



Attitudes Toward Evidence-based Practice in Child and Youth Welfare: The Role of Implementation Climate and Professional Quality of Life

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3 Abstract

Evidence-based practices (EBPs) can support the delivery of high-quality, evidence-informed care for children and adolescents, yet are rarely implemented in German Child and Youth Welfare Service (CYWS) facilities. Although attitudes toward EBPs have been associated with EBP use, implementation is also shaped by organizational and individual factors. However, little is known about these relationships among child welfare workers (CWWs) in German CYWS facilities. This study therefore examined attitudes toward EBPs and their associations with perceived implementation climate and professional quality of life among CWWs. Baseline data of 161 child welfare workers in 37 German CYWS facilities from multi-center cluster-randomized controlled trial BETTER CARE were analyzed. Associations between the implementation climate (Implementation Climate Scale (ICS)) and the Professional Quality of Life (ProQOL) on attitude toward EBPs (Evidence-Based Practice Attitude Scale (EBPAS)) were examined using LASSO-based predictor selection followed by multiple linear regression analyses with cluster-robust standard errors. The ICS subscales *recognition* ($\beta=0.22$, $p=.002$), *rewards* ($\beta=-0.21$, $p=.004$), and *selection for openness* ($\beta=0.26$, $p=.002$), as well as the ProQOL subscales *burnout* ($\beta=-0.60$, $p<.001$) and *compassion satisfaction* ($\beta=0.32$, $p=.022$) were significant predictors of the attitudes toward EBPs among CWWs. Among CWWs in German CYWS facilities, attitudes toward EBPs were associated with selected dimensions of implementation climate and professional quality of life. The findings suggest that attitudes toward EBPs should be considered within their organizational and individual context.

Keywords Child welfare · Evidence-based practice · Implementation climate · Professional quality of life · Refugee · Child

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Abbreviations

CYWS	Child and youth welfare service
CWWs	Child welfare workers
EBPAS	Evidence-based practice attitude scale
ICS	Implementation climate scale
ProQOL	Professional quality of life
STS	Secondary traumatic stress
BO	Burnout
CS	Compassion satisfaction

Introduction

Children and adolescents in child and youth welfare service (CYWS) facilities have a higher risk of developing mental health disorders due to having a high chance of experiencing potentially traumatic events, compared to children living with their families (Burns et al., 2004; Ford et al., 2007; Jaritz, 2008; Jozefiak et al., 2016; Schmid et al., 2008). In Germany, CYWS provide out-of-home care for children and adolescents whose care needs could not be adequately met within their families (Witte et al., 2018). This includes a range of services and settings, including residential care, in which children and adolescents may receive around-the-clock support. Across European and American studies, prevalence rates of mental disorders among youth in CYWS range from 47.9% to 81.2%, with the most common symptoms being conduct problems, post-traumatic stress, hyperactivity or inattention, depressive symptoms, substance abuse, and symptoms of anxiety (Bronsard et al., 2011; Burns et al., 2004; Conn et al., 2016; Jozefiak et al., 2016; Schmid et al., 2008; Vasileva & Petermann, 2017). Unaccompanied young refugees (UYRs) are one population receiving care within the German CYWS system. In 2024, approximately 24,000 UYRs were housed in out-of-home care in Germany (Statistisches Bundesamt, 2026). UYRs are at especially high risk of developing trauma-related mental health problems because many have experienced multiple potentially traumatic events before, during, and after migration, while at the same time facing considerable barriers to accessing evidence-based mental health care (Rosner et al., 2026). CYWS facilities therefore represent an important setting for addressing the mental health needs of this highly vulnerable population and for implementing evidence-based, trauma-informed approaches to care.

Despite this high demand for appropriate psychological care in CYWS facilities, only a fraction of the children and adolescents actually receive mental health care services (Browne et al., 2006; Burns et al., 2004; Geen et al., 2005; Horwitz et al., 2012; Rosenfeld et al., 1997).

Mental health care services may be provided through specialized outpatient or inpatient services outside the CYWS system (Fegert et al., 2017). However, access to such services can be limited, particularly for children and adolescents facing barriers like service inaccessibility, lack of knowledge on acquiring support, or stigma-related barriers (Powell et al., 2021). Providing evidence-based mental health care within CYWS facilities may therefore complement existing mental health care services by bringing evidence-based practices (EBPs) into the children's and adolescents' everyday care environment (James et al., 2013; Ramos Miguel et al., 2024).

EBPs refer to empirically supported interventions and treatments developed and evaluated through rigorous research (Aarons, 2005) that often outperform usual care (Cho et al., 2022; Landsverk et al., 2011; Leathers et al., 2016). Especially in the CYWS context, EBPs may support the delivery of high-quality mental health care (Landsverk et al., 2011) through manualized, non-therapeutic practices such as skills-based programs and trauma-informed care approaches that can be delivered by non-clinically trained staff (Avery et al., 2024). This is where child welfare workers (CWWs) play a key role. In Germany, CWWs are mostly either social workers or trained educators (Statistisches Bundesamt, 2022), meaning that neither is authorized to provide psychotherapy unless they complete additional specialized clinical training (Melcop et al., 2019). Nevertheless, they spend most of their time with children and adolescents, know their needs best, and are on site, which can reduce barriers to accessing psychological care and minimize concerns about stigma (Holmes & McDermid, 2013; Kerns et al., 2014). Their role in mental health care should therefore be understood as complementary to, rather than a replacement for, specialized mental health care services. CWWs are therefore ideally positioned to either administer EBPs themselves when these are designed for delivery by non-clinical staff or coordinate access to evidence-based psychotherapies provided by clinically trained mental health care providers (Barth, 2008). However, without their commitment to and acceptance of EBPs, such interventions may remain unused even when they are available (Aarons, 2004).

A study by Leathers et al. (2016) found that, in a sample of both CWWs (73%) and therapists (27%) working in CYWS facilities in the USA, attitudes toward EBPs were positive. Those attitudes toward EBPs are relevant to a successful implementation because more positive attitudes have been associated with a higher likelihood of EBP use (Aarons et al., 2011; Barth, 2008). Understanding factors associated with CWWs' attitudes toward EBPs is therefore important for identifying conditions

that may facilitate or hinder the uptake of evidence-based care in CYWS facilities. Previous research suggests that attitudes toward EBPs are influenced by both individual characteristics and the organizational context in which professionals work (Aarons, 2004; Mersky et al., 2025). Among organizational factors, implementation climate has emerged as an important determinant of successful EBP implementation (Szota et al., 2023). Implementation climate refers to the extent to which an organization creates “a fertile organizational context for putting EBPs into practice [...]” (Ehrhart et al., 2014, p. 2). A supportive implementation climate has been consistently associated with more positive provider attitudes toward EBPs (Aarons & Sawitzky, 2006; Szota et al., 2021, 2023) and with greater EBP use (Williams et al., 2018). Consequently, examining how CWWs perceive the implementation climate in their CYWS facility may help clarify whether the organizational context supports their engagement with EBPs.

In addition to organizational context, the professional well-being of CWWs may be relevant to their attitudes toward EBPs. Given their regular work with children and adolescents exposed to adverse and potentially traumatic experiences, CWWs may be vulnerable to secondary traumatic stress and burnout, which can affect their professional quality of life (Letson et al., 2020; Molnar et al., 2020; Rienks, 2020; Salloum et al., 2015). Professional quality of life encompasses both negative work-related outcomes, such as secondary traumatic stress and burnout, and positive experiences, such as compassion satisfaction (Stamm, 2010). A recent study by Schwegler et al. (2025), which partly used the same data as the present study, found that the levels of secondary traumatic stress and burnout in CWWs working with UYRs are generally low to average, while the levels of compassion satisfaction are moderate to high. Importantly, aspects of the professional quality of life may also be related to attitudes toward EBPs. For example, a study of Israeli social workers demonstrated that higher levels of burnout were associated with more negative attitudes toward EBPs (Kagan, 2022). Conversely, training and support related to EBPs may contribute to a better professional quality of life by increasing professionals’ competence and preparedness to address the needs of the children and adolescents they support (Collins & Long, 2003; Glennon et al., 2019). Taken together, implementation climate and professional quality of life may represent complementary factors associated with CWWs’ attitudes toward EBPs: implementation climate reflects the organizational conditions under which EBPs are implemented, whereas professional quality of life captures the professional well-being of the individuals expected to engage with them.

Despite the growing evidence that organizational and individual factors are relevant to EBP implementation, little is known about how these factors relate to attitudes toward EBPs among CWWs in the German CYWS context. This is particularly relevant for CYWS facilities, where CWWs play a central role in the daily care of children and adolescents with substantial mental health needs, but are not themselves trained to provide psychotherapy. Examining the associations between implementation climate, professional quality of life, and attitudes toward EBPs may therefore help identify organizational and professional conditions that could support the implementation of EBPs in CYWS facilities.

Study Aims and Research Questions

The present study aimed to examine factors associated with attitudes toward EBPs among CWWs in German CYWS facilities. Specifically, the study examined the associations between perceived implementation climate, professional quality of life, and attitudes toward EBPs. Thus, this study aimed to examine (a) the attitudes toward EBPs, the perceived implementation climate, and the professional quality of life among CWWs in German CYWS facilities, and b) the associations between these constructs. Based on previous research, more supportive implementation climate dimensions and higher compassion satisfaction are expected to be associated with more positive attitudes toward EBPs, whereas higher levels of secondary traumatic stress and burnout are expected to be associated with less positive attitudes toward EBPs.

Method

The data used in this paper are from the BETTER CARE study (Rosner et al., 2026), in which two active conditions (BETTER CARE and usual care+ (UC+)) were compared: While BETTER CARE encompassed a stepped care approach including screenings, prevention (“Mein Weg” (eng. “My Way”; Pfeiffer & Goldbeck, 2019) and trauma-focused cognitive behavioral therapy (Cohen et al., 2017), UC+ included screening and a consecutive treatment recommendation.

Procedure

The data collection took place in German CYWS facilities housing UYRs across seven federal states between 2020 and 2024. The participating CYWS facilities provided care for UYRs within the broader German CYWS

system, including residential and outpatient care settings. The facilities were recruited via invitation letters, telephone calls, online events, and flyers. The recruitment of CWWs took place through the CYWS facilities where they worked. Due to the COVID-19 pandemic, assessments were conducted either online or on-site, adhering to strict hygiene standards. The data were collected at baseline (T0), as well as 6 months (T1) and 12 (T2) months post-baseline. The present study only employed the baseline (T0) data collected before the implementation of the intervention.

Sample

Initially, $N=189$ CWWs from 38 CYWS facilities signed up for the study. The goal was for them to receive training to implement “Mein Weg” in their CYWS facility. Ultimately, only $N=161$ CWWs from 37 CYWS facilities participated in the data collection. CWWs in the BETTERCARE condition received a two-day training in trauma-informed care and delivery of “Mein Weg” after T0 or T1, whereas CWWs in the UC+ received training after T2. Thus, all data analyzed in the present study were collected prior to training, and randomization ensured comparability between the study conditions at baseline. Within the CYWS facilities, the number of CWWs ranged from 1 to 14. Of the CWWs, 124 (77%) were female, and the CWWs’ age ranged from 22 to 62 years ($M=36.5$; $SD=10.49$), while the years of work experience ranged from 0 to 40 years ($M=10.18$; $SD=9.29$). CWW characteristics are summarized in Table 1.

Table 1 Characteristics of participating CWWs

Characteristics	M/ n	SD/ %
Age (in years)	36.50	10.49
Gender		
Female	124	77.0
Male	37	23.0
Work experience (in years)	10.18	9.29
Highest Educational level		
University degree	102	63.4
Social Work/ Social Services	45	28.0
Psychology	15	9.3
Education/ Educational Services	13	8.1
Social Pedagogy	10	6.2
Other fields/ Field not specified	19	11.8
Apprenticeship	54	33.5
Educator/ Early childhood and Youth Care	36	22.4
Youth and Residential Care Worker	6	3.7
Special Education	3	1.9
Other training/ no specified	9	5.6
Other/ no formal qualification	5	3.1

$N=161$. Percentages are based on the total sample

Measures

All CWWs completed the questionnaires before 2-day training. The questionnaires inquired about their socio-demographic information, the Evidence-Based Practice Attitude Scale, the Implementation Climate Scale, and the Professional Quality of Life. The study team adapted the latter for the context of CYWS by replacing “person” and “those I help” with “youth in care”. Standard demographic information, such as age and gender, as well as additional details on job experience and other qualifications, was assessed. Internal consistencies for the total scales and subscales of the Evidence-Based Practice Attitude Scale, the Implementation Climate Scale, and the Professional Quality of Life were mostly acceptable to good and are reported in Table 5.

The Evidence-Based Practice Attitude Scale (EBPAS-D36) consists of 36 items and assesses mental health care providers’ attitudes toward the adoption of EBPs (Rye et al., 2017; Szota et al., 2020). Each item is answered on a 5-point scale, ranging from 0 (not at all) to 4 (to a very great extent). In total, there are 12 subscales, each consisting of 3 items. Seven subscales assess positive attitudes toward EBP adoption, including the perceived attractiveness and relevance of EBP (*appeal* and *fit*), willingness to adopt EBPs when required (*requirements*), receptiveness to new and manualized approaches (*openness*), and perceptions of potential benefits and organizational conditions related to EBP adoption (*job security*, *organizational support*, and *feedback*) (Aarons et al., 2012; Szota et al., 2020). The remaining five subscales capture potentially ambivalent views of EBPs, including perceived discrepancies between research-based interventions and usual practice (*divergence*), concerns about the applicability of EBPs to clients’ needs (*limitations*), concerns about supervisory oversight (*monitoring*), views regarding the relative importance of scientific evidence and clinical skills (*balance*), and perceived effort associated with learning EBPs (*burden*). Example items are provided in Table 6. The subscale scores can be calculated by taking the mean of the items corresponding to a subscale. Furthermore, the total EBPAS score can be determined by reverse-coding the subscales of *divergence* (items 4–6), *limitations* (items 16–18), *monitoring* (items 19–21), *balance* (items 22–24), and *burden* (items 25–27). This ensures that higher scores consistently indicate more positive attitudes toward EBPs (Rye et al., 2017). The total score is then calculated by summing all the item scores and dividing by the total number of items. The EBPAS has been validated both in English (Rye et al., 2017) and German (Szota et al., 2020), with the German version also having been validated in a large sample

of German psychotherapists, including child and adolescent psychotherapists and psychotherapists in training (Szota et al., 2021).

The Implementation Climate Scale (ICS) measures the extent to which the organizational climate, in this case, in a CYWS facility, supports the implementation of EBPs (Ehrhart et al., 2014). In total, 18 items are answered on a 5-point scale ranging from 0 (not at all) to 4 (to a very great extent). The ICS consists of six subscales that capture different aspects of organizational support for EBP implementation: *selection for openness* reflects the extent to which organizations hire staff who are open to new practices; *recognition for EBP* refers to acknowledging staff for their use of EBPs; *selection for EBP* concerns the extent to which EBP-related knowledge and experience are considered when selecting and hiring staff; *focus on EBP* reflects the degree to which EBP implementation is prioritized within the organization; *educational support for EBP* captures opportunities and resources for learning about and implementing EBPs; and *rewards for EBP* refers to organizational incentives associated with EBP use. Example items are presented in Table 7. The subscale score and the total score can be computed similarly to the EBPAS scores, except that no items have to be reversed. Again, more favorable ratings of the implementation climate are indicated by higher scores (Szota et al., 2023). The ICS has been validated in the CYWS context (Ehrhart et al., 2016).

The professional quality of life, specifically the effects of helping traumatized individuals, is measured using the Professional Quality of Life (ProQOL; Stamm, 2010). The questionnaire consists of 30 items, each of which requires a response on a scale of 1 (never) to 5 (very often). Example items are presented in Table 8. The ProQOL captures both positive and negative aspects of Professional Quality of Life, with the subscale compassion satisfaction (CS) representing the positive aspect and the subscales burnout (BO) and secondary traumatic stress (STS) representing aspects of compassion fatigue. CS refers to the sense of fulfillment derived from helping others, while BO is characterized by experiences such as exhaustion, frustration, anger, and depressive feelings, and STS involves trauma-related distress and fear arising in connection with one's work (Stamm, 2010). The sum scores were categorized in line with Stamm (2010): Sum scores that are less than 23 are categorized as a (0) low expression of STS, BO, or CS, while sum scores between 23 and 41 are categorized as a (1) moderate expression, and sum scores above 41 are categorized as a (2) high expression.

Statistical Analysis

R version 4.4.3 (R Core Team, 2025) was used for all statistical analyses. For modelling the regressions, the package *glmnet* (Friedman et al., 2010) was used, while *sandwich* (Zeileis, 2004) and *clubSandwich* (Pustejovsky, 2026) were used for the cluster-robust standard errors. The significance level was set at $\alpha = 0.05$. CWWs who registered for the study but did not participate were excluded from the analyses. No handling of missing data was necessary. Descriptive statistics were calculated for the EBPAS and ICS total scores and subscale scores, and the ProQOL subscales. Pearson correlations were calculated to examine the bivariate associations between attitudes toward EBPs, implementation climate, and professional quality of life. The EBPAS total score was used as the dependent variable, while the ICS subscale mean scores and the categorized ProQOL subscales were used as independent variables in the regression analysis. Age and gender were used as covariates because these demographic characteristics may be associated with attitudes toward EBPs. To identify a parsimonious set of predictors while reducing the risk of overfitting, a penalized regression using the least absolute shrinkage and selection operator (LASSO; Tibshirani, 1996) was conducted. The six ICS subscales, three categorized ProQOL subscales, age, and gender were included as predictors in the analysis. Categorical predictors were dummy coded using the model matrix, while continuous predictors were standardized to a mean of 0 and a standard deviation of 1 prior to model estimation. A Gaussian model with an L1 regularization ($\alpha = 1$) and 10-fold cross-validation was used to determine the penalty parameter lambda (λ). The one-standard-error (1-SE) rule was applied, selecting the largest penalty parameter within one standard error of the minimum cross-validated error to obtain a more parsimonious predictor set (Chen & Yang, 2021).

These selected predictors were retained in the final multiple linear regression model. Because CWWs were nested within CYWS facilities, the potential clustering of observations within facilities was first assessed using an unconditional multilevel model with a random intercept for facility. The intra-class correlation coefficient (ICC) was 0.05, indicating that only a small proportion of the variance in the EBPAS total score was attributable to differences between facilities. Therefore, a multilevel model was not used for the primary analysis. Instead, the final multiple linear regression model was estimated with cluster robust standard errors using the CR2 small-sample correction and CYWS facility as the clustering variable (Pustejovsky & Tipton, 2017). Satterthwaite-adjusted tests (Satterthwaite, 1946) were used

Table 2 Descriptive data of the CWWs' EBPAS scores

	M	SD	range
<i>Total Score</i>	2.68	0.36	1.89–3.50
<i>Requirements</i>	2.50	0.68	0.67–4.00
<i>Appeal</i>	3.22	0.58	1.33–4.00
<i>Openness</i>	2.75	0.66	1.00–4.00
<i>Divergence</i>	1.19	0.66	0.00–3.33
<i>Limitations</i>	1.18	0.72	0.00–2.67
<i>Fit</i>	3.40	0.58	1.33–4.00
<i>Monitoring</i>	1.57	0.87	0.00–4.00
<i>Balance</i>	1.99	0.63	0.33–3.33
<i>Burden</i>	1.03	0.81	0.00–3.33
<i>Job security</i>	1.39	0.93	0.00–4.00
<i>Organizational support</i>	2.27	0.81	0.67–4.00
<i>Feedback</i>	3.14	0.69	1.00–4.00

EBPAS = Evidence-Based Practice Attitude Scale

for statistical inference. Model assumptions, including linearity, normality of residuals, homoscedasticity, multicollinearity, and influential observations, were examined prior to interpretation.

To assess the stability of LASSO variable selection, the LASSO procedure was repeated across 1,000 bootstrap samples using the same 10-fold cross-validation and 1-SE selection criterion. For each bootstrap sample, predictors with non-zero coefficients at the selected penalty parameter were considered selected. Selection frequencies were calculated as the proportion of the bootstrap samples in which each candidate predictor was retained. This analysis was conducted as a robustness analysis and did not alter the predictor set of the primary regression model.

Because the predictors in the final regression model were selected using the same sample through a data-driven LASSO procedure, the subsequent regression coefficients, confidence intervals, and p-values were interpreted as conditional on the selected model rather than as fully independent confirmatory tests. Non-zero LASSO coefficients were not interpreted as statistically significant effects. The final regression results were therefore considered exploratory and interpreted with appropriate caution.

Results

The review of the model assumptions confirmed linearity, normality of the residuals ($W=0.99$, $p=.564$), homoscedasticity ($BP=7.62$, $df=7$, $p=.367$), and the absence of

multicollinearity ($VIF<3.1$) and influential outliers, indicating that the prerequisites for multiple linear regression analysis were met.

CWWs' Attitudes Toward EBPs

The descriptive data on CWWs' attitudes toward EBPs are presented in Table 2. The EBPAS total score had a mean of $M=2.68$ ($SD=0.36$). Among the subscales, the highest mean scores were observed for *fit*, *appeal* and *feedback*, whereas the lowest mean scores were observed for *burden*, *limitations*, and *divergence*.

Perceived Implementation Climate in German CYWS Facilities

The mean overall ICS score was $M=1.43$ ($SD=0.60$, range=0.28–3.11). Subscale means were lowest for *rewards* ($M=0.63$, $SD=0.80$, range=0–3.33) and highest for *selection for openness* ($M=2.67$, $SD=0.73$, range=0.67–4). The other subscales showed mean scores of $M=1.42$ ($SD=0.80$, range=0–3) for *focus*, $M=1.19$ ($SD=0.93$, range=0–4) for *education*, $M=1.27$ ($SD=0.91$, range=0–3.33) for *recognition*, and $M=1.39$ ($SD=0.88$, range=0–3.33) for *selection for EBP*.

ProQOL of CWWs

The descriptive data for the ProQOL among EBP-administering CWWs in German CYWS facilities can be found in Table 3. In total, 105 CWWs reported low and 56 moderate levels of *STS*; 94 reported low and 67 moderate levels of *BO*; and 1 reported low, 97 moderate, and 63 high levels of *CS*.

ICS and ProQOL Predictors of EBPAS

As a preliminary analysis, bivariate correlations were calculated between possible predictors and the total EBPAS score. The results, presented in Table 9, revealed significant correlations between the total EBPAS score and the ICS subscales *focus* ($r=.19$, $p=.018$), *recognition* ($r=.25$, $p=.001$), and *selection for openness* ($r=.35$, $p<.001$), as well as all ProQOL subscales (*STS*: $r=-.18$, $p=.025$; *BO*: $r=-.44$, $p<.001$, *CS*: $r=.41$, $p<.001$), while the LASSO procedure selected ICS *recognition*, *rewards*, and *selection*

Table 3 Descriptive data of the CWWs' ProQOL scores

	M	SD	range	low	moderate	high
<i>STS</i>	21.02	4.08	12–34	65.2%	34.8%	0%
<i>BO</i>	21.95	4.00	12–32	58.4%	41.6%	0%
<i>CS</i>	39.76	4.62	21–50	0.6%	60.2%	39.1%

STS=secondary traumatic stress, BO=burnout, CS=compassion satisfaction

Table 4 Multiple linear regression model: Predictors of the total EBPAS score

Predictors	B	p	95% CI for B		SE (B)	β
			LL	UL		
(Intercept)	2.25	<0.001	2.02	2.47	0.11	
ICS Recognition	0.09	0.002	0.07	0.37	0.02	0.22
ICS Rewards	-0.09	0.004	-0.37	-0.06	0.03	-0.21
ICS Selection for Openness	0.13	0.002	0.13	0.40	0.04	0.26
ProQOL BO	-0.21	<0.001	-0.87	-0.32	0.05	-0.60
ProQOL CS	0.12	0.022	0.04	0.61	0.05	0.32
Female	0.10	0.191	-0.01	0.25	0.08	0.12

N=161, EBPAS=Evidence-Based Practice Attitude Scale, CI=confidence interval, LL=lower limit, UL=upper limit, ICS=Implementation Climate Scale, ProQOL=Professional Quality of Life, STS=secondary traumatic stress, BO=burnout, CS=compassion satisfaction

for openness, as well as BO, CS, and gender for inclusion in the final regression model. The results of the multiple linear regression with LASSO-selected predictors of the total EBPAS score, using cluster-robust standard errors, are presented in Table 4. The model was significant ($R^2 = 0.355$; $F(6, 154) = 14.12$, $p < .001$) and able to explain 33% of the EBPAS variance. *Recognition* ($\beta = 0.22$, $p = .002$), *selection for openness* ($\beta = 0.26$, $p = .002$), and *CS* (high levels compared to not high levels) ($\beta = 0.32$, $p = .022$) were significant predictors of a higher total EBPAS score, while *rewards* ($\beta = -0.21$, $p = .004$) and *BO* (moderate compared to low levels) ($\beta = -0.60$, $p < .001$) significantly predicted lower EBPAS scores.

LASSO Selection Stability

The bootstrap stability analysis showed substantial variation in the frequency with which predictors were selected across the 1,000 bootstrap samples. *BO* (99.5%) and *selection for openness* (98.3%) showed the highest selection frequencies, followed by *CS* (75.5%) and *recognition* (63.9%). *Rewards* was selected in 48.9% of bootstrap samples. Lower selection frequencies were observed for *focus* (36.5%) and *STS* (29.1%), whereas *selection for EBP* (4.8%), *educational support* (4.5%), *age* (0%), and *gender* (0%) were rarely or never selected.

Discussion

The aim of this study was to assess the CWWs' attitudes toward EBPs, the perceived implementation climate in German CYWS facilities, and their levels of secondary traumatic stress, burnout, and compassion satisfaction. Furthermore, this study aimed to investigate the associations between the implementation climate and the professional quality of life and CWWs' attitudes toward EBPs. CWWs reported generally positive overall attitudes toward EBPs, whereas the perceived implementation climate was comparatively less supportive. In the regression analysis,

recognition, rewards, selection for openness, burnout, and compassion satisfaction were associated with attitudes toward EBPs, after accounting for gender. These findings provide a differentiated picture of EBP readiness in this sample: CWWs generally appeared receptive to EBPs, while the organizational conditions surrounding their implementation were perceived as less developed. At the same time, because all variables were assessed cross-sectionally, these associations should not be interpreted as evidence that implementation climate or professional quality of life cause favorable attitudes toward EBPs.

The CWWs in this study reported positive overall attitudes toward EBPs. They were generally interested in and open to learning about and using EBPs, which aligns with previous research on CWWs and therapists in CYWS (Leathers et al., 2016) as well as other studies on mental health care providers in CYWS facilities (de Paúl et al., 2015). The CWWs held particularly positive attitudes when EBPs seemed appealing and suitable for their clients, and when they received appropriate feedback and supervision. This finding supports prior work showing that perceptions of client suitability and supervisory support may enhance openness to EBPs and reduce burnout (Aarons et al., 2009). At the same time, the positive attitudes should not be interpreted as evidence that EBP implementation is already likely to occur. A central challenge in implementation research is that professionals may express generally favorable attitudes toward EBPs while their organizations lack the resources, structures, or processes necessary to support their use (Aarons et al., 2011; Li et al., 2018). This interpretation is particularly relevant in the present study because attitudes were positive whereas the implementation climate was perceived as comparatively less supportive. Thus, the findings suggest that a lack of willingness among individual CWWs may not be the only, or necessarily the primary barrier to EBP implementation. Instead, organizational conditions may represent an additional level at which implementation needs to be supported. Importantly, actual EBP use was not assessed in the present study, so this interpretation should be examined in future research.

The finding that CWWs reported a less supportive implementation climate is consistent with findings from US (Ehrhart et al., 2016) and Norwegian (Engell et al., 2020) CYWS settings. However, the organizational context in which CWWs work differs from that of many clinical mental health professionals. CWWs in Germany are predominantly social workers or trained educators rather than psychotherapists or other clinically trained mental health professionals (Statistisches Bundesamt, 2022). Their primary responsibilities include providing everyday care, establishing stable relationships, responding to practical and emotional needs, and supporting children and adolescents within their CYWS settings (Pinheiro et al., 2024). EBPs therefore have to be integrated into a broader set of child welfare responsibilities rather than constituting the primary focus of their professional role. This may make organizational support, protected time, supervision, and clear implementation structures particularly relevant to whether evidence-based approaches can be incorporated into everyday practice (Aarons et al., 2011; Akin et al., 2016; Li et al., 2018).

One particularly notable finding concerned the relationship between the reward dimension of the implementation climate and attitudes toward EBPs. CWWs reported little monetary reward for EBP use, and although retained in the multivariable model, the bivariate association between rewards and attitudes toward EBPs was not significant. The negative association observed in the multivariable model may therefore reflect a suppression effect arising from the inclusion of correlated implementation climate dimensions or other characteristics in the model. In addition, the practical meaning of the rewards dimension may differ across cultural contexts. The ICS was originally developed in the United States (Ehrhart et al., 2014), where organizational incentive structures may differ from those in the German CYWS. In Germany, CYWS are predominantly provided by private providers (*freie Träger*), with private providers accounting for 96.5% of the 13,000 operating-permit-required CYWS facilities in 2024, compared with 3.5% operated by public providers (Statistisches Bundesamt, 2026). The reward dimension may therefore not have the same meaning or practical relevance as it would in settings where individual performance bonuses are more common. However, the present study cannot determine whether differences in reward structures or other contextual factors account for the observed association. Accordingly, the finding should be interpreted cautiously and should not be taken as evidence that financial incentives are detrimental to EBP implementation or that recognition systems should be prioritized over monetary rewards.

In contrast, recognition was positively associated with attitudes toward EBPs. Recognition may communicate that an organization values the use of EBPs and may provide CWWs with feedback that their efforts are noticed and supported (Aarons & Sawitzky, 2006; Ehrhart et al., 2014). Similarly, the positive association between selection for openness and EBP attitudes suggests that CWWs who perceived their organizations as selecting staff who are open to new practices also reported more favorable attitudes toward EBPs. These findings are consistent with the broader concept of implementation climate, in which organizational signals and practices communicate the extent to which EBP use is expected, supported, and valued.

Regarding the professional quality of life of CWWs, reported levels of secondary traumatic stress and burnout were low to moderate. This supports the findings of (Schwegler et al., 2025), who investigated data from the same study but, instead of focusing on EBP-administering CWWs, examined CWWs in general. While other studies from the CYWS context also showed similar levels (Letson et al., 2020; Prost & Middleton, 2020), studies among mental health care providers working with UYRs or in a high-risk trauma setting reported moderate to high levels of both secondary traumatic stress and burnout (Denkinger et al., 2018; Ebren et al., 2022; Roberts et al., 2021; Živanović & Marković, 2020). These discrepancies may partly reflect different work settings and professional responsibilities, such as professionals working in transit centers (Živanović & Marković, 2020) or with potential victims of sexualized violence (Denkinger et al., 2018), as well as the fact that a clinical high-risk trauma setting has a higher density of highly affected patients. The professional role of CWWs may also involve different protective factors, including sustained relationships with the children and adolescents, and team-based work (Conrad & Kellar-Guenther, 2006; Salloum et al., 2015). Additionally, burnout was negatively associated with attitudes toward EBPs. One possible explanation is that greater burnout may be accompanied by symptoms of exhaustion and reduced cognitive and emotional resources for engaging with additional practices and organizational change (Koch & Adler, 2018; Maslach & Leiter, 2016). CWWs experiencing greater burnout may therefore perceive the adoption of a new practice, evidence-based or not, as an additional demand rather than a potentially useful resource.

The levels of compassion satisfaction, on the other hand, were moderate to high, indicating that most CWWs derive considerable meaning and fulfillment from their work with children and adolescents. This is consistent with previous research suggesting that positive

experiences associated with helping others may coexist with and potentially co-occur with lower levels of stress-related outcomes (Conrad & Kellar-Guenther, 2006; Salloom et al., 2015; Stamm, 2010) and may be positively associated with attitudes toward EBPs. One possible interpretation is that professionals who derive greater satisfaction from their work may be more receptive to approaches perceived as potentially beneficial for the children and adolescents in their care.

Finally, to our knowledge, this is the first study to examine the associations of both burnout and compassion satisfaction with CWWs' attitudes toward EBPs. So far, there have only been studies on mental health care providers' EBP attitudes and their professional quality of life (Caringi et al., 2017; Kostova et al., 2025), while the potential relationship between the professional quality of life and quality of care has received little empirical attention (e.g. burnout, Kagan, 2022). Taken together, the findings suggest that attitudes toward EBPs should not be considered in isolation from the organizational and individual context in which CWWs work. The combination of generally positive attitudes toward EBPs and comparatively less supportive implementation climate is particularly relevant. It suggests that favorable individual attitudes alone may be insufficient for EBP implementation if organizations do not provide the structures and resources required to support their translation into practice. At the same time, the associations between professional quality of life and attitudes toward EBPs indicate that implementation effort may need to consider the demand placed on CWWs themselves. Rather than viewing EBP implementation solely as a matter of changing individual attitudes, implementation may be better understood as a multilevel process involving professional readiness, organizational conditions, and the broader CYWS system.

Strengths and Limitations

The large and heterogeneous sample of CWWs from in- and outpatient CYWS facilities across seven German federal states represents a strength of the study, as it captures perspectives from workers across diverse facilities and regions. However, several limitations should be acknowledged.

First, in the recruitment process, participation was coordinated by facility leadership, which may have introduced a selection bias. CWWs who participated may have been more interested in EBPs or more positively disposed toward research and organizational change than those who did not participate. This could have resulted in an overestimation of positive EBP attitudes and may

also have restricted the variability in attitudes within the sample. However, as mentioned, due to the heterogeneity of the present sample, future studies should replicate these findings in other samples of CWWs and CYWS facilities to assess the generalizability and robustness of the observed associations.

Second, the sample consisted specifically of CWWs working in CYWS facilities housing UYRs. Although the participating facilities represented a range of CYWS settings, the focus on facilities housing UYRs may limit the generalizability of the findings to other CYWS populations. CWWs working with UYRs may encounter specific linguistic, cultural, migration-related, and mental health needs and may work under organizational conditions that differ from those of CWWs working with other CYWS populations. Consequently, the observed levels of attitudes toward EBPs, implementation climate, and professional quality of life, as well as the relationship between these constructs, may not generalize to other CYWS populations or service settings.

Third, this study did not differentiate between CYWS facilities with prior EBP experience and those without. This means that some facilities may already use EBPs due to their implementation climate, leadership style, or CWWs' attitudes. It could therefore be beneficial to differentiate analyses by facilities' experiences with EBPs to determine whether the observed relationships hold across contexts or are influenced by prior EBP experiences.

Fourth, cultural differences should be considered when interpreting the findings. The measures used in the present study were developed in cultural and professional contexts that differ from the German CYWS context. Therefore, there may be differences in how cultural norms, organizational structures, and professional contexts are understood and reported. This should be considered when comparing the present findings with research from other countries or service systems.

Fifth, although both the EBPAS and ProQOL scales are widely used in research, they have not been validated specifically for the CYWS context. This raises concerns about whether they fully encapsulate the unique circumstances of the CYWS system, which may have contributed to the poor reliability of the EBPAS subscales *balance* and *divergence*, and the ProQOL subscale *BO* in the present sample, leading to limited interpretability. These findings may indicate that some constructs are understood differently in CYWS settings than in the populations in which the measures were originally developed. Additionally, there is a lack of EBP protocols specifically developed and tailored to the CYWS context, which often disregards challenges like workload, worker turnover, and crisis-oriented services (Leathers et al.,

2016). Therefore, future research should prioritize the development and validation of CYWS-specific EBPs.

Sixth, the stability of the LASSO-based predictor selection varied across predictors. While some predictors were selected consistently across bootstrap samples, others showed substantial variation in their selection. Consequently, the selection of individual predictors may be sensitive to sampling variation, and the corresponding associations should therefore be interpreted with caution. Replication in larger and independent samples is needed to determine the robustness and reproducibility of these findings.

Seventh, positive attitudes toward EBPs do not automatically translate into actual EBP use (Leathers et al., 2016). The present study examined attitudes and their associations with implementation climate and professional quality of life but did not assess whether participants subsequently used EBPs in routine practice or whether implementation resulted in improved outcomes for children and adolescents. Thus, the findings should not be interpreted as demonstrating that changing EBP attitudes would necessarily increase EBP use or improve outcomes for children and adolescents.

Lastly, while the cross-sectional data provide important insights into current attitudes and perceived implementation climates, they preclude causal conclusions. All variables were assessed at the same time point, before participants received the study-related training. The analysis therefore identifies associations but cannot establish temporal ordering or causal effects. It remains unclear whether organizational conditions and professional quality of life shape attitudes toward EBPs, whether attitudes influence perceptions of the organizational climate and professional quality of life, or whether unmeasured factors influence all three constructs. Longitudinal research is needed in the future to clarify the directionality of relationships.

Practice and Policy Implications

The findings have implications for how EBP implementation in CYWS facilities may be supported, but these implications should be interpreted as potential strategies rather than direct effects demonstrated by this study. Most importantly, the combination of positive EBP attitudes and comparatively less supportive implementation climate suggests that implementation efforts should not focus exclusively on changing individual attitudes. Instead, organizations may need to create conditions that make the use of EBPs feasible and sustainable within everyday CYWS practice.

At the organizational level, the positive associations of recognition and selection for openness with attitudes toward EBPs suggest that organizations may benefit from

clearly communicating that EBPs are valued and from creating opportunities for staff to receive feedback and develop competence. Feedback, verbal acknowledgement, and opportunities for the development of EBP competence through supportive supervision and team meetings, may be relevant components of such an implementation climate (Farahnak et al., 2020; Ryan & Deci, 2000). Such organizational conditions may help create a context in which EBPs can be considered and integrated into routine practice, although the present study did not assess whether these conditions lead to greater EBP use.

At the policy level, the findings highlight the relevance of organizational conditions that support EBP implementation in CYWS facilities. Access to appropriate training, supervision, and resources may be important for creating conditions in which EBPs can be integrated into routine CYWS practice. These implications should be considered alongside evidence from implementation research, as the present study did not directly assess the effects of such structural supports.

At the individual and team level, the associations between professional quality of life and attitudes toward EBPs suggest that implementation strategies may benefit from considering the working conditions for CWWs. Approaches that support manageable workloads, reflective practice, supervision, team support, and opportunities to experience competence and meaning in one's work, as well as shared caseloads (Fixsen et al., 2005), resilience or mindfulness programs (Letson et al., 2020), and trauma-informed self-care practices (Deblinger et al., 2024; Salloum et al., 2015), may be relevant to maintain professional well-being. However, because the direction of these associations cannot be established, such measures should not be described as interventions that will necessarily improve EBP attitudes. Their broader relevance lies in supporting sustainable working conditions for CWWs who are responsible for the daily care of vulnerable children and adolescents.

Ultimately, the relevance of these organizational and individual factors lies in their potential relationship to the quality and consistency of care provided to children and adolescents living in CYWS facilities. If CYWS facilities are better able to support CWWs in engaging with appropriate EBPs, this may create more favorable conditions for children and adolescents to receive consistent, structured, and evidence-informed support within their everyday lives. However, this study did not assess EBP fidelity, service use, treatment outcomes, or outcomes for adolescents and their families. It therefore cannot be determined whether the observed associations translate into better outcomes for children and adolescents.

Conclusion

The results of this study indicate that CWWs in German CYWS facilities serving UYRs reported generally positive attitudes toward EBPs, while perceiving the implementation climate as comparatively unsupportive. Associations between attitudes toward EBPs, selected dimensions of implementation climate, and professional quality of life suggest that EBP implementation should be considered within its broader organizational and individual context. However, the cross-sectional design does not permit conclusions about causal direction. The findings therefore point to potential organizational and individual factors that warrant further investigation rather than demonstrating specific mechanisms of EBP implementation. Future longitudinal research should examine whether these factors are associated with actual EBP uptake and fidelity, and whether successful implementation ultimately contributes to more consistent evidence-based care for children and adolescents in CYWS facilities.

Appendix

Table 5 Internal consistencies for the EBPAS, ICS and ProQOL total scales and subscales

Measure	Scale/ subscale	α	ω
EBPAS	Total	0.85	0.86
	Requirements	0.87	0.88
	Appeal	0.69	0.71
	Openness	0.72	0.77
	Divergence	0.52	0.56
	Limitations	0.74	0.75
	Fit	0.80	0.81
	Monitoring	0.72	0.74
	Balance	0.43	0.46
	Burden	0.80	0.81
	Job security	0.81	0.83
	Organizational support	0.72	0.76
	Feedback	0.80	0.81
ICS	Total	0.90	0.91
	Focus	0.79	0.80
	Education	0.89	0.90
	Recognition	0.81	0.81
	Rewards	0.80	0.80
	Selection for EBP	0.88	0.89
ProQOL	Selection for openness	0.78	0.79
	STS	0.70	0.71
	BO	0.64	0.65
	CS	0.84	0.85

Table 6 EBPAS item examples

Subscale	Item example (Rye et al., 2017)
Appeal	How likely would you be to adopt it if I “made sense” to you?
Balance	A positive outcome in therapy is an art more than a science (-)
Job Security	Learning an evidence-based practice will help me keep my job
Requirements	How likely would you be to adopt it if it was required by your supervisor?
Openness	I like to use new types of therapy/ interventions to help my clients
Divergence	I would not use manualized therapy/ interventions (-)
Limitations	Evidence-based practice is too narrowly focused (-)
Fit	How likely would you be to adopt it if you knew it was right for your clients?
Monitoring	My work does not need to be monitored (-)
Burden	I can’t meet my other obligations (-)
Organizational support	I would learn an evidence-based practice if training were provided
Feedback	I enjoy getting feedback on my job performance

(-) indicates a reverse-coded item

Table 7 ICS item examples

Subscale	Item example (Ehrhart et al., 2014)
Selection for Openness	This team/agency selects staff who are flexible
Recognition for EBP	Clinicians in this team/agency who use evidence-based practices are more likely to be promoted
Focus on EBP	Using evidence-based practices is a top priority in this team/agency
Education Support	This team/agency provides evidence-based practice trainings or in-services
Rewards	This team/agency provides financial incentives for the use of evidence-based practices
Selection for EBPs	This team/agency selects staff who value evidence-based practice

Table 8 ProQOL item examples

Subscale	Item example (Stamm, 2010)
STS	I feel depressed because of the traumatic experiences of the people I help
BO	I feel worn out because of my work as a CWW (-)
CS	My work makes me feel satisfied

(-) indicates a reverse-coded item

Table 9 Bivariate correlations and descriptive information of all study variables

	M	SD	2	3	4	5	6	7	8	9	10
1. EBPAS Total	2.68	0.36	0.19*	0.12	0.25**	-0.06	0.12	0.35**	-0.18*	-0.44**	0.41**
2. ICS Focus	1.42	0.80	-	0.59**	0.47**	0.42**	0.43*	0.05	-0.02	-0.24**	0.28**
3. ICS Education	1.19	0.93		-	0.53**	0.53**	0.53**	0.24**	-0.10	-0.16*	0.20**
4. ICS Recognition	1.27	0.91			-	0.48**	0.61**	0.24**	-0.08	-0.22**	0.23*
5. ICS Rewards	0.63	0.81				-	0.52**	0.09	0.01	-0.12	0.20*
6. ICS Selection for EBP	1.39	0.88					-	0.27*	-0.01	-0.16*	0.20*
7. ICS Selection for Openness	2.67	0.73						-	-0.06	-0.09	0.11
8. ProQOL STS	21.02	4.08							-	0.56**	-0.12
9. ProQOL BO	21.95	4.00								-	-0.58**
10. ProQOL CS	39.76	4.62									-

N = 161, EBPAS Evidence-Based Practice Attitude Scale, ICS Implementation Climate Scale, ProQOL Professional Quality of Life; * $p < .05$, ** $p < .01$

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Data Availability The datasets generated and analyzed for this study are available from the corresponding author upon request.

Declarations

Competing Interests The authors declare no competing interests.

Informed Consent For study participation, written informed consent was provided by participants.

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References

- Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale (EBPAS). *Mental Health Services Research*, 6, 61–74. <https://doi.org/10.1023/B:MHSR.0000024351.12294.65>
- Aarons, G. A. (2005). Measuring provider attitudes toward evidence-based practice: consideration of organizational context and individual differences. *Child and Adolescent Psychiatric Clinics of North America*, 14, 255–271. <https://doi.org/10.1016/j.chc.2004.04.008>
- Aarons, G. A., & Sawitzky, A. C. (2006). Organizational culture and climate and mental health provider attitudes toward evidence-based practice. *Psychological Services*, 3(1), 61–72. <https://doi.org/10.1037/1541-1559.3.1.61>
- Aarons, G. A., Fettes, D. L., Flores, L. E., & Sommerfeld, D. H. (2009). Evidence-based practice implementation and staff emotional exhaustion in children's services. *Behaviour Research and Therapy*, 47(11), 954–960. <https://doi.org/10.1016/j.brat.2009.07.006>
- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. C. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 4–23. <https://doi.org/10.1007/s10488-010-0327-7>
- Aarons, G. A., Cafri, G., Lugo, L., & Sawitzky, A. (2012). Expanding the domains of attitudes towards evidence-based practice: The evidence based practice attitude scale-50. *Administration and Policy in Mental Health and Mental Health Services Research*, 39, 331–340. <https://doi.org/10.1007/s10488-010-0302-3>
- Akin, B. A., Brook, J., Lloyd, M. H., Bhattarai, J., Johnson-Motoyama, M., & Moses, M. (2016). A study in contrasts: Supports and barriers to successful implementation of two evidence-based parenting interventions in child welfare. *Child Abuse and Neglect*, 57, 30–40. <https://doi.org/10.1016/j.chiabu.2016.06.002>
- Avery, F., Kennedy, N., James, M., Jones, H., Amos, R., Bellis, M., Hughes, K., & Brophy, S. (2024). A systematic review of non-clinician trauma-based interventions for school-age youth. *Plos One*, 19(9). <https://doi.org/10.1371/journal.pone.0293248>
- Barth, R. P. (2008). The move to evidence-based practice: How well does it fit child welfare services? *Journal of Public Child Welfare*, 2(2), 145–171. <https://doi.org/10.1080/15548730802312537>

- Bronsard, G., Lançon, C., Loundou, A., Auquier, P., Rufo, M., & Siméoni, M. C. (2011). Prevalence rate of DSM mental disorders among adolescents living in residential group homes of the French Child Welfare System. *Children and Youth Services Review*, 33, 1886–1890. <https://doi.org/10.1016/j.childyouth.2011.05.014>
- Browne, K., Hamilton-Giachritsis, C., Johnson, R., & Ostergren, M. (2006). Overuse of institutional care for children in Europe. *British Medical Journal*, 332(7539), 485–487. <https://doi.org/10.1136/bmj.332.7539.485>
- Burns, B. J., Phillips, S. D., Wagner, H. R., Barth, R. P., Kolko, D. J., Campbell, Y., & Landsverk, J. (2004). Mental health need and access to mental health services by youths involved with child welfare: A national survey. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(8), 960–970. <https://doi.org/10.1097/01.chi.0000127590.95585.65>
- Caringi, J. C., Hardiman, E. R., Weldon, P., Fletcher, S., Devlin, M., & Stanick, C. (2017). Secondary traumatic stress and licensed clinical social workers. *Traumatology*, 23(2), 186–195. <https://doi.org/10.1037/trm0000061>
- Chen, Y., & Yang, Y. (2021). The One Standard Error Rule for Model Selection. *Does It Work?* *Stats*, 4(4), 868–892. <https://doi.org/10.3390/stats4040051>
- Cho, E., Tugendrajah, S. K., McMillen, J. C., Proctor, E. K., & Hawley, K. M. (2022). Implementation of Evidence-Based Practices within Treatment-As-Usual and Evidence-Based Practice Initiatives. *Administration and Policy in Mental Health and Mental Health Services Research*, 49(5), 757–784. <https://doi.org/10.1007/s10488-022-01197-z>
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). *Treating Trauma and Traumatic Grief in Children and Adolescents* (2nd ed.). The Guilford Press. <https://doi.org/10.1007/978-3-540-88571-9>
- Collins, S., & Long, A. (2003). Working with the psychological effects of trauma: consequences for mental health-care workers—a literature review. *Journal of Psychiatric and Mental Health Nursing*, 10, 417–424. <https://doi.org/10.1046/j.1351-0126.2003.00620.x>
- Conn, A. M., Szilagyi, M. A., Alpert-Gillis, L., Baldwin, C. D., & Jee, S. H. (2016). Mental health problems that mediate treatment utilization among children in foster care. *Journal of Child and Family Studies*, 25, 969–978. <https://doi.org/10.1007/s10826-015-0276-6>
- Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burn-out, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect*, 30, 1071–1080. <https://doi.org/10.1016/j.chiabu.2006.03.009>
- de Paúl, J., Indias, S., & Arruabarrena, I. (2015). Adaptación de la escala de actitudes hacia la práctica basada en la evidencia en profesionales de protección infantil. *Psicothema*, 27(4), 341–346. <https://doi.org/10.7334/psicothema2015.67>
- Deblinger, E., Pollio, E., Cooper, B., Harrison, J. P., & Steer, R. A. (2024). PRACTICE Makes Progress, A Self-Care Course for Mental Health Professionals in the Child Trauma Field: A Preliminary Investigation. *Psychological Trauma: Theory Research Practice and Policy*, 16, 751–759. <https://doi.org/10.1037/tra0001582>
- Denkinger, J. K., Windthorst, P., El Sount, C. R. O., Blume, M., Sedik, H., Kizilhan, J. I., Gibbons, N., Pham, P., Hillebrecht, J., Ateia, N., Nikendei, C., Zipfel, S., & Junne, F. (2018). Secondary traumatization in caregivers working with women and children who suffered extreme violence by the Islamic State. *Frontiers in Psychiatry*, 9. <https://doi.org/10.3389/fpsy.2018.00234>
- Ebren, G., Demircioğlu, M., & Çırakoğlu, O. C. (2022). A neglected aspect of refugee relief works: Secondary and vicarious traumatic stress. *Journal of Traumatic Stress*, 35, 891–900. <https://doi.org/10.1002/jts.22796>
- Ehrhart, M. G., Aarons, G. A., & Farahnak, L. R. (2014). Assessing the organizational context for EBP implementation: the development and validity testing of the Implementation Climate Scale (ICS). *Implementation Science*, 9. <https://doi.org/10.1186/s13012-014-0157-1>
- Ehrhart, M. G., Torres, E. M., Wright, L. A., Martinez, S. Y., & Aarons, G. A. (2016). Validating the Implementation Climate Scale (ICS) in child welfare organizations. *Child Abuse & Neglect*, 53, 17–26. <https://doi.org/10.1016/j.chiabu.2015.10.017>
- Engell, T., Kirkøen, B., Aarons, G. A., & Hagen, K. A. (2020). Individual level predictors of implementation climate in child welfare services. *Children and Youth Services Review*, 119. <https://doi.org/10.1016/j.childyouth.2020.105509>
- Farahnak, L. R., Ehrhart, M. G., Torres, E. M., & Aarons, G. A. (2020). The Influence of Transformational Leadership and Leader Attitudes on Subordinate Attitudes and Implementation Success. *Journal of Leadership and Organizational Studies*, 27(1), 98–111. <https://doi.org/10.1177/1548051818824529>
- Fegert, J. M., Kölsch, M., Krüger, U., & Baumann, A. E. (2017). *Sachbericht zum Projekt: Versorgung psychisch kranker Kinder und Jugendlicher in Deutschland-Bestandsaufnahme und Bedarfsanalyse*. https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/5_Publikationen/Praevention/Berichte/Abschlussbericht_Versorgung_psychisch_kranke_Kinder_u_Jugendliche.pdf
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. *Implementation research: A synthesis of the literature* (Vol. 1). The National Implementation Research Network. <http://nirn.fmhi.usf.edu>
- Ford, T., Vostanis, P., Meltzer, H., & Goodman, R. (2007). Psychiatric disorder among British children looked after by local authorities: Comparison with children living in private households. *British Journal of Psychiatry*, 190, 319–325. <https://doi.org/10.1192/bj.p.bp.106.025023>
- Friedman, J., Hastie, T., & Tibshirani, R. (2010). Regularization Paths for Generalized Linear Models via Coordinate Descent. *Journal of Statistical Software*, 33(1). <https://doi.org/10.18637/jss.v033.i01>
- Geen, R., Sommers, A., & Cohen, M. (2005). *Medicaid Spending on Foster Children*.
- Glennon, A., Pruitt, D. K., & Roulund Polmanteer, R. S. (2019). Integrating self-care into clinical practice with trauma clients. *Journal of Human Behavior in the Social Environment*, 29(1), 48–56. <https://doi.org/10.1080/10911359.2018.1473189>
- Holmes, L., & McDermid, S. (2013). How social workers spend their time in frontline children’s social care in England. *Journal of Children’s Services*, 8(2), 123–133. <https://doi.org/10.1108/JCS-03-2013-0005>
- Horwitz, S. M., Hurlburt, M. S., Goldhaber-Fiebert, J. D., Heneghan, A. M., Zhang, J., Rolls-Reutz, J., Fisher, E., Landsverk, J., & Stein, R. E. K. (2012). Mental health services use by children investigated by child welfare agencies. *Pediatrics*, 130(5), 861–869.
- James, S., Alemi, Q., & Zepeda, V. (2013). Effectiveness and implementation of evidence-based practices in residential care settings. *Children and Youth Services Review*, 35(4), 642–656. <https://doi.org/10.1016/j.childyouth.2013.01.007>
- Jaritz, C. W. D. S. M. (2008). Traumatische Lebensereignisse bei Kindern und Jugendlichen in der stationären Jugendhilfe. *Trauma & Gewalt*, 2(4).
- Jozefiak, T., Kayed, N. S., Rimehaug, T., Wormdal, A. K., Brubakk, A. M., & Wichstrøm, L. (2016). Prevalence and comorbidity of mental disorders among adolescents living in residential youth care. *European Child and Adolescent Psychiatry*, 25, 33–47. <https://doi.org/10.1007/s00787-015-0700-x>
- Kagan, M. (2022). Social Workers’ Attitudes towards Evidence-based Practice: A Multidimensional Perspective. *British Journal of Social Work*, 52(8), 4497–4517. <https://doi.org/10.1093/bjsw/bc ac067>

- Kerns, S. E. U., Pullmann, M. D., Putnam, B., Buher, A., Holland, S., Berliner, L., Silverman, E., Payton, L., Fourre, L. R., Shogren, D., & Trupin, E. W. (2014). Child welfare and mental health: Facilitators of and barriers to connecting children and youths in out-of-home care with effective mental health treatment. *Children and Youth Services Review*, 46, 315–324. <https://doi.org/10.1016/j.chilyouth.2014.09.013>
- Koch, A. K., & Adler, M. (2018). Emotional exhaustion and innovation in the workplace—a longitudinal study. *Industrial Health*, 56, 524–538.
- Kostova, Z., Pfeiffer, E., & Garbade, M. (2025). What doesn't kill you makes you stronger—Professional quality of life in ukrainian mental health care professionals during the ongoing war. *Traumatology*. <https://doi.org/10.1037/trm0000562>
- Landsverk, J., Brown, C. H., Reutz, R., Palinkas, J. L., & Horwitz, S. M. C. (2011). Design elements in implementation research: A structured review of child welfare and child mental health studies. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 54–63. <https://doi.org/10.1007/s10488-010-0315-y>
- Leathers, S. J., Melka-Kaffer, C., Spielfogel, J. E., & Atkins, M. S. (2016). Use of evidence-based interventions in child welfare: Do attitudes matter? *Children and Youth Services Review*, 70, 375–382. <https://doi.org/10.1016/j.chilyouth.2016.10.022>
- Letson, M. M., Davis, C., Sherfield, J., Beer, O. W. J., Phillips, R., & Wolf, K. G. (2020). Identifying compassion satisfaction, burnout, & traumatic stress in Children's Advocacy Centers. *Child Abuse & Neglect*, 110. <https://doi.org/10.1016/j.chiabu.2019.104240>
- Li, S. A., Jeffs, L., Barwick, M., & Stevens, B. (2018). Organizational contextual features that influence the implementation of evidence-based practices across healthcare settings: A systematic integrative review. *Systematic Reviews*, 7. <https://doi.org/10.1186/s13643-018-0734-5>
- Maslach, C., & Leiter, M. P. (2016). Burnout. In *Stress: Concepts, Cognition, Emotion, and Behavior: Handbook of Stress* (pp. 351–357). Elsevier. <https://doi.org/10.1016/B978-0-12-800951-2.00044-3>
- Melcop, N., von Werder, T., Sarubin, N., & Benecke, A. (2019). The role of psychotherapy in the german health care system: Training requirements for psychological psychotherapists and child and adolescent psychotherapists, legal aspects, and health care implementation. *Clinical Psychology in Europe*, 1(4). <https://doi.org/10.32872/cpe.v1i4.34304>
- Mersky, J. P., Lee, C. T. P., Bacalso, E., & Liu, X. (2025). Reexamining the Evidence-Based Practice Attitude Scale-36 (EBPAS-36) in a U.S. sample of trauma-focused treatment providers. *Implementation Science Communications*, 6. <https://doi.org/10.1186/s43058-025-00702-3>
- Molnar, B. E., Meeker, S. A., Manners, K., Tieszen, L., Kalergis, K., Fine, J. E., Hallinan, S., Wolfe, J. D., & Wells, M. K. (2020). Vicarious traumatization among child welfare and child protection professionals: A systematic review. *Child Abuse & Neglect*, 110. <https://doi.org/10.1016/j.chiabu.2020.104679>
- Pfeiffer, E., & Goldbeck, L. (2019). *Traumafokussierte pädagogische Gruppenintervention für junge Flüchtlinge: Das Programm Mein Weg*. Hogrefe Verlag GmbH & Co. KG.
- Pinheiro, M., Magalhães, E., Calheiros, M. M., & Macdonald, D. (2024). Quality of Relationships Between Residential Staff and Youth: A Systematic Review. *Child And Adolescent Social Work Journal*, 41(4), 561–576. <https://doi.org/10.1007/s10560-022-00909-6>
- Powell, K., Huxley, E., & Townsend, M. L. (2021). Mental health help seeking in young people and carers in out of home care: A systematic review. *Children and Youth Services Review*, 127. <https://doi.org/10.1016/j.chilyouth.2021.106088>
- Prost, S. G., & Middleton, J. S. (2020). Professional quality of life and intent to leave the workforce: Gender disparities in child welfare. *Child Abuse & Neglect*, 110. <https://doi.org/10.1016/j.chiabu.2020.104535>
- Pustejovsky, J. E. (2026). *clubSandwich: Cluster-Robust (Sandwich) Variance Estimators with Small-Sample Corrections* (R package version 0.6.1.9999).
- Pustejovsky, J. E., & Tipton, E. (2017). Small-Sample Methods for Cluster-Robust Variance Estimation and Hypothesis Testing in Fixed Effects Models. *Journal of Business & Economic Statistics*, 36(4), 672–683. <https://doi.org/10.1080/07350015.2016.1247004>
- R Core Team. (2025). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://doi.org/10.32614/R.manuals>
- Ramos Miguel, R., Santos, L., do Céu Salvador, M., Nobre Lima, L., & Rijo, D. (2024). Effectiveness of mental-health interventions for children and adolescents placed in residential care by the welfare services: A systematic review. *Children and Youth Services Review*, 166. <https://doi.org/10.1016/j.chilyouth.2024.107929>
- Rienks, S. L. (2020). An exploration of child welfare caseworkers' experience of secondary trauma and strategies for coping. *Child Abuse & Neglect*, 110. <https://doi.org/10.1016/j.chiabu.2020.104355>
- Roberts, F., Teague, B., Lee, J., & Rushworth, I. (2021). The prevalence of burnout and secondary traumatic stress in professionals and volunteers working with forcibly displaced people: A systematic review and two meta-analyses. *Journal of Traumatic Stress*, 34, 773–785. <https://doi.org/10.1002/jts.22659>
- Rosenfeld, A. A., Pilowsky, D. J., Fine, P., Thorpe, M., Fein, E., Simms, M. D., Halfon, N., Irwin, M., Alfaro, J., Saletsky, R., & Nickman, S. (1997). Foster care: An update. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(4), 448–457. <https://doi.org/10.1097/00004583-199704000-00006>
- Rosner, R., Pfeiffer, E., Thielemann, J. F. B., Eglinsky, J., Garbade, M., Kasparik, B., Keller, J., Müller, L. R. F., & Sachser, C. (2026). Mental health care for unaccompanied young refugees in Germany through a stepped care approach versus enhanced usual care: a cluster-randomised hybrid effectiveness–implementation trial. *The Lancet Global Health*, 14(6). [https://doi.org/10.1016/S2214-109X\(26\)00055-0](https://doi.org/10.1016/S2214-109X(26)00055-0)
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being Self-Determination Theory. *American Psychologist*, 55(1), 68–78.
- Rye, M., Torres, E. M., Friborg, O., Skre, I., & Aarons, G. A. (2017). The Evidence-based Practice Attitude Scale-36 (EBPAS-36): A brief and pragmatic measure of attitudes to evidence-based practice validated in US and Norwegian samples. *Implementation Science*, 12. <https://doi.org/10.1186/s13012-017-0573-0>
- Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review*, 49, 54–61. <https://doi.org/10.1016/j.chilyouth.2014.12.023>
- Satterthwaite, F. E. (1946). An Approximate Distribution of Estimates of Variance Components. *Biometrics Bulletin*, 2(6), 110–114. <https://about.jstor.org/terms>
- Schmid, M., Goldbeck, L., Nuetzel, J., & Fegert, J. M. (2008). Prevalence of mental disorders among adolescents in German youth welfare institutions. *Child and Adolescent Psychiatry and Mental Health*, 2. <https://doi.org/10.1186/1753-2000-2-2>
- Schwegler, P. M., Kasparik, B., Thielemann, J., Eilers, R., Pfeiffer, E., Sachser, C., & Rosner, R. (2025). Professional quality of life of child welfare workers and psychotherapists working with traumatized young unaccompanied refugees in Germany: a cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*, 19. <https://doi.org/10.1186/s13034-025-00942-0>

- Stamm, B. H. (2010). *The Concise ProQOL Manual* (2nd ed.). Pocatello.
- Statistisches Bundesamt (2022). *Statistiken der Kinder- und Jugendhilfe - Einrichtungen und tätige Personen (ohne Tageseinrichtungen für Kinder)*. www.destatis.de/kontakt
- Statistisches Bundesamt (2026). *Zahl junger Menschen in Heimen und Pflegefamilien 2024 weiter gestiegen* (Press Release No. 098). Destatis. https://www.destatis.de/DE/Presse/Pressemitteilungen/2026/03/PD26_098_225.html
- Szota, K., Thielemann, J., Christiansen, H., Rye, M., Aarons, G. A., & Barke, A. (2020). *Validation and psychometric properties of the german version of the Evidence Based Practice Attitudes Scale (EBPAS-36D)*. <https://doi.org/10.21203/rs.3.rs-104485/v1>
- Szota, K., Thielemann, J. F. B., Christiansen, H., Rye, M., Aarons, G. A., & Barke, A. (2021). Cross-cultural adaption and psychometric investigation of the German version of the Evidence Based Practice Attitude Scale (EBPAS-36D). *Health Research Policy and Systems*, 19. <https://doi.org/10.1186/s12961-021-00736-8>
- Szota, K., Christiansen, H., Aarons, G. A., Ehrhart, M. G., Fischer, A., Rosner, R., Steil, R., & Barke, A. (2023). Climate for evidence-based mental health care implementation in Germany: psychometric investigation of the Implementation Climate Scale (ICS). *Scientific Reports*, 13. <https://doi.org/10.1038/s41598-023-32282-4>
- Tibshirani, R. (1996). Regression Shrinkage and Selection via the Lasso. *Royal Statistical Society*, 58(1), 267–288. <https://academic.oup.com/jrssb/article/58/1/267/7027929>
- Vasileva, M., & Petermann, F. (2017). Mental health needs and therapeutic service utilization of young children in foster care in Germany. *Children and Youth Services Review*, 75, 69–76. <https://doi.org/10.1016/j.childyouth.2017.02.022>
- Williams, N. J., Ehrhart, M. G., Aarons, G. A., Marcus, S. C., & Beidas, R. S. (2018). Linking molar organizational climate and strategic implementation climate to clinicians' use of evidence-based psychotherapy techniques: Cross-sectional and lagged analyses from a 2-year observational study. *Implementation Science*, 13. <https://doi.org/10.1186/s13012-018-0781-2>
- Witte, S., Miehlbradt, L. S., van Santen, E., & Kindler, H. (2018). Preventing Child Endangerment: Child Protection in Germany. In L. Merkel-Holguin, J. D. Fluke, & R. D. Krugman (Eds.), *National Systems of Child Protection* (Vol. 8, 6). <https://doi.org/10.1007/978-3-319-93348-1>
- Zeileis, A. (2004). Econometric Computing with HC and HAC Covariance Matrix Estimators. *Journal of Statistical Software*, 11(10). <https://doi.org/10.18637/jss.v011.i10>
- Živanović, M., & Marković, M. V. (2020). Latent structure of secondary traumatic stress, its precursors, and effects on people working with refugees. *Plos One*, 15(10). <https://doi.org/10.1371/journal.pone.0241545>

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