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The influence of sense of coherence, self-care and work satisfaction on secondary traumatic stress and burnout among child and youth residential care workers in Switzerland

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\textbf{ABSTRACT}

The present study aimed to investigate the incidence of post-traumatic and secondary traumatic stress as well as burnout symptoms among child and youth welfare workers in residential care in Switzerland and to assess the predictive value of sense of coherence, self-care, and job satisfaction. A sample of 319 child welfare professionals in Swiss child and youth residential care was assessed using questionnaires that addressed sense of coherence, perceived collective efficacy, self-care, and work satisfaction, as well as symptoms of traumatic stress and burnout. Linear regression analyses were conducted to determine the influence of sense of coherence, self-care and job satisfaction on symptoms of burnout and traumatic stress. Enhancing sense of coherence, work-related self-care and work satisfaction could reduce stress symptoms and increase the well-being of child and youth welfare staff. The authors discuss how child and youth residential care institutions could improve these factors among their staff.

\textbf{Introduction}

Children and adolescents who live in residential care often have a history of traumatic experiences. Many of them were exposed to childhood abuse, domestic violence, physical and emotional neglect or flight, and migration, and consequently they show symptoms of distress, difficulties with emotion regulation, and attachment problems (Collin-Vézina, Coleman, Milne, Sell, & Daigneault, 2011; Connor, Doerfler, Toscano, Volungis, & Steingard, 2004; van Vugt, Lanctôt, Paquette, Collin-Vézina, & Lemieux, 2014).

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Post-traumatic stress, secondary traumatic stress, and burnout

As a result of the distress of the children and adolescents, staff members in child and youth residential care frequently face difficult interactions, aggression, and violations of their personal boundaries. This may cause symptoms of post-traumatic stress (Franz, Zeh, Schablon, Kuhnert, & Nienhaus, 2010; Steinlin et al., 2015; Walsht & Clarke, 2003; Zeh, Schablon, Wohler, Richter, & Nienhaus, 2009). Furthermore, hearing or reading about traumatic events experienced by the children and adolescents may cause symptoms of post-traumatic stress and trauma-related cognitive changes in the persons exposed to the distressing material. This is referred to as secondary traumatic stress (STS; Boudoukha, Altintas, Rusinek, Fantini-Hauwel, & Hautekeete, 2013; Daniels, 2007; Elwood, Mott, Lohr, & Galovski, 2011; Inoue, Tsukano, Muraoka, Kaneko, & Okamura, 2006; Lemke, 2006; Steinlin et al., 2015; Weitkamp, Daniels, & Klasen, 2014). The difficult nature of the work may also cause symptoms of burnout (Steinlin et al., 2015; The Annie E. Casey Foundation, 2003). Although there is no uniform definition, burnout is commonly characterized by emotional exhaustion, cynicism, depersonalization, and distancing, as well as reduced efficiency (Berger et al., 2012). Symptoms of burnout have a negative effect on the quality of care (Poghosyan, Clarke, Finlayson, & Aiken, 2010; Van Bogaert, Clarke, Willems, & Mon德拉ers, 2013) and are associated with high turnover rates (Kim & Stoner, 2008; Smith, 2005). They may also promote a negative attitude toward the patients (Holmqvist & Jeanneau, 2006). There has been some controversy about the burnout syndrome as it is not an official diagnosis, and there is an overlap with depression and anxiety disorders (Ahola et al., 2005; Berger et al., 2012). There are many similarities between burnout and STS. Both conditions are (a) characterized by depression, insomnia, and loss of intimacy with friends and family; and (b) cumulative (Canfield, 2005). Symptoms of traumatic stress and burnout may lead to staff members’ feeling unsafe at work, experiencing difficulties engaging with patients and absence from work (Richter & Berger, 2009). The difference between the two concepts lies in the cause.

Enhancing resilience and well-being in child and youth residential care workers

Trauma-sensitive care

The past few years have seen an increasing interest in trauma-sensitive care in Switzerland (Gahleitner, 2013; Schmid, 2013). The aim of trauma-sensitive care is to lead staff members to a better understanding of the traumatic life experiences of the children and adolescents in their care and thereby help them to better manage conflicts, difficult interactions and setbacks. An important assumption of trauma-sensitive care is that the well-being of staff members has an important effect on the well-being of the children and adolescents and, to provide a safe place for the children and adolescents, staff members needs to feel safe as well. An important focus of trauma-sensitive care is therefore to guide staff members to a better understanding of their own stress symptoms and to engage them in self-caring behavior. Furthermore, trauma-sensitive care addresses several organizational issues such as support and appreciation, transparency, and participation.
**Associations between personal factors and stress symptoms**

Research on post-traumatic stress disorder (PTSD) has pointed out a number of personal factors that may increase the resilience toward the development of traumatic stress symptoms. These are, for example, optimism, inner locus of control, active coping strategies, and a positive self-concept (Karstoft, Armour, Elklit, & Solomon, 2015; Zoellner & Maercker, 2006). Optimism was found to improve the level of functioning of health care workers (Boldor, Bar-Dayan, Rosenbloom, Shemer, & Bar-Dayan, 2012), while commitment to child welfare and self-efficacy enhanced retention (DePanfilis & Zlotnik, 2008). Ellett (2009) emphasized the importance of altruism and self-efficacy; and Merluzzi, Philip, Vachon, and Heitzmann (2011) found care of oneself and managing difficult interactions and emotions to have a negative relationship with stress and burden.

In the present study, we focused on sense of coherence, perceived collective efficacy as a specific form of self-efficacy, and self-care. Antonovsky and Franke (1997) introduced the term *sense of coherence* in the 1980s as the central aspect of salutogenesis. The term refers to a global orientation to view the world and the individual environment as comprehensible, manageable, and meaningful. *Perceived self-efficacy* refers to the beliefs in one’s capability to organize and execute courses of action to produce given attainments (Bandura, 1997). According to Bandura, human beings are less influenced by objective facts than by their own beliefs, and these beliefs affect their interests, motivation, behavior, and affective state. Perceived self-efficacy facilitates goal-setting, effort investment, persistence in the face of barriers, and recovery from setbacks (Jerusalem & Schwarzer, 1992). The concept of perceived collective efficacy refers to a shared perception of self-efficacy within a group. Bandura pointed out that perceived collective efficacy is not just the sum of the individual perceptions of self-efficacy of the group members but also depends on group cohesion, the demands that the group faces, and the group leadership.

From a trauma-sensitive care perspective, it is assumed that child and youth residential care workers with a stronger sense of coherence and more perceived collective efficacy as well as more self-caring behavior are more likely to cope with the demands of their challenging work and are therefore less vulnerable for symptoms of stress.

**Associations between organizational factors and stress symptoms**

A number of studies have investigated the relationship between burnout and different aspects of work satisfaction. Abu-Bader (2000) pointed out the importance of supervision, collegial relationship, opportunities for promotion, comfort at work, and a higher education for increasing work satisfaction and reducing symptoms of burnout. Boyas and Wind (2010) described the protective influence of positive relationships with colleagues and supervisors, transparent communication, opportunities for participation, trust and the sense of being treated fairly, higher age, and parenthood. Lizano and Mor Barak (2012) emphasized the importance of institutional support and supervision and the negative influence of role conflict and work–family conflict. Leineweber and colleagues (2014) described the importance of adequate staffing and good leadership.
Aims

The first aim of this study was to investigate the incidence of traumatic stress and burnout symptoms among staff in child and youth residential care. The second aim was to identify personal and organizational factors associated with fewer symptoms of traumatic stress and burnout. Based on the findings, the third aim was to derive specific recommendations for child and youth residential care institutions with the objective of enhancing the well-being of their staff.

Methods

Procedure

Our study was conducted as part of a larger pilot project examining the efficacy of trauma-sensitive care in residential child and youth welfare institutions in Switzerland. 700 questionnaires were sent out to all youth welfare institutions approved by the Swiss Federal Office of Justice in the German-speaking part of Switzerland. These institutions accommodate children and adolescents between 7 and 25 years of age, over a third of which have a criminal record or severely disrupted social behavior. A total of 319 questionnaires were answered and returned (response rate = 45.6%). The survey comprised several standardized and self-developed questionnaires on sociodemographic variables, perceived collective efficacy, sense of coherence, self-care, job satisfaction, as well as symptoms of post-traumatic stress, STS, and burnout.

Participants

Participants were between 23 and 65 years of age ($M = 38.6$ years, $SD = 10.0$ years), 61% of them were female. 77% of participants reported being in a stable relationship, and 36% reported having children. In addition, 86% of participants were social education workers or social education workers in training. On average, they reported having 10.0 years ($SD = 8.2$ years, range = 0–38 years) of professional experience in child welfare institutions and having worked in the present institution for 5.1 years ($SD = 5.9$ years, range = 0–34.5 years). Two years of professional experience and having worked in the present institution for 1 year were most frequently reported.

Measures

Assessment of well-being

The Perceived Collective Efficacy (Schwarzer & Schmitz, 1999) is a 10-item questionnaire that was developed for use in teacher populations and was slightly adapted for our population. For further analyses, the mean of the 10 items was used. Reported Cronbach’s alphas between .71 and .92 (Schwarzer & Schmitz, 1999). Cronbach’s alpha in our sample was .906.
The German short version of the Sense of Coherence Scale (Schumacher, Wilz, Gunzelmann, & Brähler, 2000) was also used. Sense of coherence in regard to daily work was assessed with a nine-item version of the Sense of Coherence Scale (Antonovsky & Franke, 1997). The mean of all items was used for further analyses. The authors reported a Cronbach’s alpha of .87 (Schumacher et al., 2000). Cronbach’s alpha in our sample was .785.

For the pilot project about trauma-sensitive care, a 24-item questionnaire, the Self-Care Questionnaire (Dölitzsch, Fischer, Steinlin, Breymaier, & Schmid, 2012) was developed to assess what participants do regarding their self-care. The reference period is 3 months, and participants answered items using a 4-point Likert-type scale ranging from 1 (not correct at all) to 4 (fully correct). In our sample, Cronbach’s alpha was .840. The selectivity of the items ranged between .223 and .588, with 79% of the items between .300 and .500. Item difficulty ranged between .56 and .93, with eight items being greater than .80, so the items differentiated particularly between people with pronounced self-care. We conducted a principal components analysis to reduce data. Three factors were extracted and rotated using Promax-rotation (kappa = 4): (a) physiological factors (7 items; e.g., participating in sports, sleeping enough, balancing nutrition; Cronbach’s alpha = .787), (b) psychological factors (10 items; feeling supported, upholding values, self-reflection; Cronbach’s alpha = .705), and (c) work-related factors (7 items; taking breaks, successfully transitioning from work to private life, sharing responsibilities; Cronbach’s alpha = .695). For each factor, the mean was calculated for further analyses.

The Questionnaire on Job Satisfaction in Trauma-Sensitive Care (Schmid, Lang, Weber, Künster, & Dölitzsch, 2012) is a 27-item questionnaire developed to assess aspects of job satisfaction that are relevant for trauma-sensitive care. The reference period is 3 weeks, and participants answered items using a 6-point Likert-type scale ranging from 1 (I don’t agree at all) to 6 (I completely agree). In our sample, Cronbach’s alpha was .938. The selectivity of the items ranged between .380 and .738, with 70% of the items between .500 and .700. Item difficulty ranged between .57 and .87, with 12 items greater than .80, so the items differentiated particularly between people with pronounced job satisfaction. We conducted a principal components analysis to reduce data (Steinlin et al., 2016). Four factors were extracted and rotated using Promax-rotation (kappa = 4): (a) support from superiors, participation, transparency (10 items; Cronbach’s alpha = .897); (b) communication and support within team (6 items; Cronbach’s alpha = .849); (c) enjoyment of work (5 items; Cronbach’s alpha = .803); and (d) institutional structures and resources (6 items; Cronbach’s alpha = .804). For each factor, the mean was calculated for further analyses.

**Stress symptoms**

The Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997) is a 22-item screening instrument for PTSD. In our study, participants were asked about experiences of physical assault or threatening situations that happened during
work, which could have resulted in death or injury. The reference period for symptoms is 1 week, and participants answered items using a 4-point Likert-type scale ranging from 1 (not at all) to 4 (often). We calculated a diagnostic value using a weighted sum of the scales intrusion, avoidance, and hyperarousal. The Cronbach’s alpha of the German version was reported between .71 and .90 for the three scales. The Cronbach’s alpha in our sample was between .823 and .852.

The Questionnaire for the Assessment of Secondary Traumatic Stress (STS; Daniels, 2006) was adapted from a German study on STS in psychotherapists. It comprises 31 items that assess primary symptoms of PTSD (e.g., intrusion, avoidance, hyperarousal), depressive states, suicide ideation, and addictive behavior. The reference period is 1 week, and participants answered items using a 5-point Likert-type scale ranging from 1 (not at all) to 5 (very often). The mean of all items was used for further analyses. The author reported a Cronbach’s alpha of .937 (Daniels, 2006). The Cronbach’s alpha in our sample was .931.

The Burnout Screening Scales (BOSS; Hagemann & Geuenich, 2009) is a German-language questionnaire to collect information about current psychological (cognitive and emotional), somatic and psychosocial problems in work-related, personal, and interpersonal domains, which are related to burnout. The first part of the questionnaire (BOSS I) collects problems in regards to different life domains (work, personal life, family and friends) during the past 3 weeks (four scales with 30 items). The second part of the questionnaire (BOSS II) collects data about clinical (somatic, cognitive, and emotional) symptoms during the past 7 days (three scales with 30 items). Participants answered items using a 6-point Likert-type scale ranging from does not apply to applies strongly. The total score was calculated for each of the seven scales as well as for the BOSS I (life domains) and BOSS II (clinical symptoms). All scores were transformed into t scores. According to Hagemann and Geuenich (2009), burnout is suspected if the value on the 10-item work scale is elevated (t score equal to or greater than 60). The other scales are also considered. The authors reported Cronbach’s alpha between .75 and .91 (Hagemann & Geuenich, 2009). The Cronbach’s alpha in our sample was between .765 and .902.

Statistical analyses

We calculated descriptive analyses to describe the point prevalence of reported post-traumatic stress, STS, and burnout symptoms in our study population. Pearson correlations and point-biserial correlations were calculated to describe the bivariate associations between predictors and symptoms of post-traumatic stress, STS, and burnout. A Bonferroni alpha-error correction with 14 tests was conducted in each trauma and burnout scale. Linear regression analyses were conducted to analyze the relation between predictors and symptoms. First, all predictive variables were taken into account to determine the relevant predictors. Second, a reanalysis was conducted considering only the variables with $p < .10$ to define the regression model (Field, 2013).
Figure 1. Physical assault or threatening situation at work.

The results of the reanalysis are reported. Most assumptions for regression analyses are fulfilled—that is, residuals are independent and mostly normally distributed, collinearity is minor or moderate, and linearity is fulfilled. The assumption of homoscedasticity is not fulfilled. All calculations were conducted using IBM SPSS Statistics 21 (IBM Corp. Released., 2012).

Results

Descriptive analyses of symptoms of traumatic stress and burnout

Of all participants, 83% ($n = 265$) reported having experienced a physical assault or threatening situation during work, which could have resulted in death or injury. Participants who did not report such an experience (17%, $n = 54$) were not included in further analyses regarding symptoms of post-traumatic stress. As Figure 1 shows, 49% reported having felt helpless, afraid, or shocked directly after the event; and 18% reported having suffered from one or more symptoms for longer than 4 weeks.

Of all participants, 73% ($n = 220$) reported having heard or read about at least one traumatic event in the life of a child or adolescent. Participants who did not report such an experience (27%, $n = 81$) were not included in further analyses regarding symptoms of STS. As Figure 2 shows, 69% reported having felt helpless, afraid, or shocked directly after the event and 13% reported having suffered from one or more symptoms for longer than 4 weeks. In addition, 4% reported suicidal thoughts after the event.

Figure 2. Hearing or reading about a traumatic life event of a child or adolescent.
A suspected work-related burnout was found in 18% \( (n = 319) \) of participants. As is shown in Figure 3, 18% of participants reported elevated scores in different life domains, led by 33% on the friends scale. 14% reported clinical symptoms, mostly somatic (24%) and cognitive (16%).

**Analyses of bivariate associations between predictors and stress symptoms**

Table 1 shows the bivariate associations between predictors and symptoms of burnout, post-traumatic stress and STS. Whereas correlations between sociodemographic variables and symptoms of post-traumatic stress, STS, and burnout were small, correlations with perceived collective efficacy, sense of coherence, self-care, and job satisfaction reached small to high effects up to \( r = -.635 \) (most of them significant). Based on these results, it seemed worthwhile to conduct regression analyses to calculate the unique relationship of each predictor with symptoms of post-traumatic stress, STS, and burnout.

**Linear regression analyses**

We conducted linear regression analyses to predict the severity of post-traumatic stress, STS, and burnout symptoms by independent variables. Sociodemographic variables were included in all first-step analyses to account for their small associations with the criteria described earlier. Table 2 shows the results of the second-step linear regression analyses to predict symptoms of post-traumatic stress and STS, and Table 3 shows the results for burnout. The regression models explained between 20% and 53% of the variance. In all three models, sense of coherence was the most important predictor—a more pronounced sense of coherence was associated with fewer symptoms of post-traumatic stress, STS, and burnout (post-traumatic stress: \( \beta = -.30, p < .001 \); STS: \( \beta = -.27, p < .001 \); burnout: \( \beta = -.32, p < .001 \)).

Fewer post-traumatic stress symptoms were related to more work-related self-care (\( \beta = -.15, p < .05 \)), more enjoyment of work (\( \beta = -.18, p < .01 \)), having no children (\( \beta = .20, p < .001 \)), and being male (\( \beta = .16, p < .05 \)). Fewer STS symptoms were related to more work-related self-care (\( \beta = -.15, p < .05 \)), more enjoyment of work (\( \beta = -.18, p < .01 \)), having no children (\( \beta = .20, p < .001 \)), and being male (\( \beta = .16, p < .05 \)).
symptoms were related to more communication and support within the team ($\beta = -0.32$, $p < 0.05$) and institutional structures and resources ($\beta = -0.19$, $p < 0.05$).

Having fewer work-related burnout symptoms, fewer life domains affected, and fewer clinical symptoms were all related to more work-related self-care ($\beta = -0.25$, $p < 0.001$; $\beta = -0.24$, $p < 0.001$; $\beta = -0.15$, $p < 0.01$, respectively) and to being single ($\beta = -0.12$, $p < 0.01$; $\beta = -0.16$, $p < 0.001$; $\beta = -0.12$, $p < 0.01$, respectively). Fewer work-related burnout symptoms were also related to more support from superiors, participation and transparency ($\beta = -0.14$, $p < 0.01$) and to more enjoyment of work ($\beta = -0.18$, $p < 0.001$). Having fewer life domains affected was also related to more physiological self-care ($\beta = -0.23$, $p < 0.001$), and fewer clinical symptoms were also related to physiological self-care ($\beta = -0.13$, $p < 0.01$) and support from superiors, participation, and transparency ($\beta = -0.18$, $p < 0.001$).

Discussion

Incidence of traumatic stress and burnout

The first aim of this study was to investigate the incidence of traumatic stress and burnout symptoms among staff in child and youth residential care. The majority reported having experienced a physical assault or threatening situation at work, and half of them reported symptoms of helplessness, fear or shock after this event. Even
Table 2. Linear regression analyses to predict post-traumatic stress and secondary traumatic stress, by predictor.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Symptoms of post-traumatic stress (n = 250)</th>
<th>Symptoms of secondary traumatic stress (n = 211)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
</tr>
<tr>
<td>Constant</td>
<td>0.76</td>
<td>-0.67, 2.18</td>
</tr>
<tr>
<td>Sex (1 = male, 2 = female)</td>
<td>0.38</td>
<td>0.09, 0.67</td>
</tr>
<tr>
<td>Own children (0 = no, 1 = yes)</td>
<td>0.51</td>
<td>0.21, 0.80</td>
</tr>
<tr>
<td>Sense of coherence</td>
<td>-0.52</td>
<td>-0.74, -0.30</td>
</tr>
<tr>
<td>Self-care: Physiological factors</td>
<td>-0.16</td>
<td>-0.31, -0.01</td>
</tr>
<tr>
<td>Self-care: Work-related factors</td>
<td>-0.35</td>
<td>-0.60, -0.10</td>
</tr>
<tr>
<td>Job satisfaction: Communication and support within team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction: Enjoyment of work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction: Institutional structures and resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>15.14***</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001; irrelevant predictors not presented in the table: age, relationship status, professional experience, perceived collective efficacy, psychological support/self-reflection, psychological factors of self-care, support from superiors/participation/transparency (job satisfaction), and institutional structures and resources (job satisfaction). Shaded values represent higher levels of significance (p < .01 and p < .001).
Table 3. Linear regression analyses to predict symptoms of burnout, by predictor.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Suspected work-related burnout (n = 283)</th>
<th>Different life domains affected (n = 282)</th>
<th>Clinical symptoms (n = 284)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
<td>β</td>
</tr>
<tr>
<td>Constant</td>
<td>105.51</td>
<td>98.73, 112.29</td>
<td>−95.93</td>
</tr>
<tr>
<td>Relationship status (1 = firm relationship, 2 = single)</td>
<td>−1.97</td>
<td>−3.39, −0.54</td>
<td>−2.66</td>
</tr>
<tr>
<td>Own children (0 = no, 1 = yes)</td>
<td>−3.34</td>
<td>−4.38, −2.29</td>
<td>−0.73</td>
</tr>
<tr>
<td>Sense of coherence</td>
<td>−1.26</td>
<td>−2.52, 0.01</td>
<td>−4.43</td>
</tr>
<tr>
<td>Self-care: Physiological factors</td>
<td>−4.59</td>
<td>−6.34, −2.85</td>
<td>−2.93</td>
</tr>
<tr>
<td>Self-care: Work-related factors</td>
<td>−1.49</td>
<td>−2.53, −0.45</td>
<td>−4.10</td>
</tr>
<tr>
<td>Job satisfaction: Support from superiors, participation, transparency</td>
<td>−2.15</td>
<td>−3.39, −0.92</td>
<td>−1.63</td>
</tr>
<tr>
<td>Job satisfaction: Enjoyment of work</td>
<td>−2.15</td>
<td>−3.39, −0.92</td>
<td>−1.63</td>
</tr>
<tr>
<td>R²</td>
<td>0.52</td>
<td>0.53</td>
<td>0.50</td>
</tr>
<tr>
<td>F</td>
<td>49.84***</td>
<td>46.14***</td>
<td>61.44***</td>
</tr>
</tbody>
</table>

*p < .10, *p < .05, **p < .01, ***p < .001; irrelevant predictors not presented in the table: sex, age, professional experience, perceived collective efficacy, psychological support/self-reflection, psychological factors of self-care, communication and support within team (job satisfaction), and institutional structures and resources (job satisfaction). Shaded values represent higher levels of significance (p < .01 and p < .001).
more striking is that almost one fifth reported having suffered from post-traumatic stress symptoms longer than 4 weeks after the incident. The results for STS are comparable, with the main difference being that two thirds reported feeling helpless, afraid, or shocked directly after having heard or read about a traumatizing event in the lives of the children and adolescents in their care. A small number of persons reported suicidal thoughts after the incidents.

Almost one fifth of the participants reported significant signs of burnout in work-related matters as well as in different life domains, and nearly one fourth reported somatic symptoms such as headaches, muscular tension, digestive problems, and sleeping problems. Considering that symptoms of stress and burnout affect the quality of work and the ability to engage with other people and to maintain a positive attitude (Holmqvist & Jeanneau, 2006; Richter & Berger, 2009), these findings have important implications. Because of their burdened biography and frequent attachment and emotion regulation problems (Collin-Vézina et al., 2011; Connor et al., 2004; Dölitzsch et al., 2014; Schmid, 2007, 2013; van Vugt et al., 2014), the children and adolescents in residential care are especially dependent on continuous, reliable relationships and on warm and appreciative interactions. For staff suffering from symptoms of traumatic stress and burnout, providing such an environment is a challenge.

**Predictors for fewer traumatic stress and burnout symptoms**

This study also aimed to identify personal and organizational factors associated with fewer symptoms of traumatic stress and burnout and to derive specific recommendations for child and youth residential care institutions.

**Personal factors**

A stronger sense of coherence was associated with fewer symptoms of post-traumatic stress, STS, and burnout. In accordance with the theory of Antonovsky and Franke (1997), sense of coherence appears to be a crucial aspect of salutogenesis and therefore of physical and psychological well-being. Whether a stressful or threatening situation seems manageable and comprehensible determines to a great extent whether a person will or will not develop stress symptoms. Perceived collective efficacy showed an important contribution in the bivariate analyses but was no longer significant in the regression models. The concept is closely related to the manageability aspect of the sense of coherence, and it is likely that its effect was covered by sense of coherence.

In terms of self-care, especially the work-related factors such as taking a break, finding time to eat, drink, or use the restroom but also being able to delegate responsibility and to say “no” were associated with fewer symptoms of burnout and post-traumatic stress. Physical aspects such as regular exercise, a balanced nutrition, and spending time in nature were associated with fewer symptoms of STS and burnout.
Regarding the demographic variables, being female and having own children seems to increase the vulnerability for posttraumatic stress symptoms. It might be that having children increases the general stress level and vulnerability and therefore the risk for posttraumatic stress symptoms. In contrast, persons in a firm relationship tend to show more symptoms of burnout. This finding is surprising given that, normally, relationships are thought to alleviate stress. It might be explained by an increased likelihood of work–family conflicts, which was emphasized by Lizano and Mor Barak (2012) as a promoter for burnout.

**Organizational factors**

Although posttraumatic stress, STS, and burnout share many symptoms, they are influenced by different aspects of work satisfaction. Support from superiors, participation, and transparency were associated with fewer burnout symptoms. Communication and support within the team was associated with fewer symptoms of STS, enjoyment of work was predictive for lower levels of posttraumatic stress and burnout and institutional structures and resources were associated with fewer STS symptoms. Although the associations with burnout are in line with previous research—that is, support from superiors, transparent communication, and participation (Boyas & Wind, 2010; Lizano & Mor Barak, 2012), until now, little was known about the organizational risk factors for STS. It seems that feeling safe and supported within the team and being able to rely on clear structures, procedures and resources on an organizational level increases the resilience toward STS. These associations support the assumption that creating a safe place for staff members is just as important as creating a safe place for the children and adolescents.

**Limitations**

The results should be interpreted with some caution considering the limitations of the study, the first of which concerns the representativeness of the sample. It is possible that persons who were familiar with burnout and traumatic stress due to their own experiences showed more interest in the study and therefore were more likely to respond. In contrast, severely affected staff that was absent from work or had left the institution due to such symptoms could not be included in the study.

The study was based on questionnaires; there was no personal contact with the participants. The symptoms could therefore not be clinically evaluated or objectified, nor can any statements be made about other aspects of mental and physical health of the participants.

The questionnaire on self-care used in this study was self-developed and has not yet been systematically validated. The measures referred to different time frames, ranging from 7 days (BOSS II), 3 weeks (BOSS I), 3 months (self-care, perceived collective efficacy), to “in general” (sense of coherence, perceived collective efficacy). This study is based on a cross-sectional design; statements about the direction of effect are subject to uncertainty and require further investigation.
Conclusions

Despite these shortcomings, the study has potentially useful implications that can be addressed by the management of child welfare institutions to reduce stress symptoms among their staff. We make the following recommendations.

1. The management should increase the perceived manageability of stressful incidents by training staff members and providing clear regulations for critical incidents. By providing knowledge about psychopathology and the influence of traumatic life events on behavior, the comprehensibility of difficult situations and aggressive incidents could be improved, promoting sense of coherence.

2. Self-caring behavior should be promoted and exemplified by the management. The staff should be given the opportunity to take breaks at work and to meet their physical needs. Also, staff members should be made aware of their own influence on their health and be encouraged to engage in regular physical exercise as well as maintain a balanced nutrition.

3. To reduce the risk of posttraumatic stress in the more vulnerable female staff and staff with own children, family-friendly working conditions such as part-time work and early planning of work schedules should be promoted. This may also prevent work–family conflicts and thereby alleviate the risk of burnout.

4. To further reduce the risk of burnout, the management should make an effort to communicate in a transparent and supportive way and to create opportunities for participation.

5. To reduce the risk of STS, the management should invest into team-building and provide supervision to prevent and manage conflicts within the team, to enhance communication and to ensure that the team members feel supported by each other.

6. Last but not least, giving some consideration to the interior design of the rooms (e.g., decorating them, making sure they are well-lit or setting up flowers every once in a while) may contribute to making the workplace feel more safe, comfortable, and enjoyable, especially if individual preferences are considered and everyone is invited to participate in a joint effort.

The authors understand that resources in child welfare institutions are limited and that following these recommendations may prove challenging. However, given that symptoms of traumatic stress and burnout may hinder staff members from engaging with children and adolescents and increases absenteeism in the workplace (Richter & Berger, 2009), it seems wise to invest as many resources as possible into sustaining the well-being of staff members and thereby promoting a better quality of care and more stability in the institutions.

References


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