## Supplemental Material 1: Process Evaluation

### Process Evaluation Procedure

To evaluate the intervention process, we used several sources of information, including records of participant attendance at the training and administrative information on personnel turnover. In addition, we used protocols from the five steering group meetings between September 2017 and May 2018. Participants in the steering group meetings were representatives of the directors in the intervention group, representatives of employees, and representatives of the quality, human resources, and senior management staff of the organization. After the first training session, we conducted a semistructured interview with the trainer. Interview questions included “What went well with the training session?”, “What were problems?” and “How did you perceive the atmosphere in the training groups?” The training sessions were observed by members of the research team. The observers used a systematic checklist to evaluate whether the training content was implemented as planned. Immediately after each training session, we assessed the participants’ perceptions of the practical relevance and usefulness of the training content with items developed based on Warr and Bunce (1995). The three items that addressed practical relevance focused on the extent to which participants felt that the training content reflected their job requirements (e.g., “The content of today’s session fits well with what I experience in my everyday work.”). The three items that addressed usefulness assessed how applicable the participants perceived the training to be to their work (e.g., “I will be able to apply the content of today’s session to my everyday work.”). The responses were scored on a 4-point Likert scale (1 = *disagree* to 4 = *strongly agree*). Cronbach’s alphas were 0.80 for relevance and 0.82 for usefulness.

### Organizational Context of Intervention Implementation

Analysis of the protocols of the steering group meetings indicated that the key stakeholders were committed to the intervention and that senior management was supportive of the intervention process. The human resource manager expressed support of the directors in the intervention group by giving an opening speech in the first training session. The organization’s project management was well organized in terms of information and communication. Human resources management provided the necessary resources to implement and evaluate the intervention (e.g., assistance in organizing the surveys). Organizational records showed that two directors from the intervention group and six directors from the control group left the organization during the study. Although we have no data on turnover rates at the employee level, the organization noted that turnover was a problem and that multiple employees left the organization before completing the postintervention surveys. After completion of the one-month postintervention survey, the organization underwent a transition period in which new organizational structures were implemented. Specifically, the organization added a middle management level above the director level and changed its reporting structure. The steering group meeting protocols revealed that organizational restructuring resulted in a great deal of uncertainty and stress among the directors.

### Reach of the Training

Although participation was mandatory, not all directors assigned to the intervention group participated in the training. Six directors (15%) participated in none of the training sessions, and three directors (7%) participated in only one training session. Nine directors (22%) participated in two training sessions, and 23 directors (56%) participated in all three training sessions. The reasons for nonparticipation included absence due to illness, vacation, termination of employment, and important professional responsibilities that required the presence of the directors in the childcare centers (e.g., staffing difficulties). The directors assigned to the waitlist control group did not take part in the training until after the completion of the study.

### Intervention Fidelity and Experiences of the Training

Inspection of the fidelity checks revealed that the key content of the training was covered in all training groups and that there was little variation in the delivery of the training content across training groups. The reactions of the leaders (*N1* = 35 at the first session, *N2* = 27 at the second session, and *N3* = 29 at the third session) showed that they found the training to be relevant (*M1* = 3.30, *SD1* = 0.56; *M2* = 3.38, *SD2* = 0.58; and *M3* = 3.33, *SD3* = 0.45) and useful (*M1* = 3.11, *SD1* = 0.55; *M2* = 3.44, *SD2* = 0.51; and *M3* = 3.25, *SD3* = 0.48). Analysis of the interview with the trainer revealed that the trainer perceived the leaders’ motivation to learn and readiness for change to be high. Additionally, the trainer noted that the initial doubts and concerns about the training that several participants had expressed at the beginning were quickly resolved and that the group climate was characterized by openness and trust. After completion of the training, representatives of the directors in the steering group found that the practical relevance of the training and the useful tools that it provided helped them implement the training content in their everyday work. However, they also reported that time constraints made it difficult for them to recall and apply what they had learned.

## Supplemental Table 1

|  |  |  |
| --- | --- | --- |
| *Summary of the Training Content* | | |
| Module 1: Self-Reflection and Advantages of Supportive Leadership | Module 2: Knowledge and Skills for Engaging in Supportive Behavior | Module 3: Practice and Finetuning of Supportive Leader Behaviors |
| (1) Start of the session:   * Welcoming the participants * Icebreaker games to get to know each other * Clarifying participants’ expectations of the training * Clarifying the objectives of the training * Introducing the training logs   (2) Interactive lecture on the conceptualization and value of well-being  (3) Group discussion on leaders’ everyday stressors and resources including their influence on well-being | (1) Start of the session:   * Refreshing the content of Session 1 * Reflection and discussion on goal progress and successes and challenges in implementing the training content   (2) Interactive lecture on how leaders may create supportive work environments:   * giving clear information * providing constructive feedback * enabling participation * giving tangible assistance * expressing understanding and appreciation | (1) Start of the session:   * Refreshing the content of Session 2 * Reflection and discussion on goal progress and successes and challenges in implementing the training content   (2) Interactive lecture on the importance of understanding employees’ individual behaviors, goals, and needs  (3) Interactive lecture on how leaders may provide clarity through information and give recognition and constructive feedback |

*Note.* A full description of the training content can be obtained from the first author upon request.

## Supplemental Table 1 (continued)

|  |  |  |
| --- | --- | --- |
| *Summary of the Training Content* | | |
| Module 1: Self-Reflection and Advantages of Supportive Leadership | Module 2: Knowledge and Skills for Engaging in Supportive Behavior | Module 3: Practice and Finetuning of Supportive Leader Behaviors |
| (4) Interactive lecture on the important role of leaders in influencing employee well-being  (5) Interactive plenary session on different supportive resources for dealing with stressful experiences at work  (6) Group discussion on how leaders may effectively support their employees and what they need to fulfill their leadership role  (7) Closing of the session:   * Questions and feedback * Goal setting using the training logs | (3) Practical exercise including the development of an action plan to be more supportive of employees  (4) Group discussion on what supportive behaviors the leaders already engage in  (5) Closing of the session:   * Questions and feedback * Goal setting using the training logs | (4) Practical exercise and group discussion on how leaders may offer support that is tailored to employees’ individual needs  (5) Practical exercise and group discussion including a role-playing session with peer feedback for practicing active listening skills and the provision of constructive feedback to employees  (6) Closing of the session:   * Questions and feedback * Goal setting using the training logs * Summary and farewell |

*Note.* A full description of the training content can be obtained from the first author upon request.

## Supplemental Table 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Attrition Analysis: Independent t-Tests* | | | | | | | | |
|  | *Responders* | |  | Nonresponders | |  |  |  |
|  | *M* | *SD* |  | *M* | *SD* |  | *t* | *df* |
| One month postintervention |  |  |  |  |  |  |  |  |
| Age | 45.54 | 11.46 |  | 45.74 | 11.17 |  | –0.20 | 484.01 |
| Years of professional experience | 18.22 | 11.53 |  | 18.00 | 11.65 |  | 0.20 | 461.28 |
| Conditiona | 0.45 | 0.50 |  | 0.53 | 0.50 |  | –1.75 | 483.08 |
| LMX quality | 3.64 | 0.83 |  | 3.60 | 0.83 |  | 0.62 | 470.03 |
| Positive affective well-being | 3.35 | 0.85 |  | 3.27 | 0.83 |  | 1.05 | 482.95 |
| Emotional exhaustion | 3.52 | 1.27 |  | 3.51 | 1.28 |  | 0.05 | 480.56 |
| Job satisfaction | 3.70 | 0.70 |  | 3.63 | 0.69 |  | 1.10 | 479.78 |
| Quantitative workload | 2.75 | 0.93 |  | 2.73 | 0.87 |  | 0.19 | 489.63 |
| Qualitative workload | 1.86 | 0.71 |  | 1.83 | 0.74 |  | 0.39 | 475.00 |
| Six months postintervention |  |  |  |  |  |  |  |  |
| Age | 46.43 | 10.34 |  | 44.97 | 12.05 |  | 1.45 | 491.68 |
| Years of professional experience | 19.30 | 11.20 |  | 17.11 | 11.81 |  | 2.07\* | 470.55 |
| Conditiona | 0.47 | 0.50 |  | 0.50 | 0.50 |  | –0.60 | 479.00 |
| LMX quality | 3.71 | 0.83 |  | 3.54 | 0.83 |  | 2.26\* | 469.00 |
| Positive affective well-being | 3.37 | 0.84 |  | 3.27 | 0.85 |  | 1.31 | 479.38 |
| Emotional exhaustion | 3.58 | 1.32 |  | 3.46 | 1.24 |  | 1.03 | 463.15 |
| Job satisfaction | 3.71 | 0.71 |  | 3.64 | 0.67 |  | 1.08 | 461.74 |
| Quantitative workload | 2.78 | 0.94 |  | 2.71 | 0.86 |  | 0.90 | 461.82 |
| Qualitative workload | 1.91 | 0.73 |  | 1.79 | 0.71 |  | 1.82 | 472.62 |
| *Note.* Welch’s *t*-tests were used. *n* = 266 responders and *n* = 230 nonresponders at one month postintervention. *n* = 226 responders and *n* = 270 nonresponders at six months postintervention. a 0 = control group; 1 = intervention group.  \**p* < .05 | | | | | | | | |

## Supplemental Table 3

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| *Per-Protocol Analysis: Results of the Mixed-Effects Models for Predicting LMX Quality* | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | 1-month postintervention | | | | | | | | | |  | | 6-months postintervention | | | | | | | | | | | | | |
|  |  | Intervention effects  model | | | |  | | Moderated intervention  effects model | | | |  | | Intervention effects  model | | | | |  | | Moderated intervention  effects model | | | | | |
|  |  | Est. |  | 95% CI |  | | Est. | |  | 95% CI | |  | | Est. |  | | 95% CI | |  | | Est. | |  | | 95% CI | |
| Fixed Effects |  |  |  |  |  | |  | |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Intercept |  | 3.50 | \*\*\* | [3.39, 3.60] |  | | 3.50 | | \*\*\* | [3.41, 3.60] | |  | | 3.53 | \*\*\* | | [3.41, 3.66] | |  | | 3.53 | | \*\*\* | | [3.41, 3.66] | |
| Baseline LMX quality |  | 0.78 | \*\*\* | [0.70, 0.87] |  | | 0.75 | | \*\*\* | [0.67, 0.84] | |  | | 0.75 | \*\*\* | | [0.65, 0.85] | |  | | 0.74 | | \*\*\* | | [0.63, 0.85] | |
| Conditiona |  | 0.18 | \* | [0.03, 0.34] |  | | 0.17 | | \* | [0.03, 0.33] | |  | | 0.15 |  | | [–0.04, 0.33] | |  | | 0.14 | |  | | [–0.04, 0.33] | |
| Baseline quant. workload |  |  |  |  |  | | –0.08 | |  | [–0.18, 0.03] | |  | |  |  | |  | |  | | 0.002 | |  | | [–0.14, 0.14] | |
| Baseline qual. workload |  |  |  |  |  | | –0.11 | |  | [–0.24, 0.02] | |  | |  |  | |  | |  | | –0.12 | |  | | [–0.30, 0.07] | |
| Condition × quant.  workload |  | |  |  |  | | 0.19 | | \* | [0.04, 0.35] | |  | |  | |  | |  | |  | | 0.04 | |  | | [–0.17, 0.24] | |
| Condition × qual.  workload |  | |  |  |  | | –0.03 | |  | [–0.24, 0.18] | |  | |  | |  | |  | |  | | 0.09 | |  | | [–0.19, 0.36] | |
| Random Effects |  |  |  |  |  | |  | |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Residual variance |  | 0.21 |  |  |  | | 0.20 | |  |  | |  | | 0.23 |  | |  | |  | | 0.22 | |  | |  | |
| Intercept variance |  | 0.03 |  |  |  | | 0.02 | |  |  | |  | | 0.02 |  | |  | |  | | 0.03 | |  | |  | |
| *Note*. *N* = 217 employees nested in 62 childcare centers at one month postintervention. *N* = 145 employees nested in 53 childcare centers at six months postintervention. 95% CI = profile likelihood confidence intervals. a 0 = control group; 1 = intervention group.  \**p* < .05 \*\*\**p* < .001 | | | | | | | | | | | | | | | | | | | | | | | | | | |

## Supplemental Table 4

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Per-Protocol Analysis: Results of the Mixed-Effects Models for Predicting Positive Affective Well-Being* | | | | | | | | | | | | | | | | |
|  | 1-month postintervention | | | | | | | |  | 6-months postintervention | | | | | | |
|  |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |
|  |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |
| Fixed Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept |  | 3.34 | \*\*\* | [3.22, 3.46] |  | 3.34 | \*\*\* | [3.22, 3.46] |  | 3.35 | \*\*\* | [3.22, 3.49] |  | 3.35 | \*\*\* | [3.22, 3.48] |
| Baseline positive  affective well-being |  | 0.64 | \*\*\* | [0.53, 0.75] |  | 0.60 | \*\*\* | [0.47, 0.73] |  | 0.70 | \*\*\* | [0.58 0.82] |  | 0.61 | \*\*\* | [0.45, 0.76] |
| Conditiona |  | 0.006 |  | [–0.18, 0.19] |  | 0.01 |  | [–0.17, 0.19] |  | –0.15 |  | [–0.35, 0.05] |  | –0.14 |  | [–0.33, 0.06] |
| Baseline quant. workload |  |  |  |  |  | 0.02 |  | [–0.14, 0.18] |  |  |  |  |  | –0.06 |  | [–0.24, 0.12] |
| Baseline qual. workload |  |  |  |  |  | –0.23 | \* | [–0.41, –0.05] |  |  |  |  |  | –0.18 |  | [–0.40, 0.05] |
| Condition × quant.  workload |  |  |  |  |  | 0.07 |  | [–0.15, 0.29] |  |  |  |  |  | 0.13 |  | [–0.11, 0.38] |  |
| Condition × qual.  workload |  |  |  |  |  | 0.10 |  | [–0.18, 0.39] |  |  |  |  |  | –0.11 |  | [–0.44, 0.22] |  |
| Random Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residual variance |  | 0.45 |  |  |  | 0.43 |  |  |  | 0.37 |  |  |  | 0.35 |  |  |
| Intercept variance |  | 0.005 |  |  |  | 0.001 |  |  |  | 0.00 |  |  |  | 0.00 |  |  |
| *Note*. *N* = 225 employees nested in 62 childcare centers at one month postintervention. *N* = 149 employees nested in 53 childcare centers at six months postintervention. 95% CI = profile likelihood confidence intervals. a 0 = control group; 1 = intervention group. \**p* < .05 \*\*\**p* < .001 | | | | | | | | | | | | | | | | |

## Supplemental Table 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Per-Protocol Analysis: Results of the Mixed-Effects Models for Predicting Emotional Exhaustion* | | | | | | | | | | | | | | | | |
|  | 1-month postintervention | | | | | | | |  | 6-months postintervention | | | | | | |
|  |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |
|  |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |
| Fixed Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept |  | 3.62 | \*\*\* | [3.49, 3.76] |  | 3.62 | \*\*\* | [3.48, 3.75] |  | 3.67 | \*\*\* | [3.50, 3.83] |  | 3.66 | \*\*\* | [3.49, 3.82] |
| Baseline emotional  exhaustion |  | 0.82 | \*\*\* | [0.74, 0.90] |  | 0.76 | \*\*\* | [0.68, 0.87] |  | 0.80 | \*\*\* | [0.70, 0.90] |  | 0.75 | \*\*\* | [0.62, 0.89] |
| Conditiona |  | –0.07 |  | [–0.29, 0.13] |  | –0.08 |  | [–0.30, 0.12] |  | 0.05 |  | [–0.21, 0.30] |  | 0.04 |  | [–0.21, 0.29] |
| Baseline quant. workload |  |  |  |  |  | 0.20 | \* | [0.02, 0.37] |  |  |  |  |  | 0.13 |  | [–0.10, 0.36] |
| Baseline qual. workload |  |  |  |  |  | –0.02 |  | [–0.21, 0.17] |  |  |  |  |  | 0.12 |  | [–0.17, 0.41] |
| Condition × quant.  workload |  |  |  |  |  | –0.39 | \*\*\* | [–0.62, –0.16] |  |  |  |  |  | –0.28 |  | [–0.59, 0.04] |
| Condition × qual.  workload |  |  |  |  |  | 0.26 |  | [–0.05, 0.56] |  |  |  |  |  | –0.10 |  | [–0.54, 0.33] |
| Random Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residual variance |  | 0.48 |  |  |  | 0.45 |  |  |  | 0.59 |  |  |  | 0.57 |  |  |
| Intercept variance |  | 0.03 |  |  |  | 0.03 |  |  |  | 0.00 |  |  |  | 0.00 |  |  |
| *Note*. *N* = 222 employees nested in 62 childcare centers at one month postintervention. *N* = 146 employees nested in 53 childcare centers at six months postintervention. 95% CI = profile likelihood confidence intervals. a 0 = control group; 1 = intervention group. \**p* < .05 \*\*\**p* < .001 | | | | | | | | | | | | | | | | |

## Supplemental Table 6

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Per-Protocol Analysis: Results of the Mixed-Effects Models for Predicting Job Satisfaction* | | | | | | | | | | | | | | | | |
|  | 1-month postintervention | | | | | | | |  | 6-months postintervention | | | | | | |
|  |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |  | Intervention effects  model | | |  | Moderated intervention  effects model | | |
|  |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |  | Est. |  | 95% CI |
| Fixed Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept |  | 3.63 | \*\*\* | [3.54, 3.72] |  | 3.63 | \*\*\* | [3.54, 3.72] |  | 3.59 | \*\*\* | [3.50, 3.69] |  | 3.60 | \*\*\* | [3.50, 3.69] |
| Baseline job  satisfaction |  | 0.78 | \*\*\* | [0.69, 0.86] |  | 0.72 | \*\*\* | [0.62, 0.84] |  | 0.79 | \*\*\* | [0.70, 0.89] |  | 0.74 | \*\*\* | [0.61, 0.86] |
| Conditiona |  | 0.06 |  | [–0.07, 0.20] |  | 0.06 |  | [–0.07, 0.20] |  | 0.16 | \* | [0.02, 0.30] |  | 0.16 | \* | [0.02, 0.30] |
| Baseline quant. workload |  |  |  |  |  | –0.08 |  | [–0.18, 0.03] |  |  |  |  |  | –0.09 |  | [–0.21, 0.04] |
| Baseline qual. workload |  |  |  |  |  | –0.05 |  | [–0.17, 0.07] |  |  |  |  |  | –0.07 |  | [–0.22, 0.09] |
| Condition × quant.  workload |  |  |  |  |  | 0.07 |  | [–0.07, 0.22] |  |  |  |  |  | 0.09 |  | [–0.09, 0.26] |
| Condition × qual.  workload |  |  |  |  |  | 0.06 |  | [–0.13, 0.24] |  |  |  |  |  | 0.12 |  | [–0.11, 0.36] |
| Random Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residual variance |  | 0.18 |  |  |  | 0.17 |  |  |  | 0.17 |  |  |  | 0.16 |  |  |
| Intercept variance |  | 0.02 |  |  |  | 0.02 |  |  |  | 0.001 |  |  |  | 0.005 |  |  |
| *Note*. *N* = 222 employees nested in 62 childcare centers at one month postintervention. *N* = 146 employees nested in 53 childcare centers at six months postintervention. 95% CI = profile likelihood confidence intervals. a 0 = control group; 1 = intervention group. \**p* < .05 \*\*\**p* < .001 | | | | | | | | | | | | | | | | |