British Journal of Social Work (2022) **52**, 1089–1109
doi: 10.1093/bjsw/bcab085
Advance Access Publication May 19, 2021

Vicariously Resilient or Traumatised Social Workers: Exploring Some Risk and Protective Factors

Ana B. Méndez-Fernández[1], Francisco J. Aguiar-Fernández[1], Xoan Lombardero-Posada[1], Evelia Murcia-Álvarez[1,2] and Antonio González-Fernández[1,*]

[1]*Faculty of Education and Social Work, University of Vigo, As Lagoas, 32004 Ourense, Spain*
[2]*Centro de Investigação e de Intervenção Social do Instituto Universitario de Lisboa (CIS-IUL), Avenida das Forças Armadas, Edifício II, Lisboa 1649-026, Portugal*

*Correspondence to Antonio González-Fernández, Faculty of Education and Social Work, University of Vigo, As Lagoas, 32004 Ourense, Spain. E-mail: *aglez@uvigo.es*

Abstract

Due to the indirect exposure to traumatic realities, social workers may experience emotional responses of vicarious traumatisation or vicarious resilience. Previous research indicated that risk factors (workload and trauma caseload) provoke vicarious traumatisation and that protection factors (recovery experiences and organisational support) can buffer this relationship. However, the empirical testing of these associations was scarce amongst social workers. This cross-sectional study aims to answer two main research questions: (i) can workload and trauma caseload predict vicarious resilience and vicarious trauma? (ii) Can recovery experiences and organisational support mediate the influence of risk factors on emotional responses? A sample of 373 Spanish social workers (87 per cent females) completed a questionnaire online. The structural equation modelling analyses showed that workload and trauma caseload make recovery experiences and organisational support less likely, facilitating the emergence of vicarious trauma. Recovery experiences and organisational support protect people from vicarious trauma and promote vicarious resilience, both directly and by limiting the influence of workload and trauma caseload. These results highlight the need for interventions enhancing recovery experiences and organisational support as a means to promote vicarious resilience and to decrease vicarious trauma. The need to reduce other risk factors, enhancing protective factors, is also noted.

Keywords: job demands, organisational support, recovery experiences, Spanish social workers, vicarious resilience, vicarious trauma

Accepted: April 2021

Introduction

Just like other helping professionals, social workers routinely deal with service users who disclose traumatic material (Pack, 2014; Baugerud *et al.*, 2018; Merhav *et al.*, 2018; Cummings *et al.*, 2020; Molnar *et al.*, 2020). In most cases, social workers are exposed to the same traumatising circumstances as their service users, which constitutes a shared traumatic reality (Baum, 2012; Singer *et al.*, 2020; Vang *et al.*, 2020), that is situations in which social workers help service users cope with traumas.

As an example, in child protection services, a social worker's responsibility is to know in depth the situations of child neglect, exploitation, abuse and other modalities of maltreatment. On the basis of this knowledge, in some cases, they could conduct forensic evaluations of children and take responsibility for suggesting the removal of a child from his home (Baugerud *et al.*, 2018; Vang *et al.*, 2020). Similarly, in adult/elder protective services, social workers care for at-risk older persons, elderly people with intellectual disabilities and mental illness, survivors of physical and emotional abuse or impoverished persons (Cummings *et al.*, 2020). Social workers attending to sex offenders must listen to the narratives of their violent behaviours, empathise with them and try to restructure their cognitive distortions (Baum and Moyal, 2020). When attending to homeless persons, social workers are faced with sudden and unexpected deaths, especially as a consequence of overdose, suicide or homicide, and they may be witnesses to the decease of a service user (Wirth *et al.*, 2019).

As a personal response, activated by this indirect (vicarious) and continuous exposure to trauma, social workers can develop two opposite reactions (Knight, 2019). The first includes distinct but interrelated negative manifestations, called vicarious trauma, compassion fatigue or secondary traumatic stress (Aparicio *et al.*, 2013; Ray *et al.*, 2013; Molnar *et al.*, 2017; Cuartero, 2018; Lee *et al.*, 2018; Merhav *et al.*, 2018; Quinn *et al.*, 2019; Cummings *et al.*, 2020; Kreitzer *et al.*, 2020; Vang *et al.*, 2020). More recently, authors examined several positive effects of this indirect exposure to traumatic reality, called vicarious resilience, compassion satisfaction or vicarious posttraumatic growth (Engstrom *et al.*, 2008; Pack, 2014; Hernández-Wolfe *et al.*, 2015; Nuttman-Shwartz, 2015; Killian *et al.*, 2017; Baugerud *et al.*, 2018; Knight, 2019; Newell, 2020).

The consequences of these positive or negative reactions to vicarious exposure to trauma are very different, almost opposed to each other, for the organisations, the workers, the service users and their relatives. In social workers, vicarious trauma positively correlated with avoidant coping, occupational stress and burnout (Badger *et al.*, 2008; Cummings *et al.*, 2020; Singer *et al.*, 2020), and negatively with professional self-efficacy (Finklestein *et al.*, 2015), purpose in life and compassion satisfaction (Singer *et al.*, 2020). On the contrary, vicarious resilience positively correlated with active coping, personal resources, wellbeing and commitment (Engstrom *et al.*, 2008; Killian *et al.*, 2017), and negatively with stress and burnout. Some consequences of vicarious trauma for the service users' care are distancing, worse treatment of service users and their relatives, low empathy and depersonalisation (Badger *et al.*, 2008; Baum, 2012; Finklestein *et al.*, 2015; Molnar *et al.*, 2020). Some consequences of vicarious trauma for the institutions are frequent sick leave, low organisational commitment and intention to quit the job (Baugerud *et al.*, 2018; Ravalier, 2019; Molnar *et al.*, 2020).

Therefore, focusing on social workers and other similar care professionals, many authors have attempted to discover the risk and protective factors for experiencing healthy or harmful reactions to vicarious exposure to trauma (Michalopoulos and Aparicio, 2012; Hensel *et al.*, 2015; Molnar *et al.*, 2017; Baugerud *et al.*, 2018; Hernández-Wolfe, 2018; Knight, 2019; Cummings *et al.*, 2020; Molnar *et al.*, 2020; Vang *et al.*, 2020). According to these and other authors, some recognised risk factors were workload and increased exposure to trauma. As protective factors, these authors pointed out the contribution of recovery strategies and organisational support.

Henceforth, this study explores to what extent two risk factors (workload and trauma caseload) and two protective factors (recovery experiences and organisational support) influence the experience of vicarious trauma and/or vicarious resilience in a sample of Spanish social workers.

Theoretical framework

Two theoretical models provide the framework for this study, the Job Demands-Resources theory and the Stress-Detachment model. Their fundamental constructs and relationships, adapted to the variables evaluated in this research, are summarised in Figure 1.

The Job Demands-Resources theory (Bakker and Demerouti, 2017; Bakker and de Vries, 2021) assumes that every job may have its own specific risk and protective factors that influence burnout and wellbeing. Job demands comprise some components of the work that require sustained effort or skills and are the main causes of poor health, job stress, burnout and other damaging reactions. Job resources include those

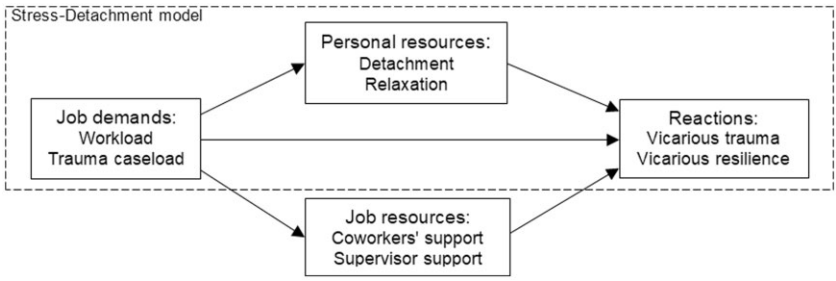

Figure 1: Representation of the Job Demands-Resources theory and the Stress-Detachment model.

aspects of the job that enable the achievement of work goals; are the main buffers of job demands and enhance personal wellbeing, growth and engagement. Personal resources refer to some individual characteristics and behaviours through which workers can exert control over their job context and foster motivation, satisfaction and engagement, protecting them from stress and burnout. Previous research has applied the Job Demands-Resources theory, analysing samples of social workers (Aiello and Tesi, 2017; Astvik *et al.*, 2020).

Similarly, the Stressor-Detachment model (Sonnentag and Fritz, 2015; Sonnentag, 2018) emphasises the important role of recovery experiences (e.g. psychological detachment from work and relaxation) in the association of job demands with stress and wellbeing (see the top part of Figure 1). Job demands undermine workers' recovery during non-work time, and this decreased recovery enhances the level of stress and burnout, diminishing satisfaction and wellbeing, both directly and indirectly. Directly, because the reduced recovery leads to higher levels of job stress and lower levels of wellbeing. Indirectly, because the reduced recovery buffers to a lesser extent, the deleterious influence of job stressors on burnout and wellbeing. We found no investigation that has applied this model to the study of social workers.

This study was designed within the framework of these two models. Following Figure 1, below are defined two personal and job resources (recovery experiences and organisational support) and two outcomes (vicarious trauma and vicarious resilience).

Personal and job resources: recovery experiences and organisational support

Recovery entails the process by which the personal systems, overloaded during an exhausting experience, return to their previous state (Sonnentag and Fritz, 2007, 2015). This is a process contrasting with stress, and it produces the regeneration of deteriorated emotions and

state of mind. Two of the most studied recovery experiences are psychological detachment and relaxation (Sonnentag *et al.*, 2010). Psychological detachment from the job during leisure time describes a personal feeling of being disconnected from the work environment and implies not being occupied with work-related obligations (e.g. not answering job-related phone calls) and being mentally disengaged and distanced from work (e.g. not thinking about job-related issues). Relaxation is described as a state of reduced arousal and improved positive emotion, and includes diverse chosen activities, such as meditation, listening to music or taking a walk. In different occupations (seldom social workers), psychological detachment and other recovery experiences correlated negatively with workload, emotional exhaustion and health problems, and positively with organisational support, job satisfaction, life satisfaction and engagement (Sonnentag and Fritz, 2007; Aronsson *et al.*, 2014; Casper and Sonnentag, 2020; Eichberger *et al.*, 2020).

In social work research, organisational support includes the assistance and help received from coworkers and supervisors (Kim and Barak, 2015; Li *et al.*, 2020). From colleagues, social workers demand that they show ability in their respective fields, that they work together, or that they collaborate in daily tasks (Wilberforce *et al.*, 2014; Aiello and Tesi, 2017; Barck-Holst *et al.*, 2017). From their supervisor, social workers require that they collaborate to get the job done, that they achieve teamwork, or show interest in their employees' welfare. In social work, organisational support correlated positively with job satisfaction (Wilberfoce *et al.*, 2014) and engagement (Aiello and Tesi, 2017), and negatively with workload (Kim and Barak, 2015; Barck-Holst *et al.*, 2017), role conflict and role ambiguity (Li *et al.*, 2020), compassion fatigue (Kreitzer *et al.*, 2020) and burnout (Barck-Holst *et al.*, 2017).

Reactions: vicarious trauma and vicarious resilience

Previous research studied mainly different negative effects of indirect exposure to trauma, such as vicarious trauma, compassion fatigue or secondary traumatic stress (Baum, 2012; Hensel *et al.*, 2015; Knight, 2019; Cummings *et al.*, 2020; Singer *et al.*, 2020).

Vicarious trauma describes the cognitive and affective changes that can occur in different care professionals who recurrently engage in an empathetic bond with their service users (McCann and Pearlman, 1990). The initiation and development of vicarious trauma is associated with service users' sharing of personal trauma, often exhaustive and vivid, which occurs during an extended professional relationship. Some of the symptoms of vicarious trauma comprise excessive arousal about personal safety, avoidance of certain behaviours, unpleasant thoughts and negative transformations of cognitions. In addition, vicarious trauma has

consequences for the professionals' practice, lowering their decision-making capacity and engagement (McCann and Pearlman, 1990; Vrklevski and Franklin, 2008; Aparicio *et al.*, 2013; Molnar *et al.*, 2017; Branson, 2019; Molnar *et al.*, 2020). Secondary traumatic stress occurs when professionals consider themselves to be overwhelmed by their willingness to offer assistance and relief to their traumatised service users (Aparicio *et al.*, 2013; Molnar *et al.*, 2017; Branson, 2019). Its symptomology includes avoidance, undesired mental imagery, hypersensitivity to trauma-related stimulation and impaired daily functioning. In contrast to vicarious trauma, secondary traumatic stress is acute and can occur after a single interpersonal interaction, whereas vicarious trauma is a consequence of a longer process. The term of compassion fatigue is very close to secondary traumatic stress and is applied to professionals who are absolutely overwhelmed by their observation and care of traumatised service users and by their desire to offer them help (Cuartero, 2018; Branson, 2019; Kreitzer *et al.*, 2020).

In contrast to these negative reactions to shared trauma, vicarious resilience is defined as positive modifications in a therapist's way of thinking and behaving as a result of their empathetic engagement with the service users' traumatic experiences (Hernández-Wolfe *et al.*, 2007). The authors included different dimensions or components in vicarious resilience, such as the increased capacity for resourcefulness and the changes in life goals and viewpoints (Hernández-Wolfe *et al.*, 2007; Engstrom *et al.*, 2008; Killian *et al.*, 2017; Hernández-Wolfe, 2018; Knight, 2019). Pack (2014) refers to these two components when mentioning the reformulation of professional and personal identities as indicators of vicarious resilience. In addition, previous research analysed other positive effects of trauma exposure such as compassion satisfaction or vicarious posttraumatic growth.

Hypotheses

The present study aims to analyse the associations between three groups of variables: two job demands (i.e. workload and trauma caseload) as risk factors; a personal resource (recovery experiences) and a job resource (organisational support) as protective factors and two opposite reactions to shared trauma (vicarious trauma and vicarious resilience) as outcomes. Figure 2 summarises the expected associations between the variables, as the basis for the working hypotheses.

> *Hypothesis 1.* Workload and trauma caseload will be negatively associated with recovery experiences and organisational support, and will negatively predict vicarious resilience and positively predict vicarious trauma.

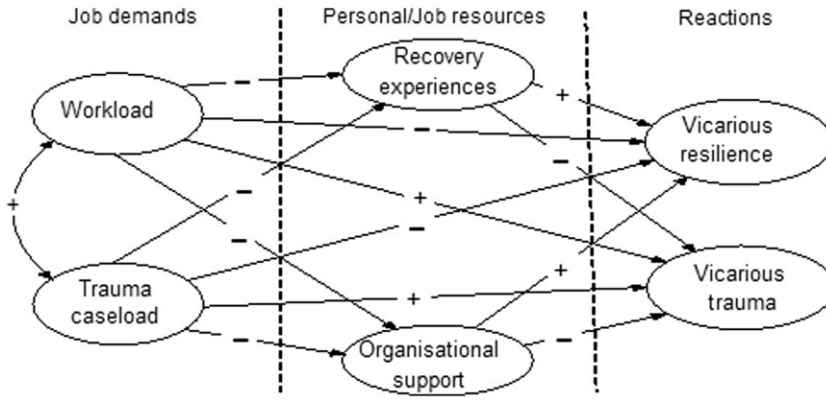

Figure 2: Model of expected associations between the target variables.

Hypothesis 2. Recovery experiences and organisational support will positively predict vicarious resilience and will negatively predict vicarious trauma.

Hypothesis 3. Recovery experiences and organisational support will mediate the influence of job demands on vicarious resilience and vicarious trauma.

Methods

Particitpants

The sample of this study included 373 social workers (87.4 per cent females) of different Spanish territories. In Spain, it is necessary to be certificated in Social Work to practice this profession. Therefore, all participants had the Degree of Social Work. In addition to the Degree, 34.1 per cent of the participants had completed a Master's degree and 2.4 per cent had completed a doctorate. The age of the participants was between 23 and 64 years ($M = 40.38$, $SD = 9.34$), and their work experience ranged from 1 to 41 years ($M = 13.23$, $SD = 9.31$). Participants worked mainly in public institutions, private companies and NGOs in multiple fields, such as Minors, Women, Mental Health, Addictions, Prisons, Disability, Social Exclusion or Immigration. As Cuartero (2018, p. 13) recognised, in Spain social workers continually deal with situations of high emotional tension and/or conflict, such as sexual abuse in children, gender-based violence, people with chronic diseases or people and children in their last stage of life. Discomfort, chronic pain, anguish, stress, depression, sadness, anger, amongst other negative emotional states, predominate amongst people requesting Social Work services. (...). The

interaction between the social worker and service users and their families (..) may be immersed in a toxic atmosphere.

Procedure

The questionnaire was posted on various social media related to social workers and was sent by email to different groups, listservs and professional associations of social workers, that is thirty-seven Official Associations of Social Workers in Spain. From these Official Associations, they transferred the questionnaire to the associates through their own social networks and their Official Bulletins. The questionnaire presented the objectives of the research and participants were asked to answer it and send it to other known social workers. The email contained a link to the survey on the Google Drive platform. Participants completed the questionnaire between October and November of 2020.

Participants were asked to answer only if they were qualified social workers who were working at the time of completing the questionnaire. All those who were part of the sample analysed stated that they were university graduates (having completed at least a degree of three to four years) and were working. Participants voluntarily consented to participate in the project and were informed about the ethical requirements and that they could withdraw from the study at any time.

Ethics statement

The procedure used in this work respects the internationally proposed ethical guidelines and was approved by the Ethical Committee of the Doctoral Program of Educational and Behavioural Sciences of the authors' university. No identifying information was requested and data were processed confidentially and anonymously.

Measures

The survey instrument was a self-reported Spanish questionnaire with six scales and thirty-five items measuring ten variables (see Supplementary Table S1).

QPS Nordic

Workload was measured with the Quantitative Demands subscale of the General Nordic Questionnaire for Psychological and Social factors at

work (QPS Nordic; Lindström *et al.*, 2000), with four items (e.g. 'Do you have to work overtime?').

Trauma caseload

According to the guidelines of Hensel *et al.* (2015) and Quinn *et al.* (2019), trauma caseload was evaluated using three items assessing the frequency, volume and ratio/proportion of traumatised service users encountered during the past six months.

Job Content Questionnaire

To assess organisational support, we applied two subscales of the Job Content Questionnaire (Karasek *et al.*, 1998): the Coworkers Support subscale, with four items (e.g. 'My colleagues help me with the job I am performing') and the Supervisor Support subscale, with four items (e.g. 'My supervisor takes an interest in the employees' welfare').

Recovery Experience Questionnaire

To evaluate recovery experiences, we applied two subscales of the Recovery Experience Questionnaire (REQ; Sonnentag and Fritz, 2007). The subscales, each with four items, measured the two most investigated components of recovery experiences, Psychological Detachment (e.g. 'During after-work hours, I distance myself from my work') and Relaxation (e.g. 'During after-work hours, I do relaxing things').

Vicarious Resilience Scale

Vicarious resilience was measured with two subscales of the Vicarious Resilience Scale (Killian *et al.*, 2017). The subscales, both with four items, were Increased Resourcefulness (e.g. 'I am better able to reassess the dimensions of problems') and Changes in Life Goals (e.g. 'My life goals and priorities have evolved').

Vicarious Trauma Scale

Vicarious trauma was assessed with the Vicarious Trauma Scale (Vrklevski and Franklin, 2008). Aparicio *et al.* (2013) confirmed the adequacy of VTS for social workers, differentiating two components, each with three items: the Cognitive factor (e.g. 'I find myself distressed by listening to my clients' stories and situations') and the Affective factor (e.g. 'Sometimes, I feel overwhelmed by the workload involved in my job').

Confirmatory factor analyses (CFAs) were performed, using the AMOS-24 software, to test the adequacy of each scale (Barbara, 2016). The CFAs showed that the different models fit the data well for each of the six applied scales (see Supplementary Tables S2–S4).

Analysis plan

After this, the main data analyses included three steps. Firstly, Cronbach's alpha and Pearson correlations were calculated, using the SPSS-24 software. Secondly, with the AMOS-24, structural equation modelling (SEM) was applied to test the proposed model of relations between variables (Figure 2), following a two-step approach, testing the measurement model and the structural model. The model fit in CFA and SEM was evaluated by the indicators χ^2/df, CFI, NFI, IFI and RMSEA (Barbara, 2016). Finally, mediation was analysed using the bootstrap procedure of the AMOS-24.

Results

Preliminary analyses

All alpha coefficients were adequate, with values ranging from 0.75 to 0.90 (see Table 1). In terms of bivariate relationships, two groups of constructs can be differentiated: the first includes job demands and vicarious trauma and the second, personal resources and vicarious resilience.

Most of the correlations tended to be positive (albeit not always significant) within the same group, and were usually negative (albeit not always significant) between groups. Except for the correlations between factors of the same scale, in general, the significant coefficients had medium and low values, between |0.13| and |0.42|.

Measurement model

Firstly, we tested the measurement model using the AMOS-24 software (Barbara, 2016). For CFA and SEM, different composite factors (i.e. latent variables) were created with the corresponding subscales (see Supplementary Tables S5 and S6 and Supplementary Figure S1). Therefore, the measurement model and the structural model included six latent variables. The measurement model fit the data well, [χ^2/df = 2.03; CFI = 0.971; NFI = 0.946; TLI = 0.957; RMSEA = 0.053, 95 per cent CI (0.038, 0.067)].

Table 1 Bivariate Pearson's correlations between variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Workload												
2. T-Caseload: Frequency	0.05											
3. T-Caseload: Volume	0.01	0.73										
4. T-Caseload: Proportion	−0.03	0.76	0.74									
5. Psychological detachment	−0.30	−0.08	−0.07	−0.13								
6. Relaxation	−0.24	−0.09	−0.08	−0.15	0.72							
7. Coworkers support	−0.18	−0.19	−0.17	−0.14	0.22	0.23						
8. Supervisor support	−0.19	−0.23	−0.25	−0.25	0.30	0.28	0.58					
9. Increased resourcefulness	−0.19	−0.10	−0.22	−0.17	0.29	0.27	0.27	0.31				
10. Changes in life goals	−0.09	−0.08	−0.15	−0.15	0.22	0.25	0.20	0.25	0.54	.		
11. VT: Cognitive factor	0.32	0.22	0.18	0.19	−0.42	−0.32	−0.24	−0.29	−0.26	−0.13		
12. VT: Affective factor	0.37	0.28	0.23	0.24	−0.31	−0.22	−0.16	−0.37	−0.19	−0.15	0.55	
Cronbach's alpha	0.75	0.90			0.87	0.78	0.85	0.90	0.84	0.80	0.80	0.86

Notes: $r < |0.13|$, no significant ($p > 0.05$); $r \geq |0.13|$, $p < 0.01$; $r \geq |0.17|$, $p < 0.001$. T-Caseload, Trauma caseload; VT, Vicarious Trauma.

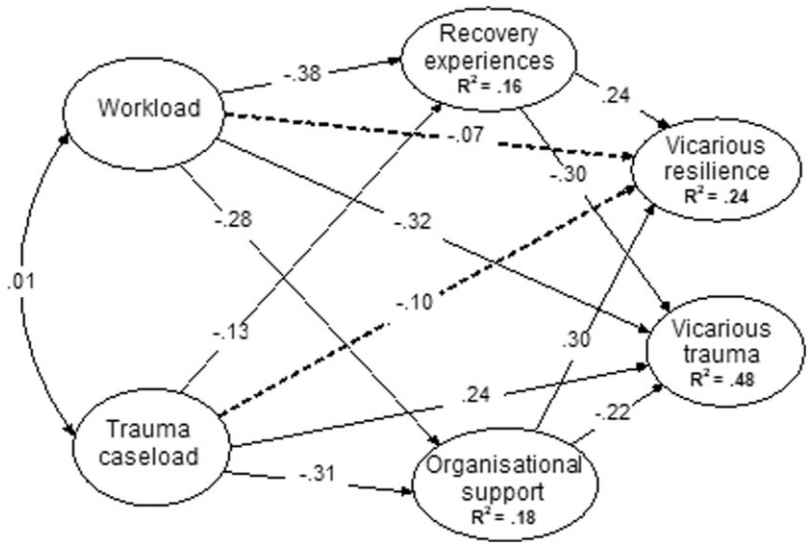

Figure 3: Relationships between the target variables (dashed lines indicate no significant values).

Structural model

Next, a SEM was performed to test the hypothesised relationships between variables (Figure 2). The proposed model fit the data well, [χ^2/df = 1.71; CFI = 0.981; NFI = 0.956; TLI = 0.957; RMSEA = 0 .044, 95 per cent CI (0.027, 0.059)]. Figure 3 shows the direct standardised paths between variables.

Workload and trauma caseload positively predicted vicarious trauma and were negatively associated with recovery experiences and organisational support (Hypothesis 1), but neither workload nor trauma caseload significantly predicted vicarious resilience. Recovery experiences and organisational support positively predicted vicarious resilience and negatively predicted vicarious trauma (Hypothesis 2). The proportions of explained variance were 16 per cent for recovery experiences, 18 per cent for organisational support, 24 per cent for vicarious resilience and 48 per cent for vicarious trauma.

Mediated relationships

Finally, to establish the existence of mediation, the AMOS-24 software computed the indirect effects between variables (Table 2).

The results support the existence of full and partial mediation (Hypothesis 3). Recovery experiences and organisational support

Table 2 Direct, indirect and total effects between variables

Predictor → Criterion	Direct effect (*p*)	Indirect effect (*p*)	Total effect (*p*)
Partial mediation			
Workload → Vicarious trauma	0.321 (0.001)	0.176 (0.004)	0.497 (0.001)
T-Caseload →Vicarious trauma	0.234 (0.001)	0.107 (0.004)	0.341 (0.001)
Full mediation			
Workload →Vicarious resilience	−0.074 (0.332)	−0.176 (0.004)	−0.249 (0.004)
T-Caseload → Vicarious resilience	−0.101 (0.115)	−0.125 (0.004)	−0.226 (0.008)

Note: T-Caseload = Trauma caseload.

partially mediated the influence of workload and trauma caseload on vicarious trauma (both direct and indirect effects were significant). In contrast, the influence of workload and trauma caseload on vicarious resilience was fully mediated by recovery experiences and organisational support (only the indirect effects were significant). The total influence on vicarious trauma and vicarious resilience was stronger for workload than for trauma caseload.

Discussion

This study, with a sample of Spanish social workers, aimed to explore the extent to which vicarious resilience and vicarious trauma can be explained by the structural influences of workload and trauma caseload (as risk factors) or recovery experiences and organisational support (as protective factors). Previously, we established the adequacy of the applied scales. The findings are relevant to the knowledge of these constructs from empirical and practical perspectives.

Empirical relevance: main results

First, in contrast to our expectations, this study found no significant relationships between social workers' workload and trauma caseload. This indicates that, for the sample evaluated, workload and trauma caseload are two largely independent work stressors: care for a large number of service users who have experienced traumatic events is not necessarily associated with accumulation of work because work overload is irregular, it involves working overtime, performing too many tasks or working at a rapid pace.

Second, social workers who were more overloaded and attended to more traumatised service users implemented recovery experiences (both psychological detachment and relaxation) less frequently, perceived less

support from their coworkers and supervisors and more frequently suffered vicarious trauma (Hypothesis 1). This means that professionals who need it the most (with the highest trauma caseload and, above all, with the greatest workload) were the ones who put into practice recovery experiences less frequently and received the least help from their peers and superiors. The first result (the negative association between job demands and recovery experiences) is what Sonnentag (2018) has called the 'recovery paradox', characterised as high levels of job stressors, a great need for recovery and a low actual propensity to recover. This paradoxical circumstance denotes a wide discrepancy between the intense need to recover because the job demands are high and the reduced likelihood to actually recover in this situation. The second result (the negative association between job demands and organisational support) increases some previous research with social workers, showing that workload was negatively associated with organisational support (Kim and Barak, 2015; Barck-Holst *et al.*, 2017). To our knowledge, this is the first study that evaluates recovery experiences in social work, despite the decisive role acknowledged for this variable by the Job Demands-Resources theory and the Stress-Detachment model. As far as we know, it is also the first study that assessed vicarious resilience amongst social workers, despite the importance of studying positive reactions to trauma exposure amongst these professionals.

Third, social workers who implemented recovery experiences more frequently and who received support from their coworkers and supervisors more often experienced more intense vicarious resilience and suffered vicarious trauma less severely (Hypothesis 2). These results support the suggestions of Vrklevski and Franklin (2008) and Hernández-Wolfe (2018), who hypothesised that personal resources and organisational support would positively influence vicarious resilience. They also confirm theoretical reviews (Michalopoulos and Aparicio, 2012; Hensel *et al.*, 2015; Molnar *et al.*, 2017, 2020) and empirical studies of samples of social workers and other similar professionals (Vang *et al.*, 2020) that found that organisational support was negatively associated with vicarious traumatisation. Previous research analysing the relationships of recovery experiences and organisational support with vicarious trauma and vicarious resilience is scarce. Even scarcer are studies that have jointly analysed these variables in social worker samples.

Fourth, regarding mediated relations, overloaded social workers who were treating a larger number of traumatised service users experienced less vicarious resilience and (in part) suffered more vicarious trauma because they implemented psychological detachment and relaxation strategies less regularly and received less support from their coworkers and supervisors (Hypothesis 3). In other words, social workers more regularly supported by their supervisors and coworkers and practicing recovery strategies more often had less vicarious trauma and more vicarious

resilience resulting from their workload and trauma caseload. With regard to previous studies in the framework of Job Demands-Resources theory (Aiello and Tesi, 2017; Astvik *et al.*, 2020), the present study confirms the role of job demands and job resources as predictors of different positive and negative outcomes amongst social workers. However, to our knowledge, this work is the first one that has addressed trauma caseload, recovery experiences, vicarious trauma and vicarious resilience within the framework of the Job Demands-Resources theory. As for the Stress-Detachment model, the results of previous studies carried out with samples from other professionals (Schultz *et al.*, 2019; Casper and Sonnentag, 2020; Eichberger *et al.*, 2020) are confirmed with social workers. We found no previous research that has studied vicarious trauma and vicarious resilience from the Stress-Detachment model. Also, to our knowledge, this is the first time this model has been applied to the study of a sample of social workers.

However, despite the mediating role of recovery experiences and organisational support (protective factors), the direct relationship of workload and trauma caseload (risk factors) on vicarious trauma was significant in both cases. This means that the contribution of both protective factors was not enough to fully counteract the influence of the risk factors on vicarious trauma. In this sense, many authors (Baugerud *et al.*, 2018; Cummings *et al.*, 2020; Kreitzer *et al.*, 2020; Molnar *et al.*, 2020;, Newell, 2020; Vang *et al.*, 2020) have found further risk and protective factors for experiencing positive or negative reactions to shared trauma.

Practical relevance: applications

From an applied perspective, this study identified risk and protective factors for vicarious trauma. These findings guide decisions to improve vicarious resilience and to reduce vicarious trauma. The interventions are geared to the enhancement of protectors (personal and job resources) and the reduction of risk factors (job demands). The importance of these two components was already anticipated by McCann and Pearlman (1990, p. 144) when, referring to vicarious trauma, they asserted: 'The helper must be able to acknowledge, express and work through these painful experiences in a supporting environment'.

As personal resources, first, the professionals can take action to deal with vicarious trauma: be aware of the danger of repeatedly attending to traumatised service users; seek the support of colleagues or expert supervisors and solve particularly difficult cases as a team. In addition, workers can detach from work during non-working hours by performing enjoyable activities unrelated to work; spending time with people outside the work environment or establishing very clear boundaries

between work and non-work areas, for example, not checking work-related emails until work time (Sonnentag and Fritz, 2007, 2015; Casper and Sonnentag, 2020). The need for psychological detachment from work is especially necessary nowadays: with the use of new technologies (e.g. instant messaging on mobiles), this goal is more difficult to achieve.

As organisational protective factors against vicarious trauma, supervisors should reduce, wherever possible, the volume and proportion of trauma caseload, making it easier for professionals to spend more of their time on tasks that do not involve being in direct contact with traumatic accounts. Molnar *et al.* (2017) also recommend regularly screening for and treating vicarious trauma in the workplace to help professionals who are experiencing reactions to exposure to trauma and those most susceptible to suffering more severe problems. Finally, supervisors can make sure that their workers have the sufficient resources to carry out their tasks and avoiding certain practices that make detachment more difficult, such as 'think about this proposal over the weekend and on Monday, we can discuss it' (Sonnentag and Fritz, 2015; Casper and Sonnentag, 2020).

However, in this study, neither organisational support nor recovery experiences were sufficient to neutralise the impact of workload and trauma caseload on vicarious trauma. In this sense, the authors highlighted the benefits of decreasing, wherever possible, some aspects of job demands such as workload (Barck-Holst *et al.*, 2017) or hours of work relative to contracted hours (Wilberforce *et al.*, 2014). According to other authors (Baugerud *et al.*, 2018; Knight, 2019; Cummings *et al.*, 2020; Kreitzer *et al.*, 2020; Molnar *et al.*, 2020; Vang *et al.*, 2020), vicarious trauma would be less severe amongst the workers if other risk factors such as excessive paperwork, authoritarian supervision, work–family interferences, role ambiguity and role conflict were reduced.

Limitations and future research

The findings of the present study should be interpreted with caution, considering several limitations. First, the cross-sectional design does not allow causal inferences between variables to be established. Second, the sampling procedure used in this study does not allow determining the response rate: it does not allow knowing the number of social workers who were invited to participate in the study and who did not complete the questionnaire; nor does it allow us to know how many of these potential participants accessed the questionnaire and ultimately did not submit it. Third, the risk and protective factors evaluated in this work explained only 48 per cent of the variance of vicarious trauma and a smaller 24 per cent of that of vicarious resilience. Future research could analyse other risk factors (e.g. work–family conflict or role conflict),

protective factors (e.g. self-care practices or coping strategies) and consequences (e.g. burnout or turnover intentions) of vicarious trauma and vicarious resilience. Fourth, we cannot rule out that participants' responses are influenced by contextual variables not analysed in this work. Future research could examine the extent to which the evaluated constructs differ depending on social workers' gender, age, work experience, type of contract or institution in which they work. Fifth, this study used a quantitative approach. In the future, its results could be complemented by other qualitative ones that allow us to know more nuances of the causes and consequences of vicarious trauma and vicarious resilience. Finally, when the data were collected, in October and November of 2020, Spain was undergoing an exceptional situation because of the social and health emergency arising from COVID-19. This circumstance, which greatly increased the workload and job stress of many social workers (Ben-Ezra and Hamara-Raz, 2020), may have conditioned their responses to the questionnaires and the results obtained.

Conclusion

This study aimed to explore the extent to which some risk factors (job demands) and protective factors (personal and job resources) explain the degree of vicarious resilience and vicarious trauma in a sample of social workers. Excessive workload and trauma caseload were associated with lower levels of recovery experiences and organisational support, making the rise of vicarious trauma more likely. On another hand, recovery practices and organisational support protected individuals from vicarious trauma and fostered vicarious resilience, both directly and indirectly, buffering the influence of workload and trauma caseload on vicarious trauma and vicarious resilience. Lastly, the decrease of these and other risk factors and the improvement of these and other protective factors are recommended to achieve the reduction of vicarious traumatisation and the increase of vicarious resilience.

Acknowledgements

Our gratitude to all the social workers who selflessly participated in this study.

Supplementary material

Supplementary material is available at *British Journal of Social Work Journal* online.

References

Aiello, A. and Tesi, A. (2017) 'Psychological well-being and work engagement among Italian social workers: Examining the mediational role of job resources', *Social Work Research*, **41**(2), pp. 73–84.

Aparicio, E., Michalopoulos, L. and Unick, G. (2013) 'An examination of the psychometric properties of the Vicarious Trauma Scale in a sample of licensed social workers', *Health & Social Work*, **38**(4), pp. 199–206.

Aronsson, G., Astvik, W. and Gustafsson, K. (2014) 'Work conditions, recovery and health: A study among workers within pre-school, home care and social work', *British Journal of Social Work*, **44**(6), pp. 1654–72.

Astvik, W., Welander, J. and Larsson, R. (2020) 'Reasons for staying: A longitudinal study of work conditions predicting social workers' willingness to stay in their organization', *The British Journal of Social Work*, **50**(5), pp. 1382–400.

Badger, K., Royse, D. and Craig, C. (2008) 'Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors', *Health & Social Work*, **33**(1), pp. 63–71.

Bakker, A. B. and de Vries, J. D. (2021) 'Job Demands-Resources theory and self-regulation: New explanations and remedies for job burnout', *Anxiety, Stress, & Coping*, **34**(1), pp. 1–21.

Bakker, A. B. and Demerouti, E. (2017) 'Job demands-resources theory: Taking stock and looking forward', *Journal of Occupational Health Psychology*, **22**(3), pp. 273–85.

Barbara, M. B. (2016) 'Structural equation modelling with AMOS', in *Basic Concepts, Applications, and Programming*. 3rd edn, New York, Routledge.

Barck-Holst, P., Nilsonne, Å., Åkerstedt, T. and Hellgren, C. (2017) 'Reduced working hours and stress in the Swedish social services: A longitudinal study', *International Social Work*, **60**(4), pp. 897–913.

Baugerud, G., Vangbæk, S. and Melinder, A. (2018) 'Secondary traumatic stress, burnout and compassion satisfaction among Norwegian child protection workers: Protective and risk factors', *British Journal of Social Work*, **48**, 215–35.

Baum, N. (2012) 'Trap of conflicting needs: Helping professionals in the wake of a shared traumatic reality', *Clinical Social Work Journal*, **40**(1), pp. 37–45.

Baum, N. and Moyal, S. (2020) 'Impact on therapists working with sex offenders: A systematic review of gender findings', *Trauma, Violence & Abuse*, **21**(1), pp. 193–205.

Ben-Ezra, M. and Hamara-Raz, Y. (2020) 'Social workers during COVID-19: Do coping strategies differentially mediate the relationship between job demand and psychological distress?', *British Journal of Social Work* (doi: 10.1093/bjsw/bcaa210).

Branson, D. C. (2019) 'Vicarious trauma, themes in research, and terminology: A review of literature', *Traumatology*, **25**(1), pp. 2–10.

Casper, A. and Sonnentag, S. (2020) 'Feeling exhausted or vigorous in anticipation of high workload? The role of worry and planning during evening', *Journal of Occupational and Organizational Psychology*, **93**(1), pp. 215–42.

Cuartero, M. E. (2018) 'Compassion fatigue: how to be a social work professional and not break down in the attempt', *Revista Cuadernos de Trabajo Social*, **11**(1), pp. 9–31.

Cummings, C., Singer, J., Moody, S. and Benuto, L. (2020) 'Coping and work-related stress reactions in protective services workers', *British Journal of Social Work*, **50**(1), pp. 62–80.

Eichberger, C., Derks, D. and Zacher, H. (2020) 'Technology-assisted supplemental work, psychological detachment, and employee well-being: A daily diary study', *German Journal of Human Resource Management* (https://doi.org/10.1177/2397002220968188).

Engstrom, D., Hernandez, P. and Gangsei, D. (2008) 'Vicarious resilience: A qualitative investigation into its description', *Traumatology*, **14**(3), pp. 13–21.

Finklestein, M., Stein, E., Greene, T., Bronstein, I. and Solomon, Z. (2015) 'Posttraumatic stress disorder and vicarious trauma in mental health professionals', *Health & Social Work*, **40**(2), pp. e25–e31.

Hensel, J., Ruiz, C., Finney, C. and Dewa, C. (2015) 'Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims', *Journal of Traumatic Stress*, **28**(2), pp. 83–91.

Hernández-Wolfe, P. (2018) 'Vicarious resilience: A comprehensive review', *Revista de Estudios Sociales*, **66**(66), pp. 9–17.

Hernández-Wolfe, P., Gangsei, D. and Engstrom, D. (2007) 'Vicarious resilience: A new concept in work with those who survive trauma', *Family Process*, **46**(2), pp. 229–41.

Hernández-Wolfe, P., Killian, K., Engstrom, D. and Gangsei, D. (2015) 'Vicarious resilience, vicarious trauma and awareness of equity in trauma work', *Journal of Humanistic Psychology*, **55**(2), pp. 153–72.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P. and Amick, B. (1998) 'The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessment of psychosocial job characteristics', *Journal of Occupational Health Psychology*, **3**(4), pp. 322–55.

Killian, K., Hernández-Wolfe, P., Engstrom, D. and Gangsei, D. (2017) 'Development of the Vicarious Resilience Scale (VRS): A measure of positive effects of working with trauma survivors', *Psychological Trauma: Theory, Research, Practice, and Policy*, **9**(1), pp. 23–31.

Kim, A. and Barak, M. (2015) 'The mediating roles of leader–member exchange and perceived organizational support in the role stress–turnover intention relationship among child welfare workers: A longitudinal analysis', *Children and Youth Services Review*, **52**, 135–67.

Knight, C. (2019) 'Trauma informed practice and care: Implications for field instruction', *Clinical Social Work Journal*, **47**(1), pp. 79–89.

Kreitzer, L., Brintnell, S. and Austin, W. (2020) 'Institutional barriers to healthy workplace environments: From the voices of social workers experiencing compassion fatigue', *The British Journal of Social Work*, **50**(7), pp. 1942–60.

Lee, J., Gottfried, R. and Bride, B. (2018) 'Exposure to trauma, secondary traumatic stress, and the health of clinical social workers: A mediation analysis', *Clinical Social Work Journal*, **46**(3), pp. 228–35.

Li, X., Zhang, N. and He, X. (2020) 'Role stress and depressive symptoms amongst social workers in China: The moderating effects of social support', *British Journal of Social Work* (doi: 10.1093/bjsw/bcaa193).

Lindström, K., Elo, A., Skogstad, A., Dallner, M., Gamberale, F. and Hottinen, (2000) *User's Guide for the QPSNordic. General Nordic Questionnaire for*

Psychological and Social Factors at Work, Copenhagen, Nordic Council of Ministers.

McCann, I. L. and Pearlman, L. A. (1990) 'Vicarious trauma: A framework for understanding the psychological effects of working with victims', *Journal of Traumatic Stress*, **3**(1), pp. 131–49.

Merhav, I., Lawental, M. and Peled-Avram, M. (2018) 'Vicarious traumatisation: Working with clients of probation services', *The British Journal of Social Work*, **48**(8), pp. 2215–32.

Michalopoulos, L. and Aparicio, E. (2012) 'Vicarious trauma in social workers: The role of trauma history, social support, and years of experience', *Journal of Aggression, Maltreatment & Trauma*, **21**(6), pp. 646–64.

Molnar, B. E., Meeker, S. A., Manners, K., Tieszen, L., Kalergis, K., Fine, J. E., Hallinan, S., Wolfe, J. D. and Wells, M. K. (2020) 'Vicarious traumatization among child welfare and child protection professionals: A systematic review', *Child Abuse & Neglect*, **110** (doi: 10.1016/j.chiabu.2020.104679).

Molnar, B., Sprang, G., Killian, K., Gottfried, R., Emery, V. and Bride, B. (2017) 'Advancing science and practice for vicarious traumatization/secondary traumatic stress: A research agenda', *Traumatology*, **23**(2), pp. 129–42.

Newell, J. (2020) 'An ecological systems framework for professional resilience in social work practice', *Social Work*, **65**(1), pp. 65–73.

Nuttman-Shwartz, O. (2015) 'Shared resilience in a traumatic reality: A new concept for trauma workers exposed personally and professionally to collective disaster', *Trauma, Violence & Abuse*, **16**(4), pp. 466–75.

Pack, M. (2014) 'Vicarious resilience: A multilayered model of stress and trauma', *Affilia*, **29**(1), pp. 18–29.

Quinn, A., Ji, P. and Nackerud, L. (2019) 'Predictors of secondary traumatic stress among social workers: Supervision, income, and caseload size', *Journal of Social Work*, **19**(4), pp. 504–28.

Ray, S., Wong, C., White, D. and Heaslip, K. (2013) 'Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals', *Traumatology*, **19**(4), pp. 255–69.

Ravalier, J. (2019) 'Psycho-social working conditions and stress in UK social workers', *The British Journal of Social Work*, **49**(2), pp. 371–90.

Schultz, A. D., Schöllgen, I. and Fay, D. (2019) 'The role of resources in the stressor-detachment model', *International Journal of Stress Management*, **26**(3), pp. 306–14.

Singer, J., Cummings, C., Moody, S. and Benuto, L. (2020) 'Reducing burnout, vicarious trauma, and secondary traumatic stress through investigating purpose in life in social workers', *Journal of Social Work*, **20**(5), pp. 620–38.

Sonnentag, S. (2018) 'The recovery paradox: Portraying the complex interplay between job stressors, lack of recovery, and poor well-being', *Research in Organizational Behavior*, **38**, 169–85.

Sonnentag, S., Binnewies, C. and Mojza, E. (2010) 'Staying well and engaged when demands are high: The role of psychological detachment', *Journal of Applied Psychology*, **95**(5), pp. 965–76.

Sonnentag, S. and Fritz, C. (2007) 'The Recovery Experience Questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work', *Journal of Occupational Health Psychology*, **12**(3), pp. 204–21.

Sonnentag, S. and Fritz, C. (2015) 'Recovery from job stress: The stressor-detachment model as an integrative framework', *Journal of Organizational Behavior*, **36**(S1), pp. S72–S103.

Vang, M., Gleeson, C., Hansen, M. and Shevlin, M. (2020) 'Covariates of burnout and secondary traumatisation in professionals working with child survivors of trauma: A research synthesis', *The British Journal of Social Work*, **50**(7), pp. 1981–2001.

Vrklevski, P. and Franklin, J. (2008) 'Vicarious trauma: The impact of solicitors of exposure to traumatic material', *Traumatology*, **14**(1), pp. 106–18.

Wilberforce, M., Jacobs, S., Challis, D., Manthorpe, J., Stevens, M., Jasper, R., Fernandez, J.-L., Glendinning, C., Jones, K., Knapp, M., Moran, N. and Netten, A. (2014) 'Revisiting the causes of stress in social work: Sources of job demands, control and support in personalized adult social care', *British Journal of Social Work*, **44**(4), pp. 812–30.

Wirth, T., Mette, J., Prill, J., Harth, V. and Nienhaus, A. (2019) 'Working conditions, mental health and coping of staff in social work with refugees and homeless individuals: A scoping review', *Health and Social Care in the Community* (https://doi.org/10.1111/hsc.12730).