Introduction
Job stress constitutes a substantial problem to the labour market, as it leads to serious consequences and costs for the individual, for the workplace and for society (Hassard et al., 2014). Correctional officers in upper-middle and high-income countries are highly affected by job stress and burnout (Bezerra Cde et al., 2016; Harizanova & Tarnovska, 2013; Keinan & Malach-Pines, 2007; Schaufeli & Peeters, 2000). This is also the case in Sweden (Harenstam & Theorell, 1990; Härenstam et al., 1988). Burnout is characterised by emotional exhaustion, cynicism, and a lack of professional efficacy and is a response to long-term stress dependent on organizational, job-related, as well as individual factors (Maslach et al., 2001). Burnout is associated with psychological ill-health, such as depression (Iacovides et al., 2003), and physiological consequences, such immunological and cortisol changes (Grossi et al., 2005; Grossi et al., 2003). Effects of interventions aimed at alleviating burnout symptoms in general labour samples show mixed-effects and provide no clear guidance on effective components (Ahola et al., 2017). Most studies on burnout among correctional officers are cross-sectional studies, based on self-report questionnaires (Schaufeli & Peeters, 2000). There is a need for interventions focusing on reducing stress in correctional officers’ work environment (Finney et al., 2013; Keinan & Malach-Pines, 2007; Kinman et al., 2016). Very few such interventions have been scientifically evaluated, and no such study has taken place in a Swedish setting. The present study reports on an intervention designed to increase job-related resources and its effects on burnout among correctional officers.

Vulnerability to job stress and burnout among correctional work can be understood in terms of ‘emotional labour’, a concept introduced by Hochschild (1983). Emotional labour refers to strain that arises when there is a discrepancy between emotions felt and emotions suppressed/expressed at work. Correctional officers are frequently faced with situations involving victimisation, violence, and drug-related incidents. These situations typically evoke strong negative feelings, such as anger, disgust, and fear (Tracy, 2005). However, the professional role of correctional officers also includes responsibility for upholding security at the correctional centre and actively promoting the rehabilitation of inmates (Dowden & Tellier, 2004; Schaufeli & Peeters, 2000). These professional duties require skills relating to maintaining calm and avoiding expressing negative emotions, for example in heated situations, such as those involving the communication or enforcement of negative decisions, or enforcing prison rules, such as lock-up. The high risk of conflicts between roles inherent
in the job may lead to burnout, because it constantly taxes the individual’s biopsychological mechanisms (Grandey, 2000). Research shows that correctional officers commonly report negative job attitudes, such as cynicism, alienation, and powerlessness. However, negative attitudes and sensitivity to stress may also be related to the correctional officers’ underlying personal motivation, such as interest in and commitment to one’s work, as well as organisational expectations, such as treatment/custodial setting (Philliber, 1987; Tracy, 2005). In addition, previous research suggests that correctional officers’ personal characteristics, such as age, years of work experience, and intention to leave the job, are associated with job stress (Dowden & Tellier, 2004).

**Everyday conversations**

Everyday conversations is a flexible communication style intended to facilitate professional conversations between staff and clients without therapeutic purpose (Farbring & Rollnick, 2015). The everyday conversations communication style has been derived from motivational interviewing, which is a communication style designed to strengthen personal motivation for a specific behaviour change (Miller & Rollnick, 2013). Motivational interviewing is a client-centred, goal-oriented method where a counsellor’s core skills in the conversation with a client focus on the counsellor’s active listening. Motivational interviewing has been found effective in supporting client behaviour change in different areas (Alperstein & Sharpe, 2016; Frost et al., 2018; Lundahl et al., 2013; Zomahoun et al., 2017). The everyday conversations communication style was developed based on parts of motivational interviewing that were important for facilitating professional conversations between staff and clients, but it is adjusted to fit conversational contexts where the goal is not client behaviour change. The everyday conversations communication style is thus a more easily accessible way for practitioners to use motivational interviewing. The everyday conversations communication style comprises three communication styles—a) following, b) guiding, and c) directing style—and aims to facilitate professional client-staff communication by teaching correctional officers to identify which of these styles is most effective in a certain situation and then use it (Farbring & Rollnick, 2015; Miller & Rollnick, 2013). Like motivational interviewing, everyday conversations focus on improving practitioners’ listening skills, which is a technique often used in combination with exploring a situation by asking questions. We hypothesised that the active knowledge and realisation of everyday conversations, thus of a flexible mix of the three communication styles, including the explicit capability of instructing inmates in a respectful way, would improve correctional officers’ relationship with inmates. This would in turn mitigate the strain of emotional labour in situations where correctional officers had to provide comfort and security in the face of potential or actual threatening situations. We also hypothesised that the effect of training in everyday conversations on burnout variables would be moderated by the correctional officers age, reason for taking the job, and whether the correctional officer wished to change his or her job.

**Aim**

The aim of the present study was to evaluate the effects of training in the everyday conversations communication style on burnout among correctional officers in the Swedish Prison and Probation Service.

**Methods**

**Design, setting, participants, and randomisation**

The study was carried out in Swedish prisons. In Sweden, there are a total of 48 prisons, which are all run by the state. Prisons selected to participate in this study were middle- or high-security prisons comprising a minimum of two wards. Prisons in the process of re-organisation or piloting other treatment programs were excluded. Great emphasis was put on support for the study by the prison governor and on facilitating staff participation in the study. In total, 7 prisons with a total of 13 wards were invited to participate in the study of which all agreed to participate through the prison governors. All correctional officers working in the participating wards were subsequently invited to participate in the study, and their informed consent was collected. Of the 277 eligible participants, 266 participated in the training in everyday conversations, and 116 provided data for the study. Recruitment and retention are described in Figure 1. A stepped wedged design with a waiting list was used, which included multiple baseline measures for each ward (Rhoda et al., 2011). By using this type of design, each ward received the intervention at different time points, where wards that were waiting to receive the intervention functioned as controls until

![Figure 1: Flow chart of intervention recruitment and participation.](image)

- Retired, quit, changed wards.
- On leave, vacation, off duty, training.
they received the intervention. Wards were randomised to training in everyday conversations at different time points during the study period using a random number table. One to three wards per month underwent training during the period of September 2005 to May 2006. Monthly assessments of burnout were collected from participants on each ward from June 2005 and September 2006, resulting in 16 assessments. Thus, all participating wards provided multiple baseline assessments (pre-intervention) for a minimum of three time points. All collected data were anonymised through the use of codes. The study was approved by the regional research Ethics committee in Stockholm (2005/5:8).

**Exposure – training in everyday conversations**

Training in everyday conversations was undertaken at each prison in a group format during half a day according to a standardised format. The training aimed to increase the correctional officers’ skills in respect of recognising the guiding, directing, and following communication styles and to apply them appropriately to difficult situations within their correctional work environment. The training consisted of theory, exercises, and role play. A manual and interactive video films for managing difficult situations in the prison environment were developed and used in training. The videos and the manuals were developed in collaboration with Dr Stephen Rolnick, School of Medicine, Cardiff University, and Carl Åke Farbring, Research and Development Unit, Swedish Prison and Probation Service. An English and a Swedish version were developed during 2004 and supplemented with exercises inspired by realistic situations. Difficult situations had been identified by experienced staff in the Swedish Prison and Probation Service. A trainer in everyday conversations from the intervention project, together with trainers in motivational interviewing at the local prison, led the training and supervised the participants by using the interactive films and the manuals. The local trainers in motivational interviewing were involved to support further implementation of everyday conversations within the prison. As trainers in motivational interviewing, they were well suited for the task as they were trained in the basic communication skills comprising everyday conversations and derived from motivational interviewing. The training was pilot tested in July 2005. It proved feasible in a smaller prison that was not participating in the study. To further facilitate implementation of training in everyday conversations, the prison governor at each prison was involved in the planning and the implementation of the training. The trainer in everyday conversations had a meeting with the local prison governor before the start of the training in order to enhance support for and commitment to the training and to clarify planned actions for each training occasion. After the training, a follow-up meeting with the prison governor was held to discuss how the training had been carried out.

**Outcome measurements**

Self-report measures of burnout were collected with the Maslach Burnout Inventory-General Survey scales (MBI-GS) (Maslach et al., 1996), translated to Swedish. Validity and reliability for the scale has been established in a Swedish sample (Schutte et al., 2000). It contains five items covering emotional exhaustion (increasing with burnout), five items covering cynicism (increasing with burnout), and six items covered professional efficacy (decreasing with burnout). Participants responded to the items on a six-point scale with ‘0’ corresponding to ‘never’, ‘1’ to ‘occasionally’, ‘2’ to ‘several times per month’, ‘3’ to ‘about once per week’, ‘4’ to ‘several times per week’, and ‘5’ to ‘every day’. Levels of burnout among staff were assessed at 16 time points in order to follow the development of burnout and to allow sufficient multiple baseline (pre-intervention) assessments for all included wards. At the first and last time points, T0 in June 2005 and T15 in September 2006, all items described above were used to measure psychological indicators of burnout. At the remaining time points between July 2005 and August 2006 (T1 to T14), single items from the MBI-GS for each of the three burnout variables were used in order to reduce burden on participants. Items were the following: the past month I have felt burned out from my work (emotional exhaustion), the past month I have doubted that my work means anything (cynicism), the past month I have been able to effectively solve problems that arise in my work (professional efficacy). Participants received questionnaires from a contact person at the prison who received them by mail from the researcher. The contact person handed out the questionnaires, along with a stamped return-envelope, to participants, who could use the return-envelope to send the completed questionnaires directly to the research team.

**Data analysis**

All analyses were performed using the SPSS 22.0 software package (Chicago, Illinois, USA). Level of significance was set to 0.05. All participants who provided data at the first time point T0 in June 2005 were included in the analysis (n = 116). Characteristics of the sample at T0 were derived using descriptive statistics. Effects of the intervention condition were estimated using mixed model linear regression with a maximum likelihood estimation method. Mixed model linear regression accounts for dependent data within clusters, auto-correlations, and models data, which includes missing cases. Models were tested and compared according to −2 Log Likelihood values to assess the model fit. As the intervention condition was randomised at ward level, a model including three levels—ward, individuals, and assessments with random intercepts at ward and individual levels—was tested. This revealed no significant variation at ward level and no significant improvement of the model fit according to −2 Log Likelihood value, compared to a simpler model including only two levels: individual and assessments with a random intercept at the individual level. Significant variations within individuals were detected, and thus a two-level model appeared appropriate for the data. The final model thus included two levels, individual and assessments; fixed effects of predictors; and a random intercept at the individual level. An indicator variable for each group was created (intervention = 1, control = 0). In accordance with the stepped wedged design, each ward was randomised
to the intervention at different time points and the grouping variable switched from control to intervention (0 to 1) for each ward at the monthly assessments time point when the ward had received the intervention. Effects were first tested in a crude model for each of the three outcomes: emotional exhaustion, cynicism, and professional efficacy, where time, intervention, and an interaction term of the two predictors were included. In order to allow for visual inspection, estimated means of the outcomes for the intervention and control conditions at each time point were derived from the crude model analyses. Effects were further tested in adjusted models in which the crude model was nested, where moderated effects were tested for one at a time. Each moderator was evaluated for model fit according to the $–2$ Log Likelihood value compared to the crude model and for a significant main effect of the moderator on the outcome and interaction effect between moderator and intervention on outcome. If the moderated model did not improve the model fit or provided statistically significant effects on the outcome, the moderator was omitted. Moderators comprised participant characteristics indicated at T0: age, reasons for taking the job, and whether the participant wanted to change jobs. When a significant interaction term (intervention*moderator) was detected between moderator and intervention, a three-way interaction term with time was tested. However, no three-way interaction was statistically significant or improved the model fit according to the $–2$ Log Likelihood value. Hence, the three-way interaction terms were omitted in the final model testing for moderated effects, and only two-way interactions were used and presented in the results. When significant interaction terms for categorical moderators and intervention were detected, a stratified analysis was conducted. Values for the interaction term and for main effect of intervention on the stratified data are presented. For significant interaction terms on continuous moderators and intervention the effects were interpreted from the main analysis and only values for the interaction terms are presented. In order to make sure there was no overinterpretation of possible positive effects, and thus to prevent a type-I error, a sensitivity analysis was performed for significant effects where imputation with last value carried forward was used. This is considered a conservative approach for dealing with attrition. At the time of the study, no other intervention with similar features and outcomes had been conducted on which an assessment of expected improvement of the mean values and the standard deviation in the outcome could be based and thus facilitate a power calculation. Therefore, this study was considered explorative in nature and no power calculation was conducted.

## Results

Of the 116 participants in the study, 50% were women, the mean age was 40.8, 90% worked full-time, 37% had a university degree, 51% did not wish to change jobs, 39% wanted to change jobs, and 10% were unsure. A little more than 50% had taken the job due to interest (Table 1). There was no significant difference regarding the proportion of men and women among the 116 participants compared to the entire sample of 266 who underwent training in everyday conversations.

Estimated means of the three outcome variables—emotional exhaustion, cynicism, and professional efficacy—divided per control and intervention condition for each time point are displayed in Figures 2–4 of which visual inspections does not render any clear change in trend as an effect of the intervention.

Regarding emotional exhaustion, there was no significant intervention effect over time (Table 2). A significant interaction term between intervention and whether the participant wanted to change jobs was found ($p = 0.02$), where participants who indicated that they wished to change jobs at baseline had lower emotional exhaustion ($b = –0.53$) post-intervention. In a sensitivity analysis using imputation, this effect was no longer significant. Regarding cynicism (Table 2), a significant intervention effect over time was found where cynicism decreased significantly ($b = –0.07$) compared to control ($p = 0.01$). In addition, a significant interaction term between intervention and the reason why the participant had taken the job was found. A stratified analysis revealed a significant ($p = 0.04$) effect of intervention in the group of participants who had taken the job due to practical reasons, with a decrease in cynicism ($b = –0.44$) post-intervention. These effects were still significant in the sensitivity analysis where imputation was used. Regarding professional efficacy, a significant ($p = 0.006$) intervention effect ($b = 0.06$) over time was found (Table 2). This effect was not sustained in the sensitivity analysis. Moreover, a significant ($p = 0.008$) interaction term for age and intervention was found, where the intervention had an increasing effect ($b = 0.01$) on professional efficacy with increasing age. This effect remained significant in the sensitivity analysis.

### Table 1: Descriptive Characteristics of Participants Included in the Analyses at T0.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total n</th>
<th>Mean (SD)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Women</td>
<td></td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>- Men</td>
<td></td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>116</td>
<td>40.8 (11.1)</td>
<td></td>
</tr>
<tr>
<td>Years of employment at the Swedish Prison and Probation Services</td>
<td>116</td>
<td>6.7 (8.2)</td>
<td></td>
</tr>
<tr>
<td>Work full time</td>
<td>116</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>116</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Taken the job due to</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Practical reasons</td>
<td></td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>- Interest</td>
<td></td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Want to change jobs</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td></td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td></td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>- Unsure</td>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

This study aimed to evaluate the effects of training in everyday conversations on psychological measures of burnout in correctional officers in Sweden. Results showed no clear effect of the intervention in a visual inspection of the timelines of the three outcomes: emotional exhaustion, cynicism, and professional efficacy.

The regression analysis did not show any intervention effect on emotional exhaustion. However, it showed a significant effect on lower cynicism on the entire group and an effect that seemed to be moderated by whether the correctional officer had ‘taken the job due to practical reasons’. Regarding professional efficacy, a positive effect on the outcome with increasing age was found.
The results showing significant effects of the intervention on cynicism and moderated effects related to personal motivators and characteristics of the correctional officer on both cynicism and professional efficacy support a notion that communication skills have the potential to alleviate burnout. However, the underlying processes—in which ways such effects occur and why—are not clear from the results and merit further research. Our study suggests that effects of training in everyday conversations in some ways interact with correctional officers’ personal motivation or involvement with their job in affecting burnout. This is consistent with previous findings (Dowden & Tellier, 2004; Philliber, 1987; Tracy, 2005). The subgroup of correctional officers who wished to change jobs before the intervention reported less exhaustion post-intervention. The reasons for wishing to change jobs were not explored. It could be that correctional officers reporting initial intent to change jobs had high levels of initial burnout/exhaustion and therefore particularly benefited from the intervention. However, no significant main effect was found, thus we can only conclude that further research is needed to explore the relationship between communication skills and emotional exhaustion.

Regarding cynicism, there was a significant main effect indicating that after the intervention levels of cynicism decreased over time compared to the control group. This effect was particularly marked among participants who had taken the job due to practical reasons. Previous research (Philliber, 1987; Tracy, 2005) has established that correctional officers’ vulnerability to burnout is associated with their personal job motivation. More generally, it has been suggested that correctional officers with a more idealistic outlook are more susceptible to burnout; whereas, a more instrumental outlook is associated with less burnout. Tracey’s qualitative interviews with correctional officers describe how employees who have a more detached view of their job and approach it as a ‘strategic exchange are more likely to find it easy and perhaps even fun’ (2005, p. 279).

The present study contributes to the number of scientifically evaluated interventions focusing on competence in communication and to the body of interventions aimed at improving the psychosocial work environments in prisons by training correctional officers in communication skills. Previously evaluated interventions include the Power to Change Performance, which is a stress reduction programme aimed at increasing self-regulation and cognitive performance. This programme was evaluated in 75 correctional officers in US prisons. The programme comprised five modules focusing on emotion-refocusing and restructuring techniques delivered over two days of training and included heart rate variability biofeedback, where participants could follow the emotional impact on heart rate. Though possibly underpowered, no significant between-group differences were detected in outcomes post-intervention (McCraty et al., 2009). Another such study carried out in Australia evaluated a 12-month mentoring programme to increase professional skills, a supportive environment, and positive attitudes among prison nurses (n = 21). The programme

### Table 2: Main and Moderated Models: Effects of Intervention on Outcome Measures.

<table>
<thead>
<tr>
<th>Model</th>
<th>n</th>
<th>Emotional Exhaustion</th>
<th>Cynicism</th>
<th>Professional Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>b</td>
<td>p</td>
<td>b</td>
</tr>
<tr>
<td>Intervention</td>
<td>116</td>
<td>0.13</td>
<td>0.56</td>
<td>0.21</td>
</tr>
<tr>
<td>Time</td>
<td>116</td>
<td>&lt;–0.01</td>
<td>0.84</td>
<td>0.03</td>
</tr>
<tr>
<td>Intervention * Time</td>
<td>116</td>
<td>–0.05</td>
<td>0.1</td>
<td>–0.07</td>
</tr>
<tr>
<td>Between subject variance</td>
<td>116</td>
<td>1.08 (0.18)</td>
<td>0.81 (0.14)</td>
<td>0.34 (0.06)</td>
</tr>
</tbody>
</table>

* Results of mixed-model linear regression.

b = Regression coefficient (beta).

<table>
<thead>
<tr>
<th>Model</th>
<th>n</th>
<th>Emotional Exhaustion</th>
<th>Cynicism</th>
<th>Professional Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>b</td>
<td>p</td>
<td>b</td>
</tr>
<tr>
<td>Want to change jobs * intervention</td>
<td>102</td>
<td>–0.44</td>
<td>0.01</td>
<td>–0.17</td>
</tr>
<tr>
<td>- Yes</td>
<td>44</td>
<td>–0.53</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td>58</td>
<td>0.06</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Reason for choosing the job * intervention</td>
<td>107</td>
<td>0.16</td>
<td>0.85</td>
<td>0.36</td>
</tr>
<tr>
<td>- practical reasons</td>
<td>44</td>
<td></td>
<td></td>
<td>–0.44</td>
</tr>
<tr>
<td>- interest</td>
<td>63</td>
<td>–0.11</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>Age * intervention</td>
<td>115</td>
<td>&lt;–0.01</td>
<td>0.47</td>
<td>–0.01</td>
</tr>
</tbody>
</table>

* = Results of analysis on full data, n = 116.

b = main effect of intervention, results of analysis on stratified data.

Bold – significant also in the sensitivity analysis, p < 0.05.
was evaluated as an uncontrolled study with pre- and post-tests. No significant changes were detected on outcomes of job satisfaction or burnout (using the MBI-GS) between the tests (Cashin & Newman, 2010).

In comparison to previous studies, the present study included a higher number of participants and showed some favourable, significant effects of the intervention. Although the detected intervention effects can be considered small on the entire group and should be interpreted with caution, they were in favourable directions. The findings of this study may indicate that providing structured training in communication skills to mitigate difficult and threatening situations may reduce stress among correctional officers.

**Strengths and limitations**

The use of several strategies to support the implementation is a strength of the study. The prison governors were included, staff were informed, and the local trainers in motivational interviewing were involved in the training to facilitate sustainability of everyday conversations practice among the employees. Another strength of the study is the extent to which it was carried out. The prison setting is a tough environment in which to implement new interventions, yet the study was successfully carried out in routine circumstances in seven prisons. However, the study may have been underpowered. Although 116 participants were included in the analysis, few of them provided data at all 16 assessment time points and the number of participants only amounts to less than half of eligible participants (n = 266). In addition, there is no information available regarding how representative the 116 participants are of the correctional officer work force in Sweden nationally, and thus selection bias is possible. Although great emphasis was put on support for the study by the prison governor, and great efforts were made to facilitate staff participation in the study, the participation and retention rate may have been affected by several serious incidents within Swedish prison service during the study period, possibly inflicting a negative influence on the representativeness of the sample included in this study. The incidents also resulted in reorganisation and change in political focus of the Services. These circumstances may have influenced staff turnover during the period, which varied between zero and close to 100% across wards.

**Conclusion**

This study shows the potential and the feasibility to implement an intervention aimed at improving conflict mitigating communication skills to reduce stress among employees in real-life prison setting. Small but favourable intervention effects were found, which may indicate that future interventions focusing on prison staff communication skills may improve the working climate for prison staff in Sweden.

**Data Accessibility Statement**

The data that support the findings of this study are available from the corresponding author, Åsa Norman, upon reasonable request.

**Funding Information**

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**Competing Interests**

The authors have no competing interests to declare.

**Author Contributions**

LF, UL, and CÅF conceived of the study, planned the trial and data collection, and supervised how the trial was carried out. HK contributed to the interpretation of data and analyses. ÅN performed the statistical analyses and drafted the manuscript. All authors have contributed to and approved the final version of the manuscript.

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