain qualifications, would not take into account the actor's perspective (Garavan and McGuire, 2001). A

phenomenological approach, however, represents an alternative perspective where the socio-cultural context and self-assessments are recognised.

Nygren (2004, p. 151) defines professional competence as 'relevant expertise that enables people to master one or more academic tasks assigned to the profession in relation to specific claims'. Professional competence should be interpreted as an individual response to the specific requirements in various contexts and practices. This 'operational expertise' emerges only when it is realized in concrete actions in a particular practice, which is defined as 'competence to act'. Competence to act appears, first, as generalized potential competence and, secondly, as context-specific realized competence (Nygren, 2004). *Work supervision* is crucial for the development of competences both as regards learning and the process of linking new knowledge to potential use. Work supervision should be carried out interactively, focusing dialogue and relationship (Cohen, 2004).

The concept of competence is interrelated with knowledge production. Gibbons et al. (1994) separate between Mode 1 and Mode 2 types of knowledge production. In Mode 1 knowledge is defined and resolved by the scientific community, whereas in Mode 2 knowledge is produced in interaction with practice. Grey and Shubert (2012) argue that, within social work, the concept of 'evidence-based' should encompass *both* knowledge modes. Gambrill (2007) pinpoints *evidence-informed* as a more convenient concept for the knowledge production within social work, leaving room for clinical experience and judgements of practitioners and clients. As regards applied social research, Davies et al. (2008) suggest '*knowledge interaction*' as an appropriate description of the engagement of multiple players with diverse sources of knowledge.

Data and methods

A cluster-randomized design was used to evaluate effects of the CMPA skill training programme. While the Labour and Welfare Administration was responsible for developing and implementing CMPA, independent researchers were responsible for the evaluation. Social workers in experimental and control groups responded to baseline and follow-up questionnaires that consisted of items related to knowledge and skills that are important for professional practice, as well as items concerning their competences within the Qualification Programme. The evaluation also produced qualitative data in the form of interviews and observations. Additionally, effects of CMPA for clients were documented through questionnaires, administrative data and interviews. However, these data are not utilized in this study.

Recruitment and randomization

Fifty of the largest Labour and Welfare offices nationwide were invited by the Labour and Welfare Administration to participate in the project. The Administration informed the leaders of these offices of the requirements for participation, that is, organizational readiness and participation in research, while the researchers informed them about the cluster-randomized design. Of the 50 offices invited, 18 decided to participate. A common reason for declined invitations was that the offices had recently undergone major organizational changes. Clusters (offices) instead of individual social workers were randomized because the skill training programme was implemented at the office level, and randomizing individual social workers would have increased the risk of

contamination and problems of programme implementation (Bloom, 2005; Ivers et al., 2011).

Before randomizing the participating offices, all 103 social workers who were working in the Qualification Programme, either full-time or part-time in addition to other tasks, received the T1 questionnaire and the consent form. Of these, 99 responded, for a response rate of 96 per cent of the initial population of social workers. The T1 questionnaire focused on documenting the follow-up work, especially concerning encountering the user, system-oriented efforts and administrative work. The questionnaire also documented social workers' professional competences, working alliance and motivations for and experiences of follow-up work in the Qualification Programme. In addition to the standardized WAI scale (Working Alliance Inventory Scale), we developed measures that fitted the goals of the CMPA programme but at the same time were general and suitable for social workers in the control group. Measures were developed in conjunction with programme developers, practitioners and researchers in the field and were tested in a pilot study involving 24 social workers. Factor analyses were conducted on the various scales and poorly functioning items were omitted from the final questionnaire.

Of the 99 social workers who completed the first questionnaire, 78 per cent were women and 22 per cent men. The average age of social workers was 42.9 years. In terms of education, 69 per cent had a bachelor's degree and 28 per cent a master's degree; only 3 per cent had less education than a bachelor's degree. Regarding experience, 72 per cent of the social workers had previous experience with similar follow-up work, having worked in the Qualification Programme for an average of 15 months.

After the social workers had completed the first questionnaire, the 18 Labour and Welfare offices were randomized into experimental and control groups (Eldridge et al., 2008). Nine offices were randomized to the experimental group and nine to the control group. Social workers from the experimental group offices began their skill training, while social workers from the control group offices continued with business as usual. The CPGA resource group from the Directorate arranged the training over four seminars and a total of nine days between 10 May and 15 September 2011; homework assignments were completed between seminars. After the seminars ended, the programme continued with CPGA supervision **at the work place. Social workers from the control group offices received work supervision as 'business as usual', which often consists of reflections and discussions of concrete challenges in their daily work.**

Table 1 compares office-level and social worker-level information between the experimental and control group conditions at T1 (baseline). Although the randomization was successful, the levels of T1 working alliance and T1 professional competences were significantly *lower* among social workers in offices randomized to the experimental group than in control group offices. **Also the frequency of work supervision was somewhat lower in experimental group offices, although the difference was not significant.** Consequently, the baseline values of variables showing significant differences will be controlled for when determining the final effects of the CPGA skill training programme.

Insert Table 1 here

Follow-up and attrition

The follow-up questionnaire was sent to social workers within experimental and control condition 18 months after T1, which was one year after the CMPA skill training programme had ended. The second questionnaire repeated measures from the first one. In addition, social workers from offices randomized to the experimental group were asked to evaluate the CMPA skill training programme. Of the 99 social workers who had completed T1, 82 responded to T2, for a response rate of 83 per cent. Among social workers from the experimental group offices, the response rate was 75 per cent, while it was 86 per cent for their counterparts in the control group offices. The most common reason for not responding was employee turnover.

Analyses of attrition generally indicated no significant differences between T2 respondents and non-respondents in terms of gender, age, education, relevant courses, work experience or time working in the Qualification Programme. However, T2 respondents generally reported somewhat higher means on T1 measures of administrative work and professional competences than did those who did not complete the T2 questionnaire. Attrition analyses based on *experimental condition* indicated that T2 respondents in the experimental group scored somewhat higher on the administrative work scale than did T2 non-respondents ($p = 0.011$), while no such difference was found in the control group respondents. None of the other variables displayed skew attrition based on experimental condition.

Measures

Background variables were measured using standard survey questions. Gender was measured as 1 = male and 2 = female. Age was measured as the age of the respondent in 2011. Education was assessed as 1 = elementary school or high school, 2 = bachelor's degree or equivalent and 3 = master's degree, equivalent or higher.

Previous participation in relevant courses and experience of work similar to that involved in the Qualification Programme were assessed using a dichotomous variables, that is, 0 = 'no' or 1 = 'yes'. In addition, the number of *total* months working in the Qualification Programme was assessed. *Frequency of work supervision received was assessed at T1 and T2 by the sequences of supervision during the latest month prior to responding.*

Professional competences were assessed using a six-item scale. The items were: 'I have sufficient professional competence to help participants reach their goal of a job', 'I have sufficient competence to help participants improve their quality of life', 'I have sufficient competence to help participants reach their goals of activity', 'I have sufficient knowledge of the labour market in our municipality to help participants get employment', 'I have received training that gives me competence in my work with Qualification Programme participants', and 'In our office, social workers in the Qualification Programme are highly competent' (Cronbach's alpha = 0.81). The response options for each item range from 1 = never to 5 = always.

Working alliance was measured using the Working Alliance Inventory Scale, short revised version (Hatcher and Gillaspay, 2006; Horvath and Greenberg, 1989). The scale

consists of a 12-item measure focusing on the alliance between the social worker and the service user, especially concerning the dimensions of goals ('The participant and I work towards goals that we have agreed on'), tasks ('We agree on what is important for the participant to work on') and bonds ('I think the participant likes me'). The response options for each item range from 1 = never to 5 = always. The total scale ranges from 12 to 60 and is treated as one dimension in the present study (Wykes et al., 2013). The reliability of the scale is high (Cronbach's alpha = 0.86).

Quality of work supervision received was measured using the following items: 'The supervision I get at the office helps me maintain and develop skills that are important to me as a social worker in the Qualification Programme' and 'I receive supervision during training on specific skills that are important in the follow-up work'. The response options for each item range from 1 = never to 5 = always (Cronbach's alpha = 0.72).

Finally, the three areas of the CMPA skill training programme were determined using principal-axis factoring with varimax rotation (Table 2). The response options for each item range from 1 = never to 5 = always. The *encountering the user* scale consists of four items, measuring the use of MI-related techniques (Cronbach's alpha = 0.85). The *system-oriented efforts* scale also consists of four items, focusing on whether and to what extent the social worker collaborates with the participant's network (private and professional) and to what extent the participant has an active role in this collaboration (Cronbach's alpha = 0.79). The *administrative work* scale was assessed based on three items, measuring the amount and degree of documentation (Cronbach's alpha = 0.76). The explanatory variances for the three dimensions were 38.2 per cent for encountering the user, 18.8 per cent for the system-oriented efforts and 14.9 per cent for the administrative work.

Insert Table 2 here

Analysis plan

The three areas of the CMPA programme – encountering the user, system-oriented efforts and administrative work – were identified by factor analyses (Table 2). Bivariate correlations were identified for background and T1 variables (Table 3). After initial statistical tests, we measured social workers’ assessments of their work before and after the implementation of the skill training programme, based on unadjusted mean values (Table 4).

The real effects of the skill training programme were determined using analyses of covariance. The statistical models control for experimental condition, T1 working alliance, T1 professional competences and T1 baseline predictor where applicable (Table 5). In order to evaluate the impact of cluster randomization, we also applied a clustered general linear model. Table 5 reports both standard p-values and p-values adjusted for the clustered data structure. For transparency, Table 6 presents main trends for each cluster.

All analyses were conducted using SPSS version 20.0. In the planning phase of the project, power analysis was conducted based on the Guittet et al. (2005) model accounting for ICC (intraclass correlation coefficient). Power analysis estimated that,

with 10 clusters in each arm, 286 clients would be needed per arm with an ICC of 0.005. This study has nine offices in each arm, with a total of 99 social workers and 617 clients¹ who were involved in the Qualification Programme. The Norwegian Data Inspectorate and Norwegian Social Science Data Services (case 25275) approved the study design. We have followed their requirements regarding processes of data anonymity and security.

Results

At the follow-up, the social workers from experimental group offices were asked to evaluate their experience with the CMPA skill training programme. The follow-up was conducted 18 months after T1, approximately one year after finishing the CMPA seminars. Although the assessments varied somewhat between the four evaluated seminars, 92 to 97 per cent of the social workers reported that the skill training programme had been 'somewhat useful' or 'very useful' for their daily work in the Qualification Programme.

Of the social workers in the experimental condition, 83 per cent had received CMPA work supervision. The average amount of CMPA supervision received between January and September 2012 was 4.4 (SD 5.2) sequences per social worker. In addition, 77 per cent of the social workers assessed that the CMPA supervision had been useful for the follow-up of Qualification Programme participants. When comparing the frequency of work supervision during *latest* month prior to T2, the results show that social workers from the experimental group had received on average 1.13 (Sd=1.27) sequences, while

¹ The effects of CMPA on clients' employment outcomes will be analysed in another study.

social workers from control group offices had received 0.52 (Sd=1.09) sequences.

Although, social workers from offices randomised to experimental group had received work supervision more often, however the difference is not statistically significant ($p=0.119$).

Table 3 presents the means, standard deviations and bivariate correlations for the background and T1 variables of the study. Generally, the findings indicate fairly high positive correlations between encountering the user, system-oriented efforts, professional competences and working alliance. The duration of work in the Qualification Programme is also positively associated with social workers' assessments of their professional competences and working alliance, indicating that these assessments are generally more positive the longer social workers' experience of the Qualification Programme is. However, the correlation between the administrative part of the work and earlier work experience is negative, although not significant.

Table 4 shows social workers' unadjusted assessments at T1 and T2, presented by experimental condition. Generally, the findings indicate positive changes for social workers in the experimental condition, while no such effects are found for social workers from control group offices. Within the experimental group offices, significant positive changes were found for professional competences ($p=0.000$), working alliance ($p=0.001$) and quality of work supervision ($p=0.004$). Of the three main areas within the programme, it was the area of encounters with users that showed positive changes within experimental group offices ($p=0.001$), while there were no changes for system-oriented efforts or the administrative part of the work. For social workers from control group offices, there was a negative trend for several of the measures, including

professional competences, working alliance, quality of work supervision and system-oriented efforts.

Table 5 presents the effects of the CMPA programme when controlling for T1 working alliance, T1 professional competences and T1 baseline predictor (where applicable). Findings indicate that the effects of the CMPA programme are related to professional competences ($p = 0.002$), working alliance ($p = 0.016$) and quality of work supervision ($p = 0.001$). Of the three main programme areas, only the measure of system-oriented efforts is significant ($p = 0.025$), while there is a non-significant but strong trend for the encountering the user measure ($p = 0.077$). There are no effects for the administrative work, however. Nevertheless, when we account for the clustering, the effects are significant for professional competences ($p=0.012$) and quality of work supervision ($p=0.007$). Additionally, there is a strong trend on relational alliance ($p=0.072$). Thus, the main findings in this study are still valid after adjusting for the clustered data structure (Campbell and Walters, 2014).

Finally, Table 6 presents the trends for the various clusters in the study. For the measure of professional competences, results show a positive development for all clusters in the experimental group, but not in the control group. Of the clusters in the experimental group, eight of nine clusters report a positive development for quality of work supervision received and seven of nine clusters report a positive development for working alliance. Of the main three programme areas, seven of nine clusters report a positive development for encountering the user and six of nine clusters report a positive development for system-oriented efforts. Clusters in the control condition reveal no clear-cut pattern.

Discussion

Using a cluster-randomized design, this study evaluated the effects of a government administered skill training programme, the CMPA programme, implemented in the Norwegian labour and welfare context. The main finding of the study is that the programme had significant positive effects on social workers' assessments of their professional competences and quality of work supervision received one year after participation in the programme (18 months after T1).

Several aspects of the programme may have contributed to the positive effects. The CMPA's learning environment was based on interaction rather than mere transfer of knowledge. This was underscored by the programme's recognition of social workers' existing competences, which may have influenced on confidence and motivation to learn. The possibility for pragmatic adjustments facilitated implementation in the local context. These aspects may have contributed to a 'locus of control' (Tziner et al 1991) as regards to the learning context beyond the mere improvement of particular knowledge and skills. Further, the social workers received on-site training through supervision that was carried out within the CMPA context. Our findings indicate supervision as an important factor for competence development as it secured the process of intermediating potential and context-specific competence. This can be interpreted as development of operational expertise, leading to new *competence to act* (Nygren 2004). Also within the context of evidence-based knowledge, on-site training through work supervision and the possibility to adapt the intervention to its context have been

demonstrated to be important for the transfer of knowledge into practice (Fixsen et al., 2005).

Scholars have argued that the concepts of evidence-based practice and competence can be problematic within social work. Nevertheless, these findings demonstrate that it was the evidence-based, standardized methods and tools *in conjunction with* opportunities social workers had to reflect on them and adapt them to their daily practices, under supervision, that improved social workers' professional competence. Seen from this view, the implementation of CMPA can be understood as a practice that is evidence-informed rather than evidence-based (Gambrill, 2007).

Nevertheless, the limitations of the present research should be acknowledged when interpreting the findings. Only 18 offices were included in the study. A higher number of offices would have increased the statistical power of the analysis. Thus, adjusting the statistical models for the clustered data structure and the main trends presented for each cluster increases the reliability of our findings. It is also important to note, that the present results are based on social workers' subjective assessments and it can be questioned what these effects really represent. Although, the strength of this specific study is the cluster-randomized design estimating the effects of the CMPA programme, there is a need to also empirically understand the processes explaining these effects and, more generally, how social workers define key concepts as 'competence' and 'quality' within their practices. Consequently, data production designed for capturing both effectiveness, complexities and processes should be emphasised, as it contributes to a deeper understanding of the development of professional practice within social work.

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Table 1 The success of randomization based on information from offices ($n = 18$) and the T1 questionnaire for social workers ($n = 99$)

Variables	Experimental group offices <i>M(SD)</i>	Control group offices <i>M(SD)</i>	<i>p</i> - value
Office-level administrative data, <i>n</i>	9	9	
Number of participants in Qualification Programme, 2010	86.4(48.78)	67.4 (28.78)	0.333
Number of completed programmes, 2010	29.9 (17.23)	21.7 (21.73)	0.388
Number of participants attaining employment, 2010	9.7 (7.85)	10.0 (10.50)	0.943
Questionnaire for social workers, <i>n</i>	54	45	
Gender (% women)	82	73	0.332
Relevant courses (% yes)	53	47	0.538
Experience of similar work (% yes)	72	72	0.966
Average months worked in the Qualification Programme	15.4 (9.92)	14.3 (9.25)	0.558
Frequency of supervision latest month (T1)	0.87(1.44)	1.60 (3.67)	0.182
Professional competence, T1 (6–30)	20.5 (3.46)	21.9 (3.11)	0.046
Working alliance, T1 (12–60)	45.0 (4.78)	47.5 (3.82)	0.008
Quality of work supervision, T1 (2–10)	5.5 (1.87)	5.4 (1.98)	0.810
Encountering the user, T1 (4–20)	14.4 (2.52)	15.2 (2.09)	0.104
System-oriented efforts, T1 (4–20)	14.8 (2.33)	15.4 (1.88)	0.194
Administrative work, T1 (3–15)	12.0 (1.77)	12.3 (1.63)	0.458

Table 2 Main areas of the CMPA skill training programme measured using principal factor analysis with varimax rotation

Area	M(SD)	Factor		
		1	2	3
Encountering the user				
When encountering the participant, I ask open questions.	4.1 (.62)	.76	.20	-.13
When encountering the participant, I summarize the discussions under way.	3.7 (.76)	.83	.08	.12
In discussions with the participant, I reflect on his or her thoughts and feelings.	3.4 (.78)	.80	.03	.10
When the participant talks about changing something in his or her life, I explore this further.	3.6 (.67)	.63	.21	.09
System-oriented efforts				
I think that cooperation with other actors (e.g. collaborators in welfare services and the labour market and private network) functions well.	3.6 (.64)	-.06	.69	-.01
In cooperating with other actors, we manage to work towards a common goal.	3.6 (.59)	.17	.85	.15
The participant's understanding of his or her situation is important.	4.1 (.72)	.29	.60	.23
The participant has an active role in the collaborative meetings.	3.8 (.80)	.29	.60	.19
Administrative work				
I systematically document the follow-up work.	4.1 (.69)	-.01	.00	.89
I continuously document the follow-up work.	4.1 (.62)	-.00	.15	.75
I write down and document the participant's wishes and needs.	3.9 (.75)	.21	.25	.56

Note: The responses range from 1 to 5. Factor loadings of leading items on each dimension are shown in boldface type.

Table 3 Means, standard deviations and bivariate intercorrelations for study variables*(n = 83–99)*

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Experimental condition (cont. = 0, exp = 1)	.6	.50	-													
2. Gender (1 = men, 2 = women)	1.8	.42	.10	-												
3. Age	43.3	10.08	-.18	-.38**	-											
4. Education (1–3)	2.3	.50	-.09	-.02	-.05	-										
5. Relevant courses (1 = no, 2 = yes)	1.5	.50	.06	-.03	.00	.13	-									
6. Experience of similar work (1 = no, 2 = yes)	1.7	0.45	.00	-.16	.22*	.05	-.02	-								
7. Average months worked in the QP programme	14.9	9.5	.06	-.22*	-.27*	.13	.39**	.12	-							
8. Frequency of supervision latest month (T1)	1.20	2.7	-.13	.06	-.08	.09	.10	-.24*	-.12	-						
9. Encountering the user, T1 (4–20)	14.8	2.3	-.17	.27	.82*	.10	-.14	.28**	.10	.13	-					
10. System-oriented efforts, T1 (4–20)	15.0	2.1	-.19	.09	.07	.11	-.19	-.09	-.18	.37***	-					
11. Administrative work, T1 (3–15)	12.1	1.7	-.12	.27	.07	.20	-.16	-.19	.05	.14	.32**	-				
12. Professional competences, T1 (6–30)	21.1	3.3	-.21*	.18	.32*	.44	.07	.14	.06**	.10	.33**	.26*	-.07	-		
13. Working alliance, T1 (12–60)	46.1	4.5	-.28*	.09	.92*	.08	.18	-.01	.26*	.05	.54**	.53	.21	.56***	-	
14. Quality of work supervision, T1 (2–10)	5.4	1.9	.04	.01	.02	.14	-.11	-.02	.17	.00	.06	.22	.16	.11	.11	-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4 Social workers' self-assessments of their follow-up work before and after CMPA implementation, unadjusted

Variables	Experimental			Control		
	T1 (M)	T2 (M)	Mean difference (CI 95%)	T1 (M)	T2 (M)	Mean difference (CI 95%)
Professional competence	20.4	23.3***	2.9 (1.74-4.05)	21.8	22.2	-.4 (-1.84-0.98)
Working alliance	45.1	47.8**	2.7 (1.22-4.18)	47.8	47.0	-.8 (-2.28-0.77)
Quality of work supervision	5.9	7.0**	1.1 (.37-1.89)	5.2	4.9	-.3 (-1.24-0.55)
Encountering the user	14.5	15.6**	1.2 (.50-1.82)	15.2	15.4	.2 (-0.52-0.98)
System-oriented efforts	14.7	15.1	.4 (-.36-1.17)	15.4	14.9	-.6 (-1.32-1.50)
Administrative work	12.01	12.5	.4 (-.27-1.13)	12.4	12.7	.3 (-0.30-0.96)

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5 Effects of the CMPA skill training programme on social workers' competence; analyses of covariance with model-adjusted means*

Variables	Professional competence	Working alliance	Quality of work supervision
Grand mean, T1 (both groups)	21.5	46.4	5.5
Intervention group mean, T2 (CI 95%)	23.6 (22.63–24.60)	48.3 (47.07–49.55)	6.9 (6.35–7.55)
Control group mean, T2 (CI 95%)	21.3 (20.09–22.47)	46.2 (44.74–47.68)	5.2 (4.46–5.86)
Group difference <i>p</i> -value	<i>0.005</i>	<i>0.038</i>	<i>0.000</i>
Cluster adjusted <i>p</i> -value	<i>0.012</i>	<i>0.072</i>	<i>0.007</i>
Total model adj. <i>R</i> ²	0.13	0.30	0.29
Variables	Encountering the user	System-oriented efforts	Administrative work
Grand mean, T1 (both groups)	14.8	15.0	12.4
Intervention group mean, T2 (CI 95%)	15.8 (15.14–16.37)	15.3 (14.69–15.85)	12.6 (12.07–13.16)
Control group mean, T2 (CI 95%)	15.0 (14.28–15.67)	14.4 (13.65–15.07)	12.6 (11.90–13.24)
Group difference <i>p</i> -value	<i>0.130</i>	<i>0.056</i>	<i>0.891</i>
Cluster adjusted <i>p</i> -value	<i>0.133</i>	<i>0.128</i>	<i>0.930</i>
Total model adj. <i>R</i> ²	0.36	0.27	0.11

Note: Analyses of covariance with T1 baseline predictor and covariates: experimental condition, T1 professional competence, T1 working alliance. Group means are based on T1 and T2 respondents (n=61–65) and adjusted for all covariates and T1 baseline predictor. Grand means at T1 are adjusted for covariates. Group differences are reported by standard and adjusted *p*-values

Table 6 Effects of the CMPA skill training programme on social workers; office-level changes

Cluster	<i>n</i> [*]	Professional competence	Quality of work supervision	Working alliance	Encountering the user	System-oriented efforts	Administrative work
Experimental		Change	Change	Change	Change	Change	Change
2	4	+	+	+	+	+	+
4	4	+	+	+	+	+	+
5	9	+	+	+	+	+	0
9	3	+	+	+	-	+	0
10	6	+	0	+	+	+	+
13	9	+	+	0	+	-	+
16	2	+	+	-	-	-	+
17	4	+	+	+	+	0	0
18	2	+	+	+	+	+	+
Control							
1	6	0	-	0	+	+	+
3	5	-	+	-	+	0	+
6	3	+	-	+	0	0	-
7	5	+	0	0	+	+	0
8	4	-	+	-	0	-	+
11	3	+	+	+	0	0	0
12	3	-	-	-	-	-	+
14	6	0	+	-	-	-	+
15	4	-	-	0	0	-	0

* T1 and T2 respondents, total *n* = 82.

Figure 1 The main areas of the CMPA skill training programme

COMPREHENSIVE APPROACH			
	Three intervention areas within the comprehensive follow-up method		
Follow-up process:	Encountering the user	System-oriented efforts	Administrative work
ORDER	- conversation as tool	- user as actor	- ensure the user is a central actor
CHARTING	- establish the relationship	- process management	- administrative tasks
NEEDS ASSESSMENT	- information and clarification	- social network	- work with individual plans
EVALUATION OF WORKABILITY	- charting and analyzing problems	- interdisciplinary cooperation	- documentation
PROGRAM PLAN	- counselling	- cooperation with employers	- planning interventions
PROGRAM IMPLEMENTATION	- motivation	- system-oriented interventions	
EVALUATION	- defining goals		
	- change		
	- individual-level interventions		

Source: The Norwegian Labor and Welfare Administration, 2011 (translated by Malmberg-Heimonen)